ETHNOBOTANICAL STUDIES ON KOYNA VALLEY, MAHARASHTRA

भारतीय वनस्पति सर्वेक्षण
BOTANICAL SURVEY OF INDIA

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2024

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Lifestyle for Environment

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Assistance: Arpan Dey

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This e-book is a part of the mission to complete quick publication of manuscripts and the research results addressing a portion of the larger prospective on the subject for the projects carried out at Botanical Survey of India. This is for the immediate dissemination of research findings in the public domain for use of the stakeholders and general public. The book has not gone through any editorial process and the entire content, expressed opinions, design, layout etc. solely belong to the authors.

Front Cover: 

1. *Rauvolfia serpentina*
2. *Bacopa monnieri*
3. *Toddalia asiatica* var. asiatica
4. *Cuscuta reflexa*

Back Cover: Koyna Valley

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निदेशक
A. A. Mao
Director

भारत सरकार
पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय
भारतीय वनस्पति सर्वेक्षण
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST
& CLIMATE CHANGE
BOTANICAL SURVEY OF INDIA

FOREWORD

Botanical Survey of India, an apex organization under the Ministry of Environment, Forest and Climate Change (MoEF&CC) performs multidisciplinary functions in the field of plant taxonomy, floristic studies, biodiversity conservation, training, outreach programmes and publications. The main mandate of this organization is to explore all the phytogeographic regions of India and the documentation of their floral wealth. The organization also has the responsibility of conducting floristic assessments in protected areas, which is essential for the conservation and management of Endangered, Endemic, and Threatened species.

In order to harness the unlimited potential of our floristic wealth, BSI also document the traditional knowledge associated with every species and their interaction with the mankind. Protected areas, which are often considered as the fragile ecosystem and eco sensitive zones, offer intricate plant-human relationship which is documented in the form of ethnobotanical information. Koyna Wildlife Sanctuary in Maharashtra is one of the species rich areas in the Western Ghats, bestowed with vast floristic wealth including ethno-botanically important species. The Botanical Survey of India has completed documenting the floristic elements and associated traditional knowledge of the area after conducting thorough field survey and research.

I congratulate the authors for their noteworthy effort in documenting the ethnobotanical wealth of Koyna Valley. This e-book titled "Ethnobotanical studies on Koyna Valley, Maharashtra" is anticipated to be beneficial for the entire botanical fraternity and other stakeholders in understanding the biodiversity and ecosystem of this Wildlife Sanctuary and towards taking effective management steps for sustainable use and conservation.

(A.A. MAO)

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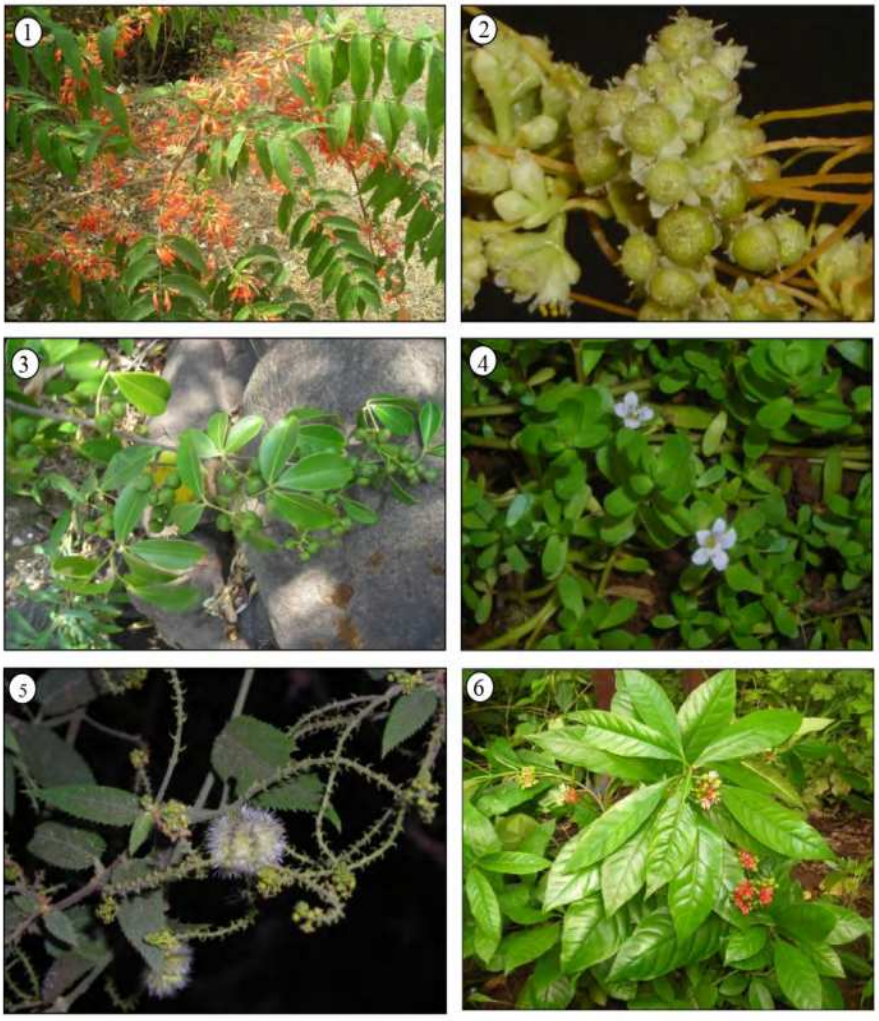

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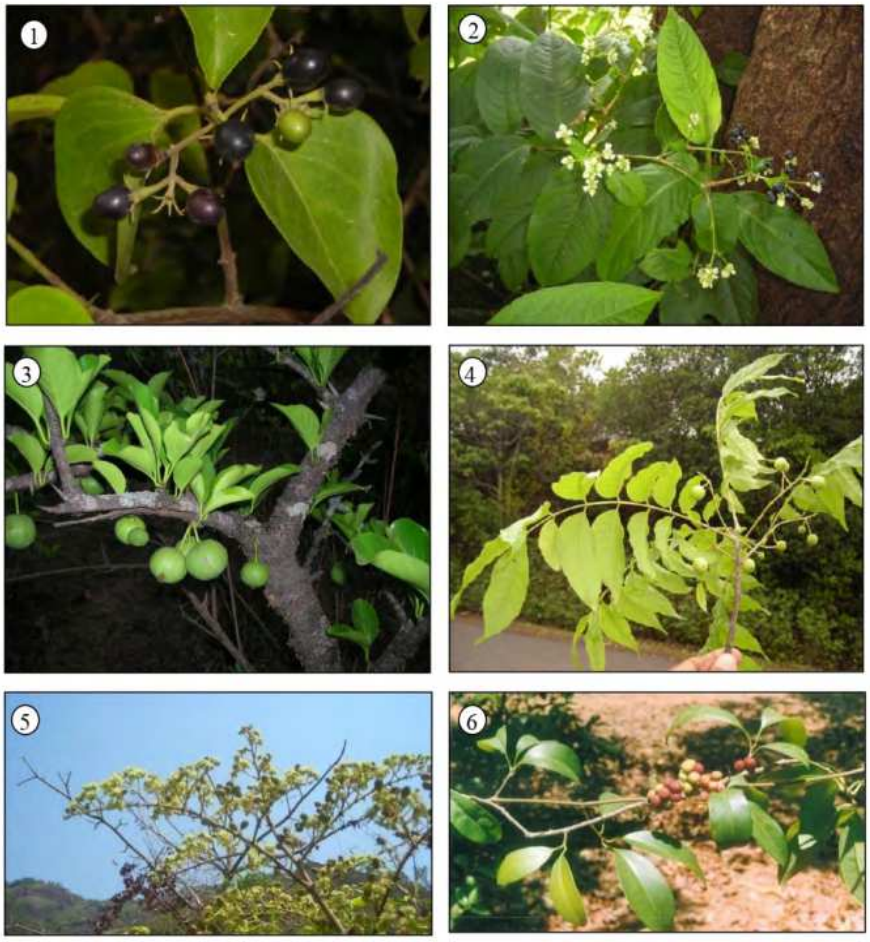

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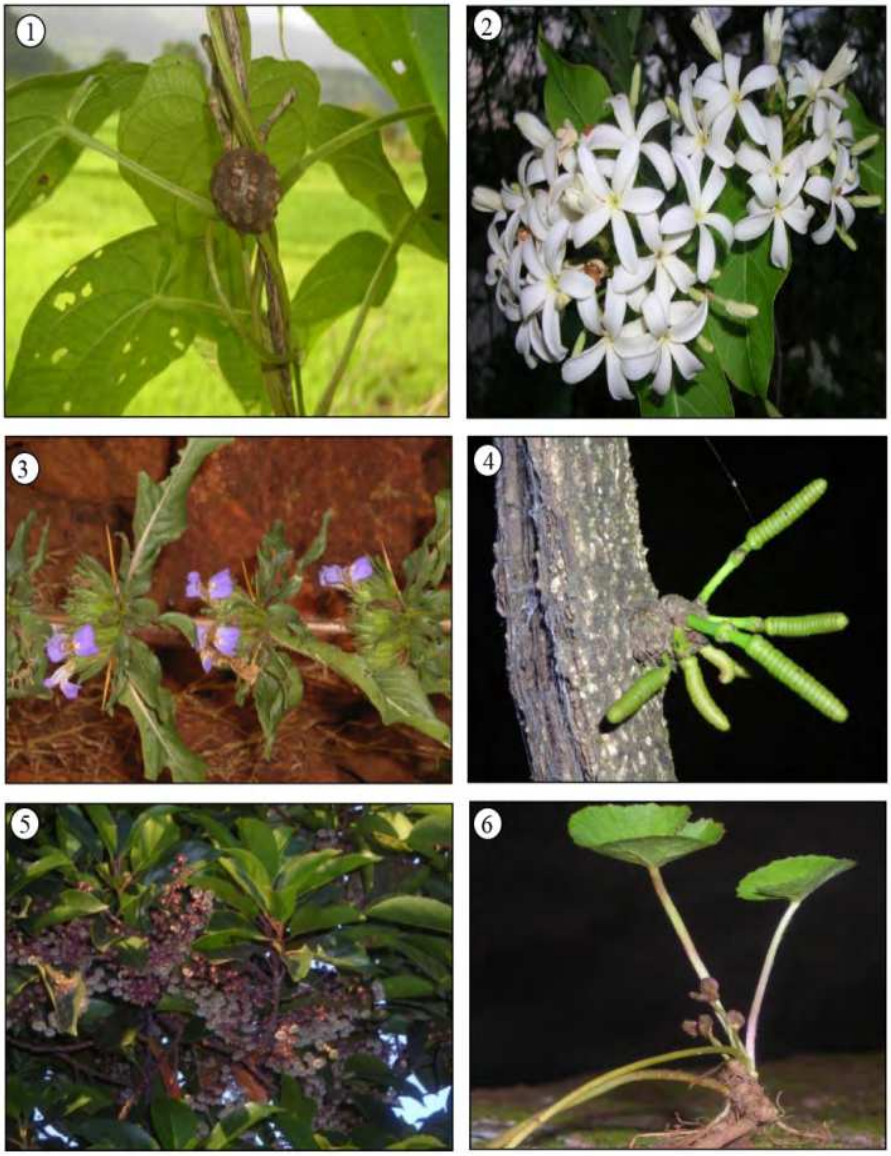

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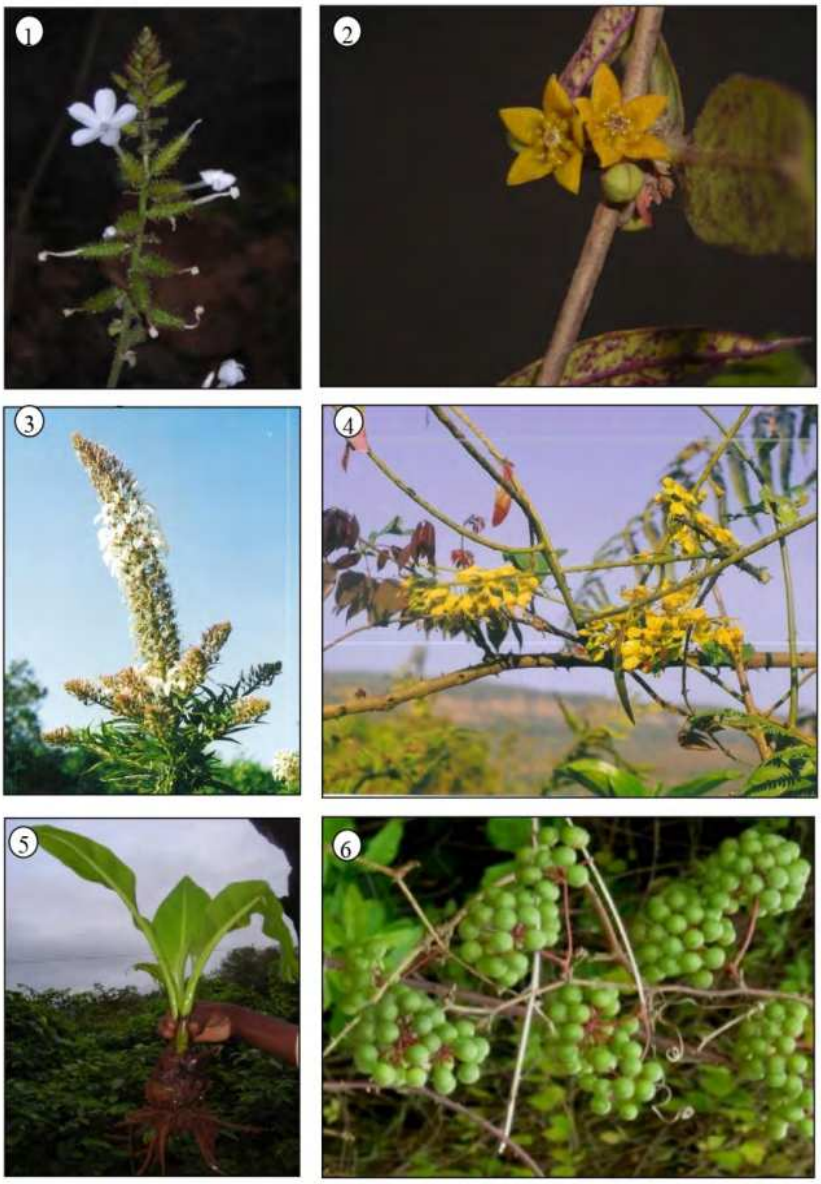

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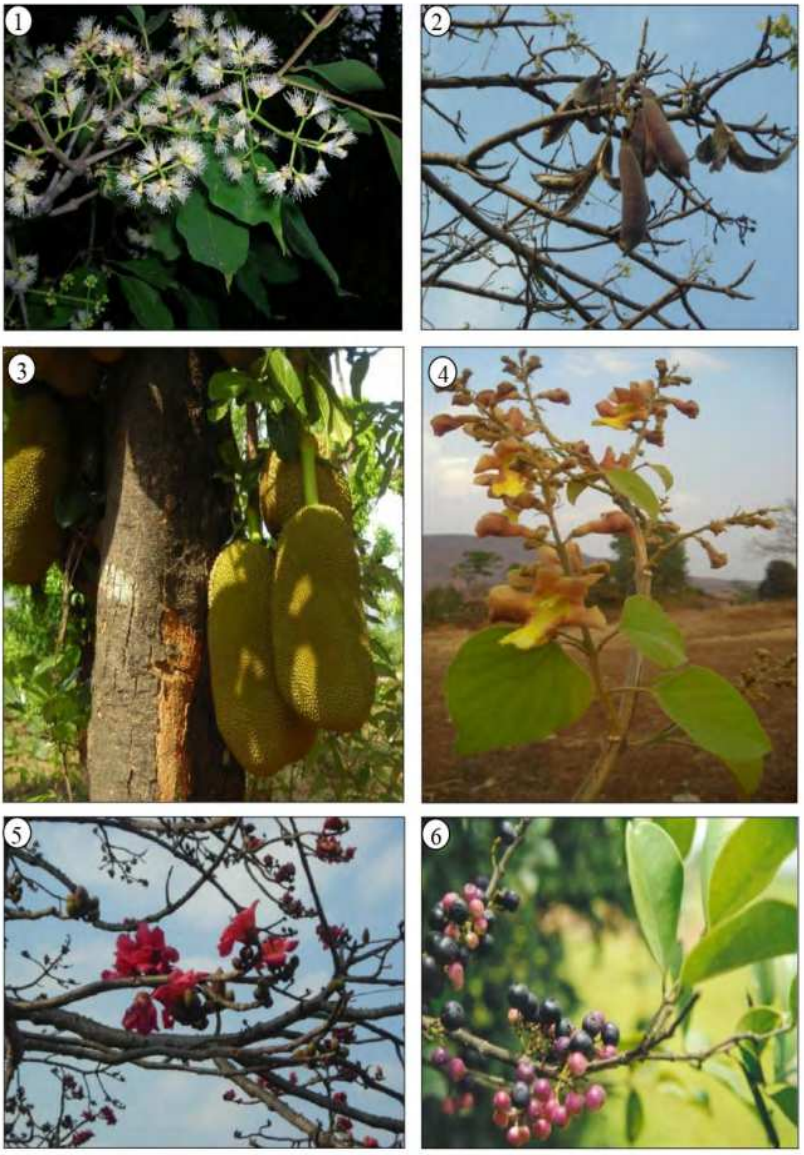

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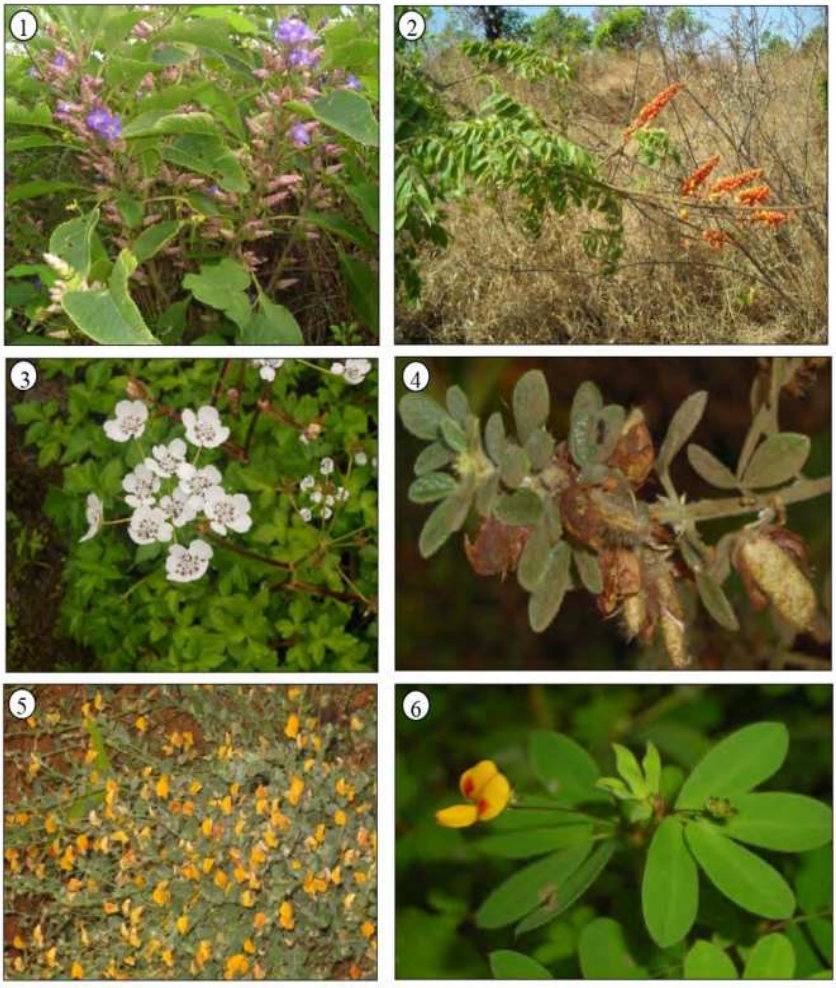
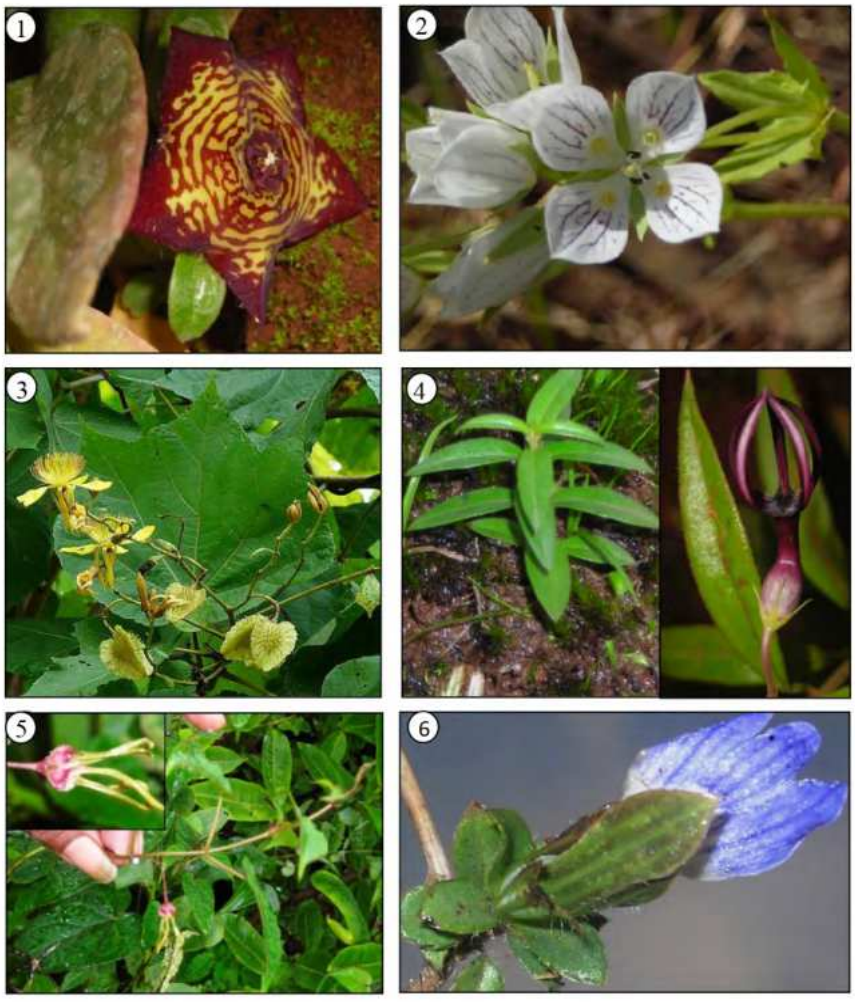


1. *Carvia callosa*: Stem used for construction of huts as well for fencing; **2.** *Moullava spicata*: Leaves used for dysentery; roots for internal bleedings; seeds for skin infection; **3.** *Pinda concanense*: Whole plant used for fever; tuber edible as vegetable; **4.** *Cajanus lineatus* : Stem used for toothache; seeds used as vegetable; **5.** *Crotalaria filipes* var. *filipes*: Fruits used as vegetable; **6.** *Smithia bigemina*: Tender leaves used as vegetable.

PLATE XI: ENDEMIC PLANTS



1. *Frerea indica*: Whole plant used for hair problems; **2.** *Swertia densifolia*: Leaves used for the treatment of measles; **3.** *Erinocarpus nimmonii*: Bark used in bone fracture, dysentery; leaves used as fodder; flowers used in stomachache and in funeral functions; **4.** *Ceropegia jainii*; Tubers edible; **5.** *Seshagiria sahyadrica*: Young Follicles are edible; **6.** *Cynarospermum asperrimum*: Root is used in opacity; leaves used as fodder.

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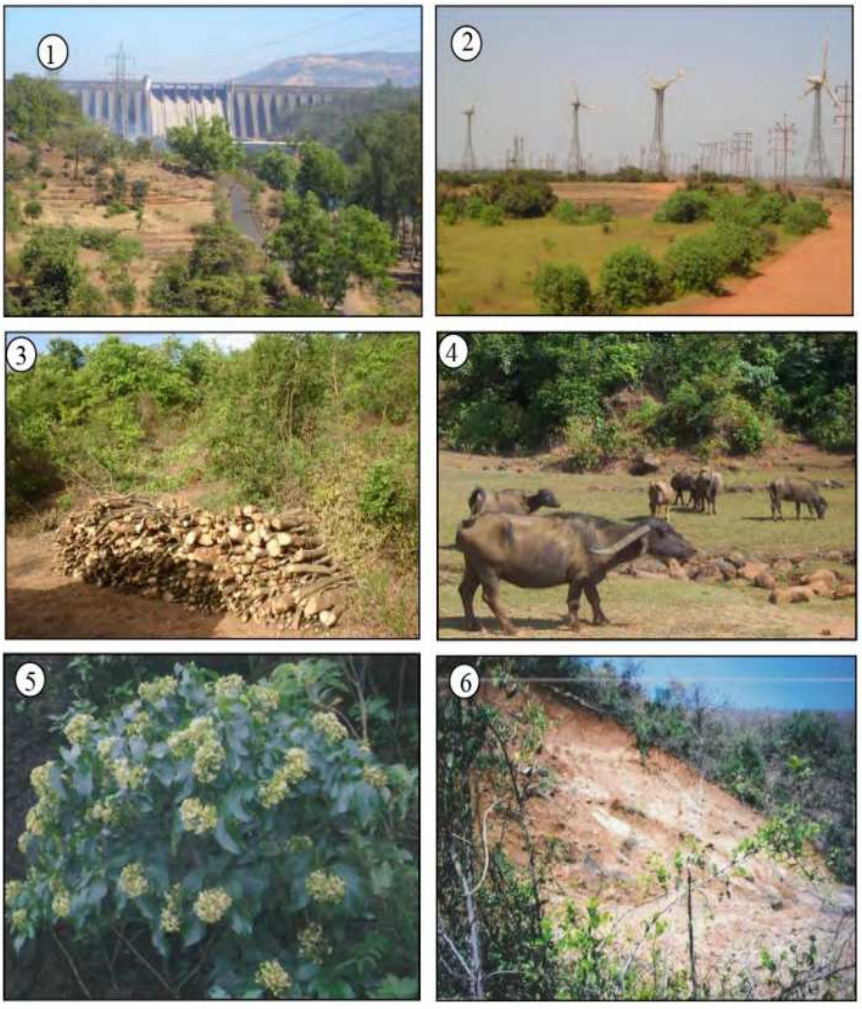

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INTRODUCTION

Ethnobotany has been defined as the study of the relationship between man and his ambient vegetation. The word "Ethno" refers to study of people and "Botany" refers to study of plants. In 1874, Powers had used the term "aboriginal botany" which meant a study of the plants which the aboriginals used for medicine, food, textiles, fabrics, ornaments, etc. Ethnobotany was first coined as a term in 1895 by John Harshberger, he described it as the study of the interaction between people, plants and culture. The studies on Ethnobotany are being concentrated particularly in the underdeveloped and developing countries since last three decades. It is because, there are still some ethnic groups and cultures striving to maintain their age-old wisdom and traditions by staying close to the forests and without the knowledge of modern systems. The Indian subcontinent represents one of the greatest emporia of ethnobotanical wealth. Here, many living groups of people are still more or less isolated from the influence of the modern world. They continue to live in close association with vital dependence on their ambient vegetation. They provide scientists unparalleled opportunities for profound research. Kirtikar and Basu (1933) have stated, "The ancient Hindus should be given credit for cultivating what is now called Ethnobotany".

In India, the systematic field and related studies in the subject of ethnobotany were steered/ pioneered by Botanical Survey of India (BSI). Dr. E.K. Janaki Ammal from BSI sometime in mid fifties studied subsistence food plants of certain tribes of south India and found better prospects of *Dioscorea*. From 1960, Dr. S.K. Jain, from BSI also started intensive field studies among the tribals of central India. His observations on newer plant resources and intimate relationship of the tribals with their plant environment encouraged him to do similar work in eastern India. According to Jain (1991), the traditional knowledge of plants or the science of Ethnobotany deals with total direct relationship between man and plants. Ethnobotany includes study of food, fibres, dyes, and tannins, other useful and harmful plants, taboos, avoidances and even magico-religious beliefs about plants (Jain 1967; Ford, 1978). The focus of ethnobotany is now on how plants have been used or are being used, managed and perceived in human societies. Man is dependent on plants from time immemorial. Our knowledge of the intimate relationship between early man and plants has come to us mainly through surviving tradition. This relationship, which now forms the core of the interdisciplinary science. Ethnobotany has thus attracted much more attention not only due to its great academic or historical importance but also due to many economic applications (Jain, 1989).

PREVIOUS LITERATURE

To have broader view regarding plants and subject ethnobotanical studies in India Agarwal, 2003; Ahuja, 2003; Ansari, 1998; Anonymous, 1948–76, 1986; Arora & Nayar, 1993; Ayyanar and Ignacimuthu, 2009; Bapuji & al., 2009; Bhandary & al., 1995; Bhatt & al., 2001, 2007; Borthakur & Gogi, 1994; Borthakur, 1996; Chaurasia & al., 2001; Chhetri, 1994; Dam & al., 2000; Gadgil & Vartak, 1975; Gopalan, 1977; Gupta & al., 2010; Harshberger, 1896; Hembrom, 1996; Hosagoudar & Henry, 1996; Jain, 1963, 1967, 1978, 1981, 1989, 1991, 2004; Jain & al., 1994; Jain & Srivastava,

2005; Jha & Basak, 1994; Joy & al., 2001; Kadavul & Dixit, 2009; Kalaskar & Surana, 2010; Kalyamasundaram, 2000; Karki & Johari, 1999; Kashyapa, 1977; Killedar & More, 2011; Karthikeyan & Mudgal, 1995; Khan & al., 2004; Khan & Yadav, 2010; Kirtikar & Basu, 1933; Krishna & al., 2007; Kshirsagar & Singh, 2000, 2007; Kumar & al., 2011, Mahapatra & al., 2012; Maheshwari, 2000; Mitra, 1994; Mohapatra & Sahoo, 2008; Mudgal & al., 1995; Naik & al., 2012; Neelima & al., 2011; Padal & al., 2010; Pal & Bose, 2011; Pandey & Bisaria, 1998; Pande & Chunekar, 2006; Pant & Samant, 2010; Parabia & Pathak, 2002; Parinitha & al., 2004; Radhakrishnan & al., 1996; Rai & al., 1977; Rajendran & Henry, 1994; Rao, 1996; Rama Rao & Henry, 1996; Reddy, 1996; Rolla Rao, 1978; Roy & al., 1998; Saklani & Jain, 1994; Sammbamurty, 2006; Sankhala, 1991; Shanavaskhan & al., 2012; Sharma & Pandey, 2009; Shiddamallaya & al., 2010; Singh & Prakash, 1994; Singh, 1996; Singh & Sharma, 2002; Sinha & Sinha, 2001; Sivrajan & Balachandran, 1994; Sinha & Ramesh Kumar, 2009; Sood & al., 2005; Sripathi & Sankari, 2010; Srivastava & al., 2000; Srivastava & Raut, 1994; Tetali & al., 2009; Thakur & al., 2011; Tigga & Sreekumar, 2001; Tigga & al., 2003; Trivedi, 2007; Udayan & al., 2004, 2006; Vanila & al., 2008; Venugopalan & al., 2011; Vishwanathan, 1999; Yesodharan & Sujana, 2007 etc. and in Maharashtra Aher & Patil, 2009; Badave & Jadhav, 1998; Badave & Khandekar, 2004; Badave & Kothari, 2006, 2007, 2009, 2010; Bhosle & al., 2009; Billore, 1972; Bole & Almeida, 1980–89; Cholekar (Bachulkar), 1996; Datar & Vartak, 1975; Deokule & Magdum, 1992; Deshpande & al., 1993, 1995; Dikshit, 1991; Draxe, 1997; Gadgil & Vartak, 1976; Gaikwad & Yadav, 2004; Ghate, 2003; Ghate & Sane, 2004; Ghate & al., 2004; Inamdar & al., 2012; Ingole & al., 2011; Jadhav & al., 2011; Jagtap & al., 2006, 2008, 2009; Jayanand, 1996; Joshi, 1996; Kambale, 2007; Kambale & Pradhan, 1980; Karne, 2011; Khandekar & Badave, 1998; Khedkar & al., 2011; Khyade & al., 2009; Koche & al., 2008; Kothari & his associates, 1992, 1993, 1996, 1999, 2003, 2004, 2006, 2008; Kulkarni, 1992, 2006; Kulkarni & Kumbhojkar, 1996, 2002; Kulkarni & al., 2003; Kumbhojkar & al., 2000; Mahabale, 1979; Malhotra & Moorthy, 1973; Nagarkar & Ghate, 2002, 2004; Naik, 1998; Nilgaonkar & al., 1985; Pande & al., 2008; Patil, 1987; Patil, 2009; Patil & al., 2009; Patil & Kothari, 2009; Patil & Patil, 2005, 2006; Patil & Ramaih, 2004; Pawar & Patil, 2008, 2009, 2011; Pahanikumar & Chaturvedi, 2010; Rakecha, 2008; Salave & al., 2011; Salave, 2012; Santapau, 1953, 1956; Saraf & Gour-Broome, 2012; Sathe, 2008; Shah & al., 1983; Sharma & Kulkarni, 1980; Sharma & Lakshminarasimhan, 1986; Sharma & al., 1996; Sharma, 2002; Sharma & Singh, 2001; Singh & al., 2012; Shimpale & al., 2004; Shrivastava & Raut, 1994; Singh & al., 2001, Upadhye & al., 1994, Upadhye & Kulkarni, 2004; Vaidya & Dhumal, 2004; Vaidya & al., 2004, Vartak & his associates, 1959, 1980, 1981, 1987, 2004; Yadav & Bhamare, 1989 etc. were referred.

India is recognized as one of the 12 mega-biodiversity centers. It has two biodiversity 'hotspots' out of 34 in the world (Mittermeier, 2005). It has also the second largest tribal population in the world after Africa. In Maharashtra, there are 47 scheduled tribal communities with a population of 73.18 lacs, which is 9.27 % of the total population of the state (Kshirsagar, 2000). The constitutional name for the tribals is 'Anusoochit Janajati' (Scheduled folk communities). These tribal people mostly live in the forests, hills, plateaus and in naturally isolated regions and depend on forest

for their livelihood. Plants and their parts are not only used as food and medicine but are also used in various rituals of their social and religious life. Forest is an integral part of their social, religious and economic life.

Ethnobotanical investigations in tribal areas, under All India Coordinated Research Project on Ethnobiology (AICRPE) revealed that, out of 9500 wild plants, 7500 plants are used as medicine, 3900 for edible use, 700 for other material and cultural requirements, 525 for fibre and cordage, 400 as fodder, 300 as pesticides, 300 as gum, resin and dyes, 100 as incense and perfumes (Annual Report, Ministry of Environment & Forest, Govt. of India, 1998–99).

The Koyna region lies at the southern end of the Sahyadri sub clusters and recognized as one of the hotspots among Western Ghats. In 1985, Koyna region is declared as Wildlife Sanctuary covering an area of 423.55 sq. km. (Singh & Singh, 2002). Geographically the region is situated between 73 ° 33′ to 73 ° 51′ E longitudes and 17 ° 21′ to 17 ° 46′ N latitudes. Elevation ranges from 600–1100 m (Min. Environment & Forests, 2006). The Koyna region comes under Taluka Patan of Satara district in Maharashtra State. An only river 'Koyna' flows from the area where a largest dam in Western Ghats was constructed on Koyna reservoir in 1962 mainly for hydroelectric purposes.

Geology: Geologically there is an immense accumulation of volcanic rocks, principally basaltic lavas, and known as Deccan trap. The word trap is applied to the step like aspect of the weathered hills of basalt which is the most common feature in the Koyna valley. Perhaps due to basaltic lava, the area is centre of massive earthquake measuring 7.5 on the Richter Scale in December 11, 1967. As the soils of Koyna region are formed from Deccan traps it is generally from the augite or amygdaloidal basalt. These soils are black, dark brown or reddish in colour and hence called Black cotton soil or Regur meaning red soil.

Climate: Climate in the Koyna region is monsoonal. Rainfall and humidity in Konkan and Sahydris equable and suitable for plant growth. There is no extreme of hot or cold. Generally from the last week of March to 1st week of May, it is very pleasant. The highest rainfall recorded in the area is 5000 mm. The mean rainfall in the area is 2500 mm. The temperature in the Koyna region and whole state vary from 10 ° to 42.7 ° C. The humidity in Koyna and all through Maharashtra is low. Average mean humidity ranges between 56% to 74%. The relative mean humidity is as high as 80% in July–August but the lowest in March–April.

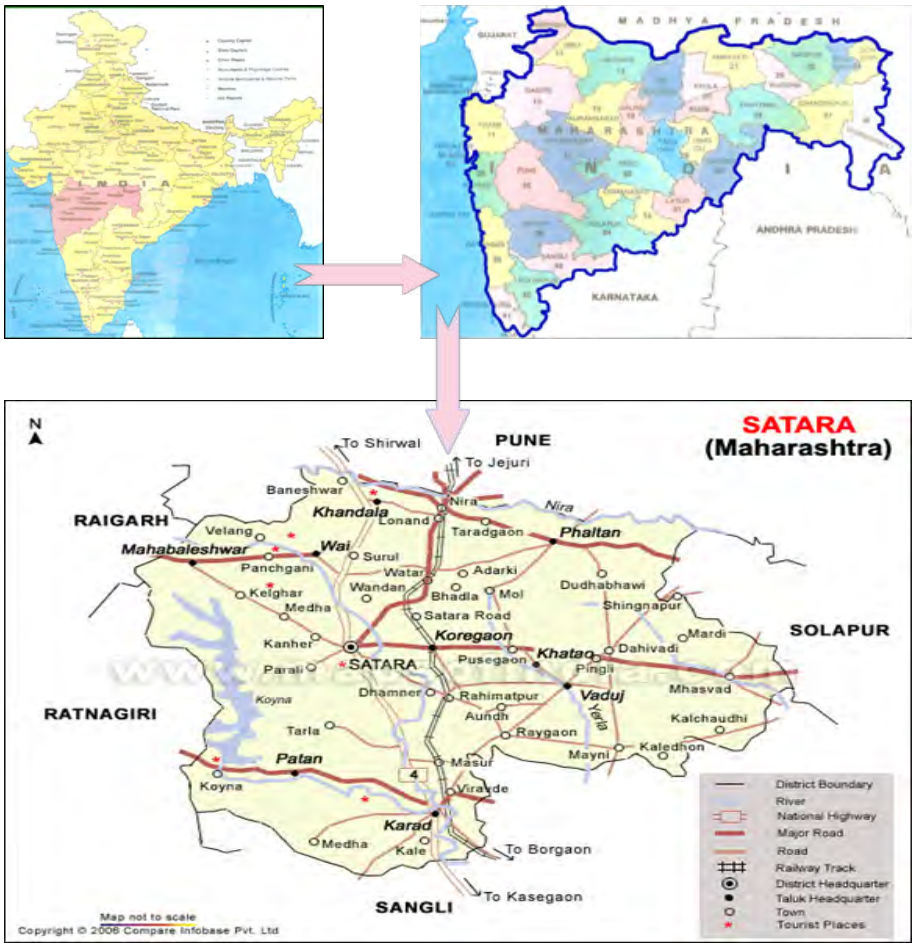
Vegetation: According to Champion and Seth (1968), the forest types seen in the area are southern tropical evergreen forests and southern moist mixed deciduous forests. The vegetation is observed in three different zonations. **Top layer**: *Bombax ceiba* is the chief deciduous species associated with *Dalbergia latifolia*, *Terminalia paniculata, Tectona grandis* etc. **Middle layer**: This consists *Careya arborea, Erythrina indica, Grewia tiliifolia* etc. **Ground layer**: The undergrowth consists of *Carissa congesta, Helicteres isora, Holarrhena antidysenterica, Wrightia tinctoria* etc.

Tribals: Traditionally this area has been inhabited by two communities Kunabis & Dhanagar Gavalies. Only few families are neo-Buddhists. The Kunabies (also called as Maratha) are the main agriculturist community in the Maharashtra where as the Gavali Dhanagars belong to Dhanagar caste cluster who are shepherds & cowherds. The main crops cultivated by them in the area are Ragi (*Eleusine coracana* (L.) Gaertn.), Rice (*Oryza sativa* L.) & Vari (*Panicum miliaceum* L.). Some pulses, oilseeds & other crops are also grown at convenient locations. However the productivity is very low.

The villages and hamlets are situated far away in the remote inaccessible areas of hilly region and devoid of modern facilities. The communities here are still following their primitive pattern of life which they have inherited from their ancestors. Their knowledge about basic needs like food, shelter and health-medicine are fulfilled by the surrounding biodiversity. These are still new to urban society and modern scientific workers of today.

Singh & Karthikeyan (2000), Deshpande & al. (1993) report angiospermic flora in Maharashtra as of 3025 species and that of Satara district of 1398 species. But because of difficult terrain no previous studies on Ethnobotanical line were ever taken up. Only a few approaches for the study of medicinal plants of Satara were made by Vartak (1959), Kothari & Shirodkar (2004), Karne, (2011).

Kocchar in 1977, Patil (1987), Deshpande & al. (1993) and Cholekar (Bachulkar), (1996) surveyed the Koyna area randomly and collected a few plants. There after the area was not surveyed. Therefore, it was very essential to explore the area botanically. So the present work entitled “Ethnobotanical studies on Koyna valley, Satara District, Maharashtra” was undertaken to explore the vegetation from surroundings of Koynanagar for extensive and intensive ethnobotanical investigations from last 15 years (1997–2012). It includes ethnobotany of about 406 species.



Map showing involvement of local people from 50 villages of Koyna region for ethnobotanical information.

LIST OF VILLAGES

Sr. No.	Name of Village	Sr. No.	Name of Village
1	Ambavane	26	Kondhavale
2	Avasari	27	Khudupalewadi
3	Bopoli	28	Kusavade
4	Chapher	29	Male
5	Chapher Mirgaon	30	Manainagar
6	Dastan	31	Mendheghar
7	Dhankel	32	Mirgaon Kamargaon
8	Donichawada	33	Nahimbe Ambeghar
9	Dhokavale	34	Nav
10	Dicholi	35	Navaja
11	Gavadewadi	36	Navaja Dicholi
12	Ghatmatha	37	Nechal
13	Ghotane	38	Patharpunj
14	Ghanabi	39	Payatyachawada
15	Goshatwadi	40	Punavali
16	Govare	41	Rammala
17	Helwak	42	Rasati
18	Kadamwadi	43	Riswad
19	Karate	44	Shirshinge
20	Kamargaon	45	Taloshi
21	Kati	46	Vankusavade
22	Kathitek	47	Vatole
23	Ker	48	Waghane
24	Kisarule	49	Zadoli
25	Kolane	50	Zadoli Ambeghar

MEDICINAL PLANTS

During the interviews with the traditional healers it was observed that, these healers and elderly people have knowledge about the medicinal plants and their properties. Many of them have brought it in use to cure various ailments. Even though, these healers are weak in diagnosis based on examination of pulse, eyes, nails etc., the medicinal value of the plants reported by them have been found to be novel. They just ask/observe the symptoms and give medicines. e.g. The juice of *Cuscuta reflexa* (Akashvel, Amrvel) was used externally for the treatment of skin infection with pus and watery contents on the scalp of the child. After 15 days follow-up 100 % cure was observed. The same remedy in other cases was also found to be effective.

These healers were also unaware of the herbal proportions and different modern preparations like oil, paste, balm etc. but they have far better information of the herbs than available in the books and literature. Even though all the medicinal plants practiced by these healers were not equally effective, some were definitely based on Ayurveda e.g. **1)** For the treatment of leucorrhoea (white discharge) the mixture of powder of *Woodfordia fruticosa* (Dhayati) flowers and *Ficus racemosa* (Umber) fruits in equal proportion is given along with water. This remedy was discussed with B.A.M.S. (Bachelor of Shuddha Ayurvedic Medicine) Ayurvedic practitioner. According to him, leucorrhoea is caused due to weakness, general debility, calcium deficiency etc. As per Ayurvedic text the *Ficus racemosa* fruit is with excess water content with astringent property. The flower of *Woodfordia fruticosa* is also astringent and effective in case of leucorrhoea. So the line of treatment was correct. **2)** The remedy of decoction of *Justicia adhatoda* (leaves), *Tinospora sinensis* (Gulvel) stem & *Zingiber officinale* (Aale) along with jaggery was experienced when affected with common cold.

Out of the 406 plants studied 300 plants are used medicinally for various ailments (Ref. Table No. 1–79; Graph 4) like Abortion (1), Abscess (15), Acidity (3), Antidote for alcohol (1), Ascites (1), Asthma (11), Bone fracture (11), Bronchitis (2), Bright's disease (inflammation of kidneys) (2), Burns (9), Chicken pox (3), Common cold (5), Conjunctivitis (5), Constipation (12), Contusion (6), Corn (4), Cracks in feet (1), Diphtheria (4), Cough (20), Dandruff (2), Diabetes (4), Excess body heat (16), Dysentery (34), Dyslexia (1), Dyspepsia (5), Epilepsy (2), Fever (30), Fever in infants (1), Dhobi feet disease ((Fungal infection in between fingers) (2), Gonorrhoea (2), Guinea worm(2), Hair problems (4), Headache (8), Herpes zoster (2), Induce vomiting (2), Indigestion (7), Insomnia (1), Internal bleeding (1), Jaundice (10), Intestinal worms (13), kidney stone (7), Joint pain (36), Lactation (4), leprosy (1), Leucoderma (3), liver disease (1), Measles (5), Menstrual problem (7), Migraine (2), Mouth ulcer (10), As a nerve tonic (1), obesity (1), Opacity (6), Otitis (2), Psoriasis (2), Piles (20), Pneumonia (7), for pregnant women (9), Prolapsed uterus (1), Pyorrhea (1), Red discharge (3), Rickets (3), Ring worms (5), Scabies (18), Antidote for Scorpion sting (10), Sexual strength (6), Skin infections (51), Antidote for Snake bite (16), Stomach ache (19), Swelling (23), Throat infection (2), Toothache (16), Tuberculosis (2), Urinary problems (11), Vomiting (5), Weakness (2), White discharge (28), Women specific diseases (43), Wounds (48) etc. About 23 plants are used in veterinary

medicines (Ref. Table No. 80) for the ailments like Snakebite (2), Contusion (1), Diphtheria (2), Dysentery (4), Foot rot (2), Intestinal worms (2), Skin infection (3), Suffocation (1), Swellings (1), Wounds (3) etc.

The traditional healers and elderly people having above knowledge are now a days facing multiple problems like scarcity of herbs due to drastic changing ecology caused by various biotic as well as abiotic factors and negligence towards their knowledge due to spread of modern medicines. Generally they keep their knowledge secret and their knowledge may vanish in the due course time. So there is urgent need to document their knowledge.

The Enumeration of medicinal plants is given below.

Enumeration of Medicinal Plants

Abelmoschus manihot (L.) Medik. ssp. **tetraphyllus** (Roxb. ex Horn.) Borss. var. **tetraphyllus** (‘*Ran bhendi’*) MALVACEAE

Undershrubs. Leaves orbicular, 3–5 lobed, base cordate, prickly on the nerves beneath. Flowers solitary, axillary, yellow with purple centre. Capsules oblong, densely bristly, 5-valved.

Fl. & Fr.: September–November.

Distrib: Dicholi, Shirshinge, Zadoli.

Uses: Root paste applied on the skin infection.

Additional Information:

- Flowers and fruits used as vegetable.
- Stem fibre used for cordage.

Abrus precatorius L. (*‘Gunj*) FABACEAE

Climbers; stem sparsely hairy. Leaves 3–5 cm long,; leaflets 8–10, pairs, oblong, base rounded, apex apiculate, deciduous. Flowers pinkish-white. Pods oblong.

Fl. & Fr.: December.

Distrib.: Occasional. Ambeghar. Also planted in Rammala garden.

Uses:

- Leaves are chewed for cough and throat infection.
- The seeds powder is inhaled once or twice a day for the treatment of headache.
- The roots are soaked in a cup of water for whole night and the water is taken at morning for the treatment of white discharge.

Additional Information:

- Roots used for syphilis and root extract along with *Asparagus racemosus* and *Cuscuta reflexa* is given after menstruation to check conception (Singh and Prakash, 1994).

- Leaves used for convulsions in children and leaf juice as blood purifier. Seeds used by the women to prevent conception, Seed paste with water and salt applied on boils to promote suppuration. Seed powder boiled with milk is powerful tonic and has aphrodisiac action (Gill and Nyawuame, 1994).
- Roots are used to control white discharge (Patil & Patil, 2006).
- Roots used for cold while leaves, roots & seeds for skin diseases and eye complaints. Boiled seeds and roots are edible (Singh & Sharma, 1998; Pawar & Patil, 2009).
- Leaves used as carminative, expectorant, stomachic, mouth freshener. Seed powder used in abortion and root paste in ulcers. **(**Karne, 2011).

Acacia chundra (Roxb. ex Rottl.) Willd. (*'Khair'*) MIMOSACEAE

Trees. Leaves 2-pinnate, stipular spines from a broad triangular base, pinnae 10 pairs; leaflets sessile, 18–22 pairs, elliptic, base unequal, apex subacute. Flowers yellow. Pods brown, shining.

Fl. & Fr.: March–November.

Distrib.: Avasari, Shirshinge.

Uses:

- The leaves are crushed and applied on skin infection.
- The decoction of inner bark is used to gargle for the treatment of mouth ulcer.
- The decoction of inner bark is given for the treatment of leucorrhoea.

Acacia concinna (Willd.) DC. (*'Shikekai'*) MIMOSACEAE

Climbing shrubs; prickly branches grooved, dark brown. Main rachis armed with hooked prickles. Pinnae 4–8 pairs; leaflets linear-oblong. Flowers red. Pods linear-oblong. Seeds 6–10.

Fl. & Fr.: March–July.

Distrib.: Common. Dicholi, Ghatmatha, Shirshinge, Zadoli, Zadoli ambeghar.

Uses: Fruits are soaked in the water for whole night, cooked and applied on

hairs as shampoo for nourishing it.

Additional Information:

- The pods sold in local markets, used for washing hairs.
- Leaves cathartic used in biliousness. Pods aperients, expectorant, emetic (Chopra & al., 1956).

Acacia pennata (L.) Willd. (*'Shembarti'*) MIMOSACEAE

Scandent shrubs, armed with hooked spines on stem. Pinnae 5–11 pairs, leaflets sessile, elliptic, base truncate, apex acute, margins ciliate. Flowers white or pale yellow in terminal panicles. Pods stalked, strap-shaped, brown.

Fl. & Fr.: February–May.

Distrib.: Common. Ghatmatha, Goshatwadi, Paytyachawada, Rammala, Zadoli.

Uses: 1/4th decoction of seed is mixed with equal quantity of sesame oil. The mixture is heated to remain only oil. This medicated oil is applied on body pain and joint pain.

Acalypha indica L. (*'Khokali'*) EUPHORBIACEAE

Herbs, branches finely pubescent. Leaves ovate, base cuneate, apex acute, margins crenate-serrate, petiole longer than leaf blade. Male flowers at apex, female flowers 2–3 in the axils of large toothed bracts. Capsules hispid, enclosed by bracts, ovoid brown.

Fl. & Fr.: July–October.

Distrib.: Occasional. Helwak, Rammala.

Uses: One-teaspoon leaf powder is given for diabetes.

Additional Information: Decoction is used for dry cough, bronchitis, asthma, Pneumonia, rheumatism; roots are laxative; leaf poultice used in ulcers (Karne, 2011).

Achyranthes aspera L. var. **aspera** (*'Aghada'*) AMARANTHACEAE

Herbs, stem subquadrangular, striate; leaves elliptic, thick, hairy above, tomentose beneath, rachis stout. Flowers greenish with pink apex, in axillary and terminal spikes; bracts and bracteoles ovate, acuminate, perianth lobes lanceolate, margins white, membranous.

Fl. & Fr.: October–December.

Distrib.: Common in waste places. Avasari, Rammala, Shirshinge, Vankusavade**,** Zadoli.

Uses:

- One cup of fresh root juice is taken as antidote for snake bite. It is also applied externally on scorpion sting.
- The stem is chewed for toothache.
- The ash of whole plant is mixed with water. Allowed to settle and residue is collected. It is again washed with water & boiled to get white solid extract. One pinch of this extract is given with beetle leaf for the treatment of cough.
- The above white solid extract is applied externally on burns and skin disease.

Additional Information:

- Roots**,** leaves and seeds useful for bronchitis and whole plant for piles. Leaves edible as vegetable (Kothari & Moorthy, 1993).
- Root ash with honey used for cough, root decoction for scorpion sting, dog bite and night blindness (Kothari and Londhe, 1999).
- The plant is useful in the treatment of eye disorders, cough, indigestion and piles. It is also useful as an antidote for snake bites (Koche & al., 2008).

- Fruits and pieces of Peacock's feather smoked against scorpion sting. Roots extract about a cup prepared in human urine drunk after snake bite (Patil & al., 2009).
- Menthol extract of whole plant useful for leprosy (Gupta & al., 2010).
- The plant is used in veterinary medicines to expel placenta after delivery (Pant and Samant, 2010).
- Leaf juice is applied on wound while paste of whole plant is applied on swelling and itching of body parts (Pawar & Patil, 2011).
- In Yunani medicines the stem, leaves and fruits used as a remedy for piles, pneumonia, cough, kidney stone, skin eruptions and snake bite. The paste made from the roots with buttermilk is taken as an anti-fertility drug (Dey, 2011).
- Whole plant decoction is used in bleeding piles, quick delivery while powder with water used for piles, dysentery. (Karne, 2011).
- The plant paste applied on breast to increase the quantity of milk. It is also used for headache and heart diseases (Thakur & al., 2011).

Chemical constituents:

The plant contains triterpenoid saponins possessing oleanolic acid as aglycone, viz. A, B, C and D as major chemical constituents. It also contain ecdysterone, long chain alcohol, viz. 17-penta triacontanol, 27-cyclohexyl heptaeosan-7-ol, 16-hydroxyl 26-methyl heptacosan-2one and 36, 47-dihydroxy hen-pentacontan-4one. Fruit contains a large percentage of alkaline ash containing potash (Nadkarni, 1982).

Acorus calamus L. (*'Vekhand, Yekand'*) ARACEAE

Herbs, perennial, rootstock stout, aromatic, creeping fibrous roots from the lower surface. Leaves linear, dark green, aromatic. Spathes leaflike, spadix cylindrical. Flowers densely arranged. Berries ellipsoid. Seeds few, obconical.

Fl. & Fr.: February–June.

Distrib.: Planted for its rhizome. Avasari, Karate, Kondhavale, Rammala.

Uses:

- Paste of the rhizome is applied on forehead for the treatment of headache.
- Leaves are crushed and added in hot water and inhaled for the treatment of common cold.

Additional Information:

- Rhizome along with black pepper is used as an antidote for snakebite (Singh and Prakash, 1994).
- Rhizome also useful for bronchitis, colic dysentery, fever, nerve tonic and for snake bite (Singh & Sharma, 2002) and for leprosy (Gupta & al., 2010).

Actinodaphne angustifolia Nees (*'Pisa'*) LAURACEAE

Trees, 10–15 m tall. Leaves in two whorls of three each, elliptic-lanceolate, coriaceous, glabrous above, tomentose beneath, apex finely acuminate, base acute.

Flowers unisexual, yellowish, arising from naked branches. Perianth tomentose, accrescent on fruiting. Berries ellipsoid, red when ripe, seated on cup shaped perianth tube.

Fl. & Fr.: October–June.

Distrib.: Commonly found in Ambeghar, Dicholi, Manainagar, Nauja, Zadoli.

Uses:

- Juice is collected by crushing the tender leaves. One teaspoon juice is taken twice a day for 4 days for the treatment of white discharge (Leucorrhoea).
- Leaves are crushed & applied on wounds.
- Fruits are boiled in water & allowed to cool. Cream like thin layer is produced on water surface. It is collected and stored in the bottle. Applied externally for the treatment of scabies.

Additional Information: A table spoon of fresh leaf juice is given in stomach pain (Upadhye & al., 1994) while seed oil useful for sprains and leaves for stomach ache and as a tonic (Singh & Sharma, 1998).

Agave americana L. var. **americana** (*'Ghayapat'*) AGAVACEAE

Undershrubs. Leaves in rosette, oblong-lanceolate, gray, prickly on the edges. Flowers yellowish-green in a bracteate scape or stalk.

Fl. & Fr.: October–December.

Distrib.: Ambeghar, Dhankel, Dicholi, Shirshinge, Zadoli.

Uses:

Leaf juice and coconut oil mixed in equal proportion and boil to remain only oil. A cotton plug with this oil is kept inside the vagina for the treatment of White discharge. One tea spoon leaf pulp along with sugar or jaggery is taken twice a day for the treatment of gonorrhoea.

Additional Information:

- Fibres are produced from the leaves.
- Flowers used as vegetable (Khyade & al., 2009).
- The plant is purgative, emmenagogue, diuretic (Pant and Samant, 2010).

Ageratum conyzoides L. (*'Osadi '*) ASTERACEAE

Herbs with strong odour. Leaves ovate. Heads white, small in dense panicles. Involucral bracts 2–3 seriate. Achens black, pappus of 4-connate scales.

Fl. & Fr.: April–September.

Distrib.: Avasari, Shirshinge, Zadoli.

Uses: Leaves are crushed and applied on ringworms, leprosy, cut and wounds.

Additional Information:

- Leaves are used in abdominal pain (Patil and Patil, 2006).

- It is useful for stomach disorders and as a tonic (Koche & al., 2008).
- The leaves are anthelmintic and antiseptic used for boils, burns, cuts, skin diseases and as antidote for snake bite (Pant and Samant, 2010).

Ailanthus excelsa Roxb. (*'Maharukh'*) SIMAROUBACEAE

Trees, leaf scar large. Leaves unequally or equally pinnate; leaflets alternate or subopposite, tomentose when young, variable in shape, coarsely and irregularly toothed or sublobate, apex acute-acuminate, base unequal. Flowers greenish in much branched, lax panicles. Fruits linear-oblong to lanceolate, reddish brown, twisted near the base.

Fl. & Fr.: January–August.

Distrib.: Planted as avenue tree. Koynanagar, Rammala, Rasati.

Uses:

- Decoction of bark along with honey is given as a tonic in debility after childbirth. It also said to be stops the delivery pains.
- Bark is also useful in dyspepsia, chronic bronchitis and asthma.

Additional Information: Bark powder is useful in asthma, bronchitis, fever, weakness and its decoction in cholera, leaf sap is useful as vermifuge in children. (Kothari and Londhe, 1999).

Allophylus cobbe (L.) Raeusch. (*'Tipan, Tipani'*) SAPINDACEAE

Scandent Shrubs. Leaflets ovate or elliptic, terminal one obovate, brownish tomentose beneath, base oblique, apex acuminate, margins serrate. Flowers in spicate racemes. Berries globose, 1-seeded, purplish red when ripe.

Fl. & Fr.: April–September.

Distrib.: Commonly found in Dicholi, Kamargaon, Kisarule, Nauja, Rammala, Shirshinge, Zadoli,

Uses:

- Leaf juice applied on skin diseases.
- Leaves are chewed and applied on gum and teeth for the treatment of toothache.
- Root powder or paste applied on wound.
- One teaspoon root powder, twice a day for 2 days is taken orally for the treatment of dysentery.
- Leaf juice of *Pipani & Dingal* (*Crotalaria retusa* L.) mixed in equal proportion and applied on abscess.

Aloe vera (L.) Burm.f. (*'Kavar, Korphad'*) LILIACEAE

Herbs, acaulescent. Leaves radical, ensiform, narrowed from the base to apex. Inflorescence of terminal racemes. Flowers yellow or orange. Capsules cylindrical or ellipsoid oblong.

Fl. & Fr: December–May.

Distrib.: Grown around houses. Karate, Kondhavale, Manainagar, Navaja Dicholi.

Uses:

- Leaves are roasted in hot ash. Half tea spoon turmeric powder is mixed with one tea spoon of leaf juice and is taken twice a day, for 2 days, for the treatment of cough.
- Leaf juice is taken at bed time for the trouble of constipation.
- Part of the leaves is applied on burns. Also useful for menstruation complaints, skin disease and growth of hairs.

Alstonia scholaris (L.) R.Br. (*'Satavin'*) APOCYNACEAE

Trees. Leaves whorled, obovate or oblong-oblanceolate, obtuse or shortly acuminate at apex, tapering at base. Flowers greenish white in umbellately branched capitate cymes. Follicles cylindric, pendulous. Seeds compressed, rounded with hairy fringe at both ends.

Fl. & Fr: December–March.

Distrib.: Occasional. On the way to Avasari, Dicholi, Koyna dam, Koynanagar, Rammala.

Uses:

One tea spoon bark powder along with piece of dried coconut kernel is taken every morning, for 2 days, for the treatment of stomach ache. The formulation should be taken with empty stomach.

One tea spoon root powder twice a day for 3 days is given for fever.

Additional Information:

- Pods used for ulcers and roots for dyspepsia (Draxe, 1997).
- Bark and leaf powder useful for dental and skin disease. Barks decoction also useful for bronchitis and rheumatic pains (Kothari & Londhe, 1999).
- Bark useful as powerful tonic. Latex applied to sores, ulcers, tumers and rheumatic swellings (Tigga & al., 2003).

Amorphophallus paeoniifolius (Dennst.) Nicols. var. **campanulatus** (Decne.) Shivadasan (*'Ransuran'*) ARACEAE

Tubers depressed, globose, dark brown. Segments of the leaves spreading, simple or forked. Leaflets obovate or oblong, acute. Spathes campanulate, greenish pink, externally with pale ocellated blotches, base purple within. Spadices as long as spathes. Male inflorescence subterminate. Berries red, 2–3 seeded, obovoid.

Fl. & Fr.: May–July.

Distrib.: Rammala, Research nursery, Rasati.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: The rhizomes are eaten for constipation and piles.

Additional Information:

- Corm pounded in water is externally applied on rheumatic pains (Upadhye & al., 1994).
- Rhizomes used as vegetable. Rhizomes are also used medicinally for cholera, earache, pimples, throat amd rheumatic pains (Singh & Sharma, 2002).

Ampelocissus latifolia (Roxb.) Planch. (*'Nandenavel'*) VITACEAE

Climbing shrubs, young parts reddish tomentose, stem and branches striate. Leaves as long as broad, orbicular, 5–9 angled, or shallowly palmately lobed, cottony tomentose beneath when young, glabrous at length, margins toothed. Flowers reddish in pyramidal paniculate-cymes, calyx cup shaped. Berries globose, red when ripe. Seeds ellipsoid.

Fl. & Fr.: June–October.

Distrib.: Avasari, Dicholi, Ghatmatha, Kisarule, Vatole, Zadoli.

Uses: The bark is used as plaster on bone fracture**.**

Additional Information:

- Fruits edible. Root bark useful for wounds (Singh & Sharma, 2002).
- Root powder is mixed in water, after about one hour this paste is applied on body for inflammation (Pawar & Patil, 2011).

Ancistrocladus heyneanus Wall. ex Grah. (*'Kardal'*) ANCISTROCLADACEAE

Large climbing shrubs with hooked branches. Leaves crowded at apex, oblanceolate, coriaceous. Flowers creamy-yellow to white in lax terminal panicles. Fruits small, winged.

Fl. & Fr.: February.

Distrib.: Kusavade, Navaja (Ozarde waterfall), Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: The crushed leaves applied all over the body for treating measles.

Additional Information: Endemic (Singh & al., 2000).

Anogeissus latifolia (Roxb. ex DC.) Wall. ex Guill. & Perr. (*'Dhavada'*) COMBRETACEAE

Trees. Leaves elliptic, base cuneate, apex obtuse or shortly cuspidate. Flowers yellow, calyx tube compressed, pubescent, 2-winged, teeth broady triangular, petals absent. Fruits yellowish-brown.

Fl. & Fr.: August–September.

Distrib.: Avasari, Dicholi. Zadoli.

Uses:

- The seeds are crushed in the water and given for dysentery.
- The gum of the tree is fried in the ghee and given to the pregnant women for back-ache and weakness.
- The bark is applied on wound.

Additional Information: Fresh stem bark pieces chewed for cough (Salave, 2012).

Argemone mexicana L. (*'Pivala dhotara'*) PAPAVERACEAE

Annual, prickly herbs with yellow juice. Leaves sessile, amplexicaul, spiny on veins and margins. Flowers bright yellow, solitary, calyx prickly. Capsule oblong, prickly. Seeds globose, blackish-brown.

Fl. & Fr.: Throughout the year.

Distrib.: Weed in waste places. Avasari, Dicholi, Rammala, Shirshinge.

Uses:

- One cup root decoction is mixed with one tea spoon of seed powder and taken as an antidote for snake bite.
- The root decoction is taken internally as well as paste is applied locally on scorpion sting.

Additional Information:

- Latex is used to cure eye ailments (Deshpande & al., 1993; Pawar & Patil, 2009).
- Flowers are used for the extraction of yellow colour for painting (Jha and Basak, 1994).
- Roots, leaves and seeds useful for scabies while whole plant sap for jaundice (Kothari & Moorthy, 1996).
- Seeds useful as laxative, for eye disease and anti-poison (snake bite) and seed oil for swelling and eczema (Singh & Sharma, 2002).
- The powdered seed mixed with coconut oil is used to treat fungal infection (Koche & al., 2008).
- Root decoction is aphrodisiac and tonic for pregnant women as well as used to check vomiting and stomach ache (Pawar and Patil, 2008).
- Root paste applied on scorpion bite (Bhosle & al., 2009; Aher & Patil, 2009).

Chemical Constituents: Contain alkaloids berberine, protopine (Chopra & al., 1956). Seeds yield about 22% of Argemone oil, carbohydrates, albumen 49% and ash 6%. The Oil contains up to 40% free glycerides of fatty acids. The mixed fatty acids contain 8.14% of lauric acid. Potassium Nitrate naturally exists in the plant (Nadkarni, 1982).

Argyreia cuneata (Willd.) Ker-Gawl. (*'Mahalungi)* CONVOLVULACEAE

Shrubs, stem silky pubescent when young. Leaves obovate-oblong, subcoriaceous, retuse or apiculate at apex, acute to cuneate at base, glabrous above, hairy beneath.

Flowers bright purple, in 3-flowered cymes. Berries ellipsoid, yellowish-brown, fruiting calyx spreading or deflexed.

Fl. & Fr.: July–February.

Distrib.: Dhankel, Kati, Ker, Zadoli-Ambeghar.

Uses: Roots used for arthritis.

Additional Information: Endemic (Singh & al., 2000).

Argyreia sericea Dalz. & Gibs. (*'Gavel'*) CONVOLVULACEAE

Twiners, large, silky all over. Leaves broadly ovate, strigose above, densely silky beneath, apex acute, base cordate, nerves 8–10 pairs. Flowers pink, 6–8 in capitate or subcapitate cymes. Berries orange.

Fl. & Fr.: August–November.

Distrib.: Ambeghar, Dhankel, Shirshinge, Zadoli.

Uses: Leaves are applied on skin diseases.

Additional Information:

- Endemic (Singh & al., 2000).
- A fibre plant used to tie bundles as well as for house construction.
- Leaf juice used for scabies and roots for dizziness. (Kothari & Moorthi, 1996).

Arisaema murrayi (Grah.) Hook. (*'Sapkanda'*) ARACEAE

Tubers with root-fibres from the upper side. Leaf solitary, peltate, divided into 5–10 ovate-lanceolate, acuminate segments, spathes striate, green at base forming a tube for more than 1/3 of its length, spadix narrowed from base upwards, limb white with purple tinge. Male flowers scattered with a few neuters above them. Ovaries numerous crowded, ripens bright red, variously compressed. Heads in fruit conical.

Fl. & Fr.: June–September.

Distrib.: Avasari, Dicholi, Ghatmatha, Rammala, Shirshinge, Zadoli.

Uses: Tuber is applied on the outgrowth of piles.

Additional Information:

- Endemic (Singh & al., 2000).
- Tuber is also given to the cattle to induce the pregnancy.
- Seeds with salt given feed to cattle for the treatment of intestinal worms & stomach ache.
- Tuber is edible as vegetable and useful to heal wounds of cattle (Singh & Sharma, 2002) and applied externally for skin diseases (Jagtap & al., 2008).

Arundo donax L. (*'Chiva'*) POACEAE

Herbs. Leaves lanceolate, base amplexicaul, apex acuminate. Panicles large decompounds, spikelets laterally compressed, lanceolate. Grains oblong.

Fl. & Fr.: September–June.

Distrib.: Dicholi, Zadoli.

Uses: The stem is heated on fire and immediately cut at nodes and the hot steam is applied on the painful part affected due to arthritis. This treatment is locally termed as '*chore dene'*.

Asparagus racemosus Willd. var. **javanica** (Kunth) Baker (*'Shatavari, Aswali'*) LILIACEAE

Stems terete woody; cladodes slender, spinous-tipped. Flowers white, fragrant in racemes, bracts ovate, minute, perianth lobes linear oblong. Berries globose, red when ripe.

Fl. & Fr.: July–September.

Distrib.: Avasari, Dhankel, Dicholi, Kolane, Male, Nav, Rammala, Zadoli.

Uses:

- Root powder is given in dysentery.
- One tea spoon root powder is taken twice a day till 10–15 days for the treatment of bleeding piles. Root paste is also applied to the affected part due to piles.
- One tea spoon root powder boiled in milk & given twice a day, for 10 days for the treatment of white discharge.
- One tea spoon root powder with a cup of milk is taken every morning for 10–15 days for lactation in mother and as a tonic.
- To increase the sexual strength root powder in a cup of milk is given for 1 month.

Additional Information:

- The roots are collected, washed and made into pieces and sold in the local market.
- Root is pounded with aerial root of *Smilax prolifera* and is prescribed as a drink to cure urinary disorder as well as discharge of blood in urine (Jain & Rao, 1983).
- Root is demulcent, diuretic, aphrodisiac, tonic, alterative, antiseptic, antidiarrhoeal and galactagogue. (Joy & al., 2001).
- Root powder given with butter milk for leucorrhoea (Draxe, 1997). Roots are also useful for piles, urinary disorder and snake-bite (Kothari & Rao, 1999).
- Leaf paste applied 2–3 times for scabies (Rajendran & Henry, 1994).
- Tubers used for the excess menstruation flow (Singh and Prakash, 1994).
- The tubers with turmeric given for fever (Karne, 2011).

Bacopa monnieri (L.) Penn. (*'Bramhi'*) SCROPHULARIACEAE (PLATE IV–4)

Herbs, creeping-ascending, succulent, rooting at nodes. Leaves sessile, obovate-oblong, apex obtuse. Flowers bluish-white, axillary, solitary; one sepal ovate, longer than remaining 4 sepals; corolla lobes with glistening dots when fresh.

Fl. & Fr: January–May.

Distrib.: Rare, along water course. Ambeghar, Shirshinge, Zadoli.

Uses: Whole plant is given along with butter milk for the treatment of red discharge. Also useful as nerve tonic. Leaves used for rheumatic pains.

Additional Information:

- Five leaves at a time for one month are prescribed to improve the speech of stuttering person (Upadhye & al., 1994).
- Whole plant used for asthma, bronchitis, constipation, cough (Children), nerve tonic, skin diseases, rheumatic pains, while the stem and leaves used as an antidote for snakebite (Kothari and Londhe, 1999).
- According to Sinha & Ramesh Kumar (2009) the plant is used as brain tonic.
- Plant is diuretic used as nerve tonic, memory enhancer and also useful for treating asthma, cough, skin diseases, constipation, bronchitis, nervous disorders, rheumatism, urinary infections and hepatitis (Karne, 2011).

Bambusa arundinacea (Retz.) Willd. (*'Kalak*) POACEAE

Culms tall; branching from all nodes from base upward, large tufted armed with recurved spines. Leaves linear or linear-lanceolate, rounded at base, sheaths coriaceous, orange yellow with green or red streks. Panicles large, equaling the stem.

Distrib.: Navaja, Rammala, Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1995).

Uses: The steam bath of leaves is given to the body part affected due to joint pain.

Additional Information: The stem is used for house construction. The stem is sold in the local market.

Barleria cristata L. var. **cristata** (*'Nili Koranti '*) ACANTHACEAE

Erect, perennial undershrubs. Leaves elliptic-oblong, hairy on both surfaces, apex acute or acuminate, base tapering. Flowers in axillary or terminal, short, ovate, dense spikes, blue or purple. Capsules ellipsoid, acute at both ends. Seeds orbicular, compressed, silky hairy.

Fl. & Fr.: September–January.

Distrib.: Commonly cultivated for flowers. Avasari, Manainagar, Maneri, Rammala.

Uses: Stem and leaves along with the salt is chewed for toothache.

Additional Information:

- Flowers used to worship the God.
- In Bengal, decoction of root with *Barleria strigosa* and dry fish given to anemia patients (Jain & Rao, 1983).

- The plant is edible and used for anaemia, body pain, headache, swelling legs, toothache (Pant and Samant, 2010).
- Leaf and root infusion used for cough (Karne, 2011).

Barleria cristata L. var. **dichotoma** (Roxb.) Prain (‘*Pandhari Koranti’*) ACANTHACEAE

Undershrubs, erect or diffuse. Leaves elliptic-oblong, apex acute or acuminate, base tapering. Flowers white in axillary or terminal, dense spikes. Capsules ellipsoid, acute at both ends. Seeds orbicular.

Fl. & Fr.: September–January.

Distrib.: Commonly cultivated for flowers. Avasari, Manainagar, Rammala.

Uses: Stem and leaves along with pinch of salt is chewed for the treatment of toothache.

Additional Information: Flowers are used for doing Pooja to worship God.

Bauhinia purpurea L. (*‘Kanchan’*) CAESALPINIACEAE

Trees. Leaves suborbicular, apex obtuse, subacute, base cordate. Flowers in terminal racemes. Pods flat, pointed at both ends, reddish-brown, obliquely oriented. Seeds oblong-ellipsoid.

Fl. & Fr.: October–November.

Distrib.: Rammala, Cultivated as ornamental plant.

Uses: Bark used for the treatment of excess body heat.

Additional Information:

- Flowers are boiled and eaten for piles and dysentery (Chhetri, 1994).
- Flowers and fruits edible as vegetable. Buds used as pickle (Singh & Sharma, 2002).
- The bark is used for the treatment of skin diseases, leprosy and as a tonic, wood as timber. Flower buds edible as vegetable and seeds to control the lice (Koche & al., 2008).
- Leaf paste applied on scorpion sting (Bhosle & al., 2009).
- Seeds are useful for leprosy (Gupta & al., 2010).
- Leaf decoction used for malaria while flower buds are laxative (Karne, 2011).

Bauhinia racemosa Lam. (‘*Apata’*) CAESALPINIACEAE

Trees. Leaves ovate-orbicular, base cordate, apex obtuse, mucronate, glabrous above, whitish tomentose beneath. Flowers white to yellowish in leaf opposed & terminal racemes. Pods flat, turgid. Seeds 12-20, oblong.

Fl. & Fr.: April –December.

Distrib.: Common. Dicholi, Ghanabi, Khudupalewadi, Rammala, Rasati, Shirshinge, Vankusavavade, Zadoli.

Uses:

- The bark powder of *Bauhinia racemosa* and Tetu (*Oroxylon indicum*) are mixed in equal proportion and used as antidote for snakebite.
- Bark powder is taken for the treatment of white discharge (leucorrhoea).

Additional Information:

- Leaves made into cigarette by adding tobacco. The bark is used for preparation of fibre. Seeds are edible. The tender leaves used as vegetable and also distributed during the festival of *Dasara* as a symbolic gold.
- Leaves decoction useful for headache & malaria. Stem bark for diarrhoea & dysentery and its gum as tonic (Chopra & al. 1956; Kothari & Rao, 1999).
- Root paste applied on joint pain (Bhosle & al., 2009).
- Leaves with onion used for diarrhoea, flower buds for dysentery and roots decoction for dyspepsia (Karne, 2011).

Chemical constituents: Chemical constituents such as ß-sitosterol and ß-amyrin were isolated from the stem bark, at least five flavonols (kaempferol and quercetin) and two coumarins (scopoletin and scopolin) were also isolated from the leaves while Stilbene (resveratrol) was isolated from the heartwood (Kumar & al., 2005).

Begonia crenata Dryand. (*'Pavasali bedaki'*) BEGONIACEAE

Herbs, annual, succulent, stem reddish. Leaves alternate, ovate or sub-orbicular, margins crenate. Inflorescence of terminal spikes. Flowers pinkish, monoecious. Capsules membranous, 3-winged. Seeds minute ellipsoid.

Fl. & Fr: July–February.

Distrib.: Common monsoon herb in moist rocky crevices. Avasari, Dicholi, Katitek, Shirshinge, Zadoli.

Uses: Whole plant is crushed and applied on the infection between fingers caused by mire.

Additional Information: Endemic (Singh & al., 2000).

Bidens biternata (Lour.) Merr. & Sherff. (*'Murshenda'*) ASTERACEAE

Herbs. Stem quadrangular, grooved. Leaves pinnate, petiole sheathing, dilated at base. Outer involucral bracts oblong subacute, herbaceous, inner longer, membranous, red, black or white, globose or lobed.

Fl. & Fr.: October–December.

Distrib.: Growing as weed. Avasari, Dhankel, Dicholi, Male, Kolane, Nav, Zadoli.

Uses:

The juice or the vegetable of the tender leaves is given for the treatment of white discharge.

Additional Information:

- The tender leaves used as vegetable.

- Medicinally, leaves also useful for ear and eye ailments (Singh & Sharma, 2002).
- Ethanol extract (95 %) is useful for leprosy (Gupta & al., 2010).
- Roots, leaves and seeds of this plant have been reported to possess antibacterial, antidysenteric, anti-inflammatory, antimicrobial and hypotensive activities. Extracts of this plant is used in southern Africa to cure malaria. In tropics also it is used on snakebite and malaria. It is used in traditional medicine as a remedy to treat glandular sclerosis, wounds, colds, flu and urinary tract infections (Dagawal and Ghorpade, 2011).

Biophytum sensitivum (L.) DC. (*'Pavasali lajalu'*) OXALIDACEAE

Herbs. Stem reddish, densely hairy, unbranched. Leaves crowded at apex of branches, leaflets oblong, oblique, base obtuse, apex apiculate, punctuate on upper surface. Flowers yellow, in terminal umbels. Capsules ellipsoid, covered with persistent calyx. Seeds ovoid.

Fl. & Fr.: September–December.

Distrib.: Growing in waste places and near cultivated fields. Avasari, Dhankel, Dicholi, Kolane, Male, Nav, Rammala, Zadoli.

Uses:

- One cup leaf juice is given to the women after delivery to expel out the remains of cellular debris and mucus and blood.
- The leaf paste is applied on cuts, wounds and burns.

Bixa orellana L. (*'Shendri'*) BIXACEAE

Small trees. Leaves ovate, acute or acuminate at apex, subcordate at base. Flowers pink or white in terminal panicles. Capsules ovoid or subglobose, clothed with long, soft prickles. Seeds trigonous, rounded and grooved on the back. Pulp annatto.

Fl. & Fr.: August–September.

Distrib.: Kati, Rammala, Rasati nursery.

Uses:

- Seed powder is applied on burns and wounds.
- Seeds used for making dye.

Additional Information:

- Seeds used in dyeing industry (Deshpande & al., 1993) for obtaining annatto colour for painting (Jha and Basak, 1994).
- The fruits and seeds used as insecticides (Sinha & Ramesh Kumar, 2009).
- The pulp surrounding the seed is used on bleeding, dysentery, gonorrhea, constipation, and fever. The extracts of leaves, bark, and roots are reported to be antidotes for poisoning from *Manihot esculenta, Jatropha curcas.* A decoction of the leaves is used to stop vomiting and nausea, treat heartburn,

prostate and urinary difficulties, and stomach problems (Venugopalan & al., 2011).

Blumea lacera (Burm.f.) DC. (*'Bhambarat'*) ASTERACEAE

Herbs, erect, aromatic. Stem grooved, glandular, pubescent. Leaves subsessile elliptic-oblong, incised or sometimes lyrately lobed, silky pubescent on both sides, margins serrate dentate. Heads orange yellow. Involucral bracts linear lanceolate, slightly longer than corolla silky villosus, margins scarious. Achenes oblong, sparsely hairy. Subangulate, terrete.

Fl. & Fr.: September–February.

Distrib.: Shirshinge, Zadoli.

Uses: Leaves are haemostatic. The juice is applied on wound as well as on leech biting.

Additional Information: Leaves used as mosquito repellent. Whole plant useful for bronchitis and fever (Singh & Sharma, 2002).

Blumea malcolmii (C.B. Cl.) Hook.f. (*'Burandi'*) ASTERACEAE

Herbs, decumbent or ascending, strongly aromatic; branches densely clothed with silky wool. Leaves obovate, sessile, base tapering, apex obtuse, margins irregularly toothed, densely white-woolly beneath. Flowers yellow. Heads in leafy panicles, terminal, fasciculate, subsessile. Achenes dark brown, obscurely angled, sparsely pubescent.

Fl. & Fr.: October–February.

Distrib.: Common. Ghatmatha, Shirshinge, Zadoli.

Uses: Leaves are haemostatic hence the juice applied on wound as well as on leech biting.

Additional Information:

- Endemic (Singh & al., 2000).
- Fresh crushed leaves applied on cuts and wounds (Upadhye & al., 1994).

Bombax ceiba L. (*'Savar, Katesavar, Lalsavar'*) BOMBACACEAE (PLATE VIII–5)

Trees, trunk buttressed. Leaves 5–7 foliolate, apex caudate, cuspidate or acuminate, base acute, entire. Flowers red, solitary, paired or clustered near the ends of leafless branchlets. Capsules ovoid-oblong, loculicidal, 5-locular. Seeds numerous, ovoid, packed in white cotton.

Fl. & Fr.: February–May.

Distrib.: Common. Ambeghar, Avasari, Dicholi, Koyna, Navaja, Rammala, Shirshinge, Zadoli.

Uses:

- One tea spoon bark powder is taken twice a day for 4 days for the treatment of white discharge (Leucorrhoea).
- Root stock of the seedling is used as aphrodisiac in sexual impotency and spermatorrhoea.
- Paste of the spines is applied on pimples.

Additional Information:

- Young flower buds (termed as 'Dodya') and fruits are used as vegetable.
- Dried stalk of the flower is collected by the local people and sold at the price of Rs. 250–300/kg. to the agents. It is supposed to be used for adulteration in olive.
- The vegetable made from the young flower buds is good for colitis (Kothari & Londhe, 1999).
- Flower buds are edible and used in colitis while fruits are used as pain killer and against snakebite (Kothari & Shirodkar, 2006).
- Roots used for impotency, root paste applied for pimples; seedlings for sexual potency; stem bark for ulcers, blisters; gum for dysentery; fruits diuretic, expectorant (Karne, 2011).

Brassica juncea (L.) Czern. & Coss. (*'Mohari'*) BRASSICACEAE

Annual, erect herbs. Leaves lanceolate, entire or dentate, lower leaves lyrate-pinnatifid. Flowers bright yellow. Fruits torulose, beaked. Seeds globose, many.

Fl. & Fr.: August–September.

Distrib.: Found as an escape around fields and wastelands. Rammala, Rasati.

Uses: Seeds crushed and applied on joint pain and swellings.

Additional Information: Seeds extract is used as fixative for providing durability and permanence to the colour (Jha and Basak, 1994).

Butea monosperma (Lam.) Taub. var. **monosperma** (*'Palas')* FABACEAE

Trees; bark rough, ash coloured. Leaves 3-foliolate; leaflets obovate ovate-rhomboid, glabrous above, silky beneath. Flowers bright crimson red in compact racemes on leafless branches. Pods oblong, sandy-brown, hairy, stalked, Seeds solitary.

Fl. & Fr.: March–May.

Distrib.: Occasional. Avasari, Gojegaon, Khudupalewadi, Punavali, Rammala (grown in garden), Shirshinge, Zadoli.

Uses: The decoction of flowers is used for the treatment of urinary problem i.e. for burning micturition (Burning during urination).

Additional Information:

- The roots made into fibre (locally called as '*Chavar*'). These fibres tied on the horns of the bullock, doors of the houses as well as on the traditional storage

tanks of the grain during the festival of bullock *'Bailapola'* in the month of July.

- Leaves used for the preparation of dishes and plates for serving food.
- Stem bark used for dysentery (Singh and Prakash, 1994);
- Decoction of leaves for diarrhoea, diabetes and heartburn. Decoction of bark for cold and cough. (Gill and Nyawuame, 1994);
- Root bark for blood pressure. leaves for eye disease; flowers for cough, leprosy and seeds for ringworm and as anti-poison for snake bite (Kothari & Moorthi, 1996); Whole plant has religious importance in holy festival and it is antiseptic and cooling (Bhatt & al., 2001);
- Leaves, flowers & seeds extract used as contraceptive, stem bark astringent used in piles. Flowers used in menstrual disorders (Kothari and Shirodkar, 2006).
- The flowers extract is used for burning sensations, skin diseases; fruits are aphrodisiac and given in abdominal disorders (Koche & al., 2008);
- Leaf powder mixed with oil useful for knee-ache and rheumatism (Aher & Patil, 2009); Flower infusion used for excess body heat (Bhosle & al., 2009).
- Root bark paste applied on swellings (Pawar & Patil, 2011); Stem bark paste used in haematuria (Karne, 2011).
- Leaves used to cure boils, pimples and tumourous hemorrhoids and are internally given in flatulent, colic, worms and piles. The shoot apex is used by the "Kani" tribal women of Kerala to prevent conception. The petals are given to sheep for haematuria. A composite powder from the dried seeds of *B. monosperma*, *Embelia ribes* and *Mallotus philippensis* was found to be effective in controlling the worm *Hymenolepis nana* in human intestine. The bark yields a kind of coarse and brown colored fibre, which is used for rough cordage (Pal & Bose, 2011).

Caesalpinia bonduc (L.) Roxb. (*'Gajaga'*) CAESALPINIACEAE

Climbers, branches prickly and downy-pubescent. Leaves abruptly pinnate; leaflets elliptic-oblong, base truncate, apex obtuse, mucronate, puberulous beneath. Flowers in racemes. Pods oblong.

Fl. & Fr.: June–September.

Distrib.: Occasional. Planted in Rammala garden, Ker.

Uses: Half tea spoon roasted and powdered seeds are given twice a day for stomach ache**.**

Additional Information:

- Paste of leaves is applied on boils (Pawar & Patil, 2011).
- Plant is reported to have multiple therapeutic properties like, anti-anaphylactic and antiviral, antiasthmatic, antiamebic and anti-estrogenic (Khedakar & al., 2011).

Cajanus lineatus (Wight & Arn.) van der Maesen (*'Turati'*) FABACEAE (PLATE X–4)

Shrubs. Leaves 3-foliolate; leaflets glandular punctuate, lateral ones oblique. Flowers yellow, in sessile racemes. Pods oblong, acute at both ends. Seeds flat orbicular.

Fl. & Fr.: December–April.

Distrib.: Common. Avasari, Donichawada, Ghatmatha, Khudupalewadi, Rammala (grown in garden), Sangamnagar (Dhakka), Shirshinge.

Uses: Stem is chewed for treating toothache.

Additional Information:

- Endemic (Singh & al., 2000).
- Seeds are used as vegetable.
- Leaves useful for cuts, wounds, asthma and cough (Singh & Sharma, 2002).

Calamus pseudo-tenuis Becc. & Hook.f. (*'Vet'*) ARECACEAE

Climbers, spiny. Leaves pinnatisect; leaflets linear lanceolate, acuminate, apex spiny; leaf sheaths with straight or hooked spines. Flowers in axillary, distichous or scorpioid spikes; calyx copular, petals tubular in male flowers, free in female flowers. Drupes globose.

Fl. & Fr.: April.

Distrib.: Dicholi, Zadoli.

Uses: Roots are given in fever.

Additional Information:

- The stems used for preparation of household instruments and sold in local market.
- Leaves useful for biliousness and wood as vermifuge (Singh & Sharma, 2002).

Callicarpa tomentosa (L.) Murr. (*'Aisar'*) VERBENACEAE

Much branched shrubs. Leaves ovate, apex acuminate, base rounded, upper surface glabrous, lower surface densely tomentose. Cymes stellately tomentose. Flowers pale pink, sessile; calyx densely tomentose. Drupes globose black.

Fl. & Fr.: December–June.

Distrib.: Ghatmatha, Navaja (Ozarde waterfall), Shirshinge, Zadoli.

Uses: Bark and leaves are crushed and applied on skin diseases.

Additional Information:

- Bark used in skin troubles and fever; flowers in diseases of nervous system and hemorrhage (Shiddamallaya & al., 2010).
- Aqueous leaf extract is used as antiseptic and to relieve itches (Yesodharan and Sujana, 2007).

Calotropis gigantea (L.) Ait. (*'Rui, Ravi'*) ASCLEPIADACEAE

Large shrubs with milky latex; young branches white tomentose. Leaves subsessile elliptic oblong, white tomentose. Flowers white or purple in lateral umbellate or subcorymbose cymes, corona of 5-fleshy, laterally compressed lobes. Follicles paired, boat shaped with hooked tip. Seeds broadly ovoid, brown, coma silky.

Fl. & Fr.: February–July.

Distrib.: Common weed in waste places. Avasari, Donichawada, Goshatwadi, Khudupalewadi, Paytyachawada, Rammala.

Uses:

- White milky latex applied on wounds & scabies.
- Latex mixed with leaf juice of *Clematis gouriana* & applied on scorpion sting.
- Stem bark, along with coconut kernel is taken twice a day for 3 days, for the treatment dysentery.
- Leaf juice of mature yellow leaves mixed with cow milk or cow urine in 1:2 proportions. 1 tea spoon of turmeric powder is added in it and taken twice a day for treating asthma. Oily food should be avoided.
- Five to six drops of leaf juice is added in 1 tea spoon of cow milk and taken twice a day, for 3 days, for the treatment of Bright's disease (*Nalgud*) -an inflammation of the kidney. The leaf juice is reduced to 3–4 drops for children. Eating of rice should be avoided during the course of time.
- The leaves are crushed & boiled along with the leaves of *vitex negundo* & applied on the painful & swollen part of the body which appears as symptom because of arthritis.

Additional Information:

- In Kunabi-Maratha community the flowers along with the flowers of *Plumeria rubra* (Chapha) are made into garland ('*Mandavali*') & tied on the forehead of husband & wife during marriage ceremony.
- A pinch of dried powdered flowers with honey are recommended for a month in mental disorders (Upadhye & al., 1994). In 'Koraku' leaf powder used for healing wounds & boils; flowers with jaggery for cough, Asthma; latex with turmeric and sessamum oil for eczema (Kothari & Londhe, 1999). Flowers employed in cough and asthma (Bhatt & al., 2001).
- The castor oil is applied over the surface of leaves, heated mildly and bandaged over the testicles for treating hydrocele (Koche & al., 2008).
- Leaf extract mixed with milk useful for joint-ache (Aher & Patil, 2009).
- A spoonful of latex is mixed in oil of *Brassica juncea* and a pinch of power of black pepper (*Piper nigrum*) and applied locally to cure joint pain. A thorn inserted in foot sole is easily removed on application of latex (Patil & Pawar, 2011). Ethanol extract is useful for leprosy (Gupta & al., 2010).
- The flowers are antimicrobial; leaves and areal parts anti-Candida, and antioxidant; roots anti-pyretic, cytotoxic, wound healing and shows pregnancy interceptive properties; latex purgative, wound healing and antimicrobial

and the stems possess hepato protective effects (Kumar & al., 2011). Leaves warmed with castor or sesame oil and applied on piles while powdered leaves used for healing of boils, wounds. (Karne, 2011).

Calotropis procera (Ait.) R.Br. (*'Rui, Ravi'*) ASCLEPIADACEAE

Erect shrubs with milky latex. Stems woody, cylindrical, branched. Leaves sessile, broadly ovate, obovate or obovate-oblong, base cordate. Flowers in umbellate cymes. Corolla hemispherical in bud, lobes divided 2/3 half way down; corona 5, laterally compressed, lobes completely adnate to column, recurved at base. Follicles in pairs, recurved. Seeds ovoid, comma silky-white.

Fl. & Fr.: February–July.

Distrib.: Common weed in waste places. Donichawada, Khudupalewadi, Paytyachawada, Rammala.

Uses:

- White milky latex applied on wounds & scabies.
- Latex mixed with leaf juice of *Clematis gouriana* & applied on scorpion sting.
- Stem bark, along with coconut kernel is taken twice a day, for 3 days, for the treatment of dysentery.
- Leaf juice of mature yellow leaves mixed with cow milk or cow urine in 1:2 proportions. 1 tea spoon of turmeric powder is added in it and taken twice a day for treating asthma. Oily food should be avoided.
- Five to six drops of leaf juice is added in 1 tea spoon of cow milk and taken twice a day, for 3 days, for the treatment of stomachache. The leaf juice is reduced to 3–4 drops for children. Eating of rice should be avoided during the course of time.
- The leaves are crushed & boiled along with the leaves of *vitex negundo* & applied on the painful & swollen part of the body which appears as symptom because of arthritis.

Additional Information:

The plant paste mixed with sugar and applied over dog bites. The dry leaves are smoked as a treatment for cough and asthma. The latex is useful in the treatment of ringworms and skin disease (Koche & al., 2008) as well as an antidote for scorpion sting (Patil & al., 2009).

Calycopteris floribunda (Roxb.) Poir. (*'Baguli, Ukshi'*) COMBRETACEAE

Shrubs, young pats rusty puberulous. tomentose on both the sides. Leaves elliptic oblong or ovate-lanceolate. Flowers yellowish green in terminal drooping panicles. Fruits samaroid, 5-ribbed, pubescent with a crown of calyx lobes.

Fl. & Fr.: March–July.

Distrib.: Common at Avasari center, Donichawada, Shirshinge, Zadoli.

Uses: The tender leaves eaten for the treatment of dysentery.

Additional Information:

- Leaves useful for skin diseases and insect bite (Singh & Sharma, 1998).
- Fruits used for jaundice and tender branches for worms infection & snake-bite (*Zado process*). Wood and leaves useful as ash-manure in rice field and stems for thirst (Kothari & Rao, 1999).

Canscora diffusa (Vahl) R.Br. ex R. & S. (*'Shankhapushpi'*) GENTIANACEAE

Herbs, highly branched. Upper leaves sessile, broadly ovate, membranous, acute at apex, rounded at base, lower petiolate, elliptic, 3-nerved. Flowers pink in lax, diffuse, paniculata cymes. Flowers pink. Capsules membranous, narrowly oblong.

Fl. & Fr.: August–May.

Distrib.: Widely distributed in moist, shady places. Dhankel, Donichawada, Rammala, Shirshinge, Zadoli.

Uses:

The leaves are crushed and applied on swelling and contusion.

Additional Information:

In Bihar whole plant is used for malaria (Jain, 2004). Leaf ash mixed with coconut oil is applied on skin to prevent the hair fall due to skin infection. Ash of entire plant is applied on swelling, bruises and goiter or even smoke is passed over the body of the patient (Patil & Patil, 2005).

Canthium angustifolium Roxb. (*'Shengali'*) RUBIACEAE

Scandent, straggling shrubs, thorns straight or curved, branches clothed with appressed hairs. Leaves opposite, elliptic-lanceolate, apex acute, base rounded or cordate, nerves and margins hirsute on lower surface. Flowers greenish-white, in axillary fascicles or cymes. Drupes obcordate.

Fl. & Fr.: February–December.

Distrib.: Ghatmatha, Mirgaon, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: One tea spoon root powder with warm water is given for intestinal worms twice a day.

Canthium dicoccum (Gaertn.) Teijsm. & Binn. (*'Tupa'*) RUBIACEAE

Small trees or shrubs. Leaves olive-green, opposite, elliptic-lanceolate, smooth, shining, coriaceous, base tapering, apex shortly acuminate. Flowers in axillary clusters, white, fragrant. Drupes subglobose, black when ripe.

Fl. & Fr.: September–December.

Distrib.: Common. Shirshinge, Zadoli ambeghar.

Notes: Included on the authority of Deshpande & al. (1993).

Uses:

- The decoction of the bark is given for fever.
- The decoction of bark is mixed with sesame oil in 1:4 proportions and the mixture is boiled till to remain only oil. This oil is applied on joint pain.

Capparis moonii Wight (*'Waghati'*) CAPPARACEAE

Extensive climbers with shining branches. Leaves elliptic-oblong; stipular spines short, stout, hooked. Flowers white in terminal corymbs, fragrant, puberulous. Fruits subglobose, reddish brown when ripe. Seeds many.

Fl. & Fr.: December–June.

Distrib.: Ghatmatha, Kamargaon, Navaja.

Uses: One tea spoon fruit powder is given for the treatment of tuberculosis twice a day.

Additional Information: Fruits are sold in nearby towns.

Capparis rotundifolia Rottl. (*'Kolisna'*) CAPPARACEAE

Shrubs, young shoots pubescent. Leaves broadly elliptic or orbicular, apex mucronate, shining above; stipular spines long, straight. Flowers white. Berries white, ovoid-globose.

Fl. & Fr.: February–July.

Distrib.: Ghatmatha, Zadoli, Zadoli ambeghar.

Uses: Leaves applied locally on rheumatic pain.

Capsella bursa-pastoris (L.) Medik. (*'Dhaman'*) BRASSICACEAE

Herbs, stem erect, glabrous or hairy. Radical leaves oblong or oblanceolate, margins toothed or pinnatifid, cauline ones oblong-lanceolate, amplexicaul or sagittate at base. Flowers white, in corymbose, soon elongating to racemes. Pods terete. Seeds ellipsoid.

Fl. & Fr.: November–April.

Distrib.: Common. Ambeghar, Avasari, Punavali, Rammala, Shirshinge, Zadoli.

Uses:

- One cup infusion of the fresh plant is given for four days for menstrual problems.
- The juice of the leaves is applied on fresh cuts and for healing wounds.

Additional Information: Whole plant used for blood pressure, diarrhoea and dropsy (Pant and Samant, 2010).

Cardiospermum halicacabum L. ('*Kapalphodi'*) SAPINDACEAE

Slender, perennial herbs, roots woody. Leaflets ovate-lanceolate, margins toothed. Flowers white, 4-merous, in corymbose, tendriliferous cymes. Capsules trigonous, depressed, pyriform. Seeds globose, arillate.

Fl. & Fr.: September–November.

Distrib.: Avasari, Rammala (planted in demogarden).

Uses: Leaf juice mixed with leaf juice of Erand (*Ricinus communis*) and applied on affected part due to joint pain (Arthritis).

Additional Information:

- Green parts of the plant eaten as vegetable (Kothari & Moorthi, 1993).
- Whole plant is useful for earache, rheumatic pains & swellings (Upadhye & al., 1994; Singh & Sharma, 2002).
- Leaf extract are poured on wound to prevent pus formation (Pawar & Patil, 2011).
- Crushed leaves used for scorpion sting and rheumatism (Karne, 2011).
- Roots decoction used for indigestion while seeds used for sinusitis (Saraf & Gour-Broome, 2012).

Careya arborea Roxb. (*'Kumbha'*) LECYTHIDACEAE (PLATE: IX-1)

Trees. Leaves broadly obovate, oblong-obovate, rounded to shortly acuminate at apex, tapering at base, margins crenate-denticulate, deciduous. Flowers yellowish-white, in terminal spikes. Fruits globose, fleshy.

Fl. & Fr: April–June.

Distrib.: Avasari centre, Dicholi, Kondhavale, Koyna dam, Navaja.

Uses:

- Bark powder is applied on wound, which helps blood clotting.
- Bark along with non-vegetarian food is given as tonic to pregnant women.
- Bark crushed and applied as plaster on bone fracture.
- Bark is given for the treatment of dysentery.
- Fruit is edible & its pulp is eaten for obesity.

Additional Information:

- Root is used for the preparation of agricultural instruments.
- A cup of flower infusion in water is given after child birth as a tonic for seven days (Upadhye & al., 1994).
- Stem sap or decoction of bark used for asthma, burnings, dental diseases and its strength, snake bites (Kothari and Londhe, 1999).
- Calyx useful for cold, cough & stomach ache along with bark & fruits. Flowers used as tonic after child birth. Bark fibre used as cordage (Upadhye & al., 1994; Singh & Sharma, 2002).

Carica papaya L. (*'Papai'*) CARICACEAE

Dioecious trees, stem with copious latex. Leaves large, pinnatifid. Flowers greenish yellow; male in drooping panicles, females in axillary clusters. Fruits fleshy, many seeded, yellow when ripe.

Fl.: November–March, *Fr.:* January–December.

Distrib.: Planted near houses for edible fruits. Avasari, Dhankel, Rammala.

Uses:

- The leaves are applied over corns.
- The raw fruits crushed & applied on infected wound.
- Latex is applied on skin disease.
- Fruits used in constipation and dyspepsia.

Additional Information:

- Ripe fruit pulp is mixed with milk cream and used for cracks in feet. It is also mixed with *Aloe vera* leaf pulp and applied on face as well as around eyes for the treatment of black spots and wrinkles (Pawar & Patil, 2011).
- Fruits used in jaundice and as appetizer (Thakur & al., 2011).

Carissa congesta Wight var. **congesta** (*'Karavand'*) APOCYNACEAE

Shrubs. Leaves broadly ovate, base acute or cuneate, apex mucronate. Flowers white with pink tinge, in axillary and terminal dichotomous cymes. Berries purplish, black when ripe.

Fl. & Fr.: November–May.

Distrib.: Ambeghar, Avasari, Dicholi, Donicha wada, Ghatmatha, Kisarule, Zadoli.

Uses:

- Two tea spoon of root paste or powder is given as an antidote for snake bite.
- The root paste is applied on scabies and scorpion sting.
- Root paste or powder applied on forehead for treating headache.

Additional Information:

- Unripe fruits made into pickle and ripe fruits are edible. Fruits are sold in the local market.
- Root paste in lime juice is applied on skin diseases (Upadhye & al., 1994).
- Leaves useful in asthma (Kothari & Rao, 1999) and roots useful as antidote for snake bite (Rakecha, 2008), also applied on skin allergy and itches (Bhosle & al. 2009) as well as used for stomach problems (Karne, 2011).

Chemical constituents: Roots extract showed histamine releasing activity. Five caediac glycosides are isolated; three of these identified as odoroside G, odoroside H and eumonoside. Other two compounds B & C were rhmnoside and rhmnoglucoside respectively (Rastogi & Mehrotra, 1993).

Carissa inermis Vahl (*'Karavand'*) APOCYNACEAE

Shrubs. Leaves elliptic to elliptic-lanceolate, coriaceous, acute to acuminate at apex, acute at base. Flowers white, in terminal, corymbose cymes. Berries ellipsoid, purple when ripe.

Fl. & Fr.: December–May.

Distrib.: Avasari, Ambeghar, Dicholi, Donicha wada, Kisarule, Ghatmatha, Zadoli.

Uses:

- The root paste or powder is applied on scabies.
- Root paste or powder applied on forehead for treating headache.

Additional Information: Endemic (Singh & al., 2000).

Caryota urens L. (*'Mad'*) ARECACEAE

Trees. Leaves 3–6 m long, drooping, spathes 20–30 cm long; male flowers; sepals cordate, ciliate, petals concave, reddish, stamens numerous, female flowers; smaller than male flowers, staminodes 3, berries globose, reddish black.

Fl. & Fr.: Throughout the year.

Distrib.: Occasional. Ambeghar, Avasari centre, Rammala, Zadoli.

Uses:

- Fruits used for headache.
- Wood sap (*maddy*) is laxative and used for excess heat in the body and sold in the local market.

Additional Information: Leaves used for thatching, hut construction, fibre and wood for planks. Stem pith is edible (Kothari & Rao, 1999).

Casearia championii Thwaites (*'Modi'*) FLACOURTIACEAE

Trees. Stems and branches lenticelled. Leaves elliptic-oblong to elliptic-lanceolate, apex acuminate, base tapering, margins entire or serrate. Flowers greenish in axillary clusters. Capsules ellipsoid, 3-valved, yellowish orange. Seeds many, aril large, fleshy.

Fl. & Fr.: February–July.

Distrib.: Ambeghar, Avasari, Dicholi, Khudupalewadi, Zadoli.

Uses: Leaves are crushed and applied on swelling.

Additional Information: Leaves used as vegetable.

Casearia graveolens Dalz. (*'Bokada'*) FLACOURTIACEAE

Small trees. Stems and branches lenticelled. Leaves broadly elliptic, base rounded, apex acute. Flowers green in axillary clusters of leafless branches. Capsules ellipsoid, 3-valved, yellow. Seeds with red aril.

Fl. & Fr.: February–October.

Distrib.: Ambeghar, Dicholi, Khudupalewadi, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: The stem bark powder is applied on wound.

Additional Information: Fruits used as fish poison; Leaves poisonous (Chopra & al., 1956).

Cassia fistula L. (*'Bhava'*) CAESALPINIACEAE (PLATE: IX-2)

Trees, about 10 m tall. Leaflets 4–8 pairs, ovate or ovate-oblong, base acute, apex emarginate. Flowers yellow in lax drooping racemes. Pods pendulous, indehiscent, brownish-black. Seeds numerous, embedded in dark coloured pulp.

Fl. & Fr.: April–December.

Distrib.: Common. Avasari, Dastan, Dicholi, Gojegaon, Karate, Nahimbe ambeghar, Rammala, Rasati.

Uses:

- Leaves crushed and applied on ringworm and scabies.
- Fruit pulp is mild laxative.

Additional Information:

- Wood is used for preparation of agricultural implements as well as for the construction of huts.
- Fruits sold in nearby towns for the preparation of Ayurvedic formulation *'Aargvadha ghana'* which is mild laxative.
- Fruit pulp used for diabetes. Leaves for ringworm (Gill and Nyawuame, 1994).
- Whole plant used for ulcers, leprosy and other skin diseases. Fruits used for heart and seeds for jaundice, constipation etc. (Kothari & Moorthy, 1996).
- The fresh leaves and flowers used for ringworm, roots for fever and the bark is laxative and astringent (Koche & al., 2008).
- Fruit powder is used for healing wounds (Bhosle & al., 2009).
- Paste of leaves prepared in cow urine is applied on scabies while the paste in rice water is applied on eczema. The leaves along with the leaves of *Celastrus paniculatus* and *Nerium indicum* are pounded homogenously in butter milk and applied on skin for joint pain (Pawar & Patil, 2011).
- Leaf paste with turmeric applied on skin diseases. Fruit pulp laxative in habitual constipation (Karne, 2011; Thakur & al., 2011).
- Root, Bark, Leaves and seeds used for fever and heart diseases (Deokar & al., 2012).

Cassia occidentalis L. (*'Kasvinda'*) CAESALPINIACEAE

Undershrubs. Leaflets ovate-lanceolate, base rounded, apex acute; rachis with a solitary gland at the base. Flowers yellow with orange streaks in racemes corymbose, axillary and forming a terminal panicle. Pods flat, recurved, transversely septate, distinctly torulose. Seeds ovoid.

Fl. & Fr.: May–July.

Distrib.: Dastan, Kati, Rammala, Sangamnagar (Dhakka), Shirshinge.

Uses: Leaf juice applied over the skin for the treatment of irritation/burnings caused due to *Semecarpus anacardium* as well as on cuts and wounds.

Additional Information:

- Root and leaf paste applied for swellings (Rajendran & Henry, 1994).
- Infusion of the roots used as a purgative, abortifacient. Seeds used as anticonvulsant and its decoction for palpitation, cold and congestive heart failure (Gill and Nyawuame, 1994).
- Leaves and seeds are edible. Also used for skin diseases like eczema, ringworm. Leaves useful for sore throat (Singh & Sharma, 2002).
- Seed powder is used for asthma (Bhosle & al., 2009).

Cassia tora L. (*'Takala'*) CAESALPINIACEAE

Herbs, annuals, erect. Leaflets obovate-oblong, base oblique, apex obtuse; rachis grooved. Flowers yellow, axillary, solitary or in pairs. Pods obliquely septate. Seeds 25–30, rhomboid.

Fl. & Fr.: April–November.

Distrib.: Very common, growing as a weed in waste places. Dastan, Rammala, Rasati, Shirshinge, Zadoli.

Uses:

- Leaves are applied on skin infection like ringworm.
- One tea spoon leaf powder is given for the treatment of dysentery twice a day, for 2 days.
- Seed powder is given for the treatment of body heat, burning sensation during urination.

Additional Information:

- Young tender leaves used as vegetable.
- Seed powder used for the preparation of tea as tea powder.
- Decoction of the leaves is mild laxative; poultice of the leaves applied to boils for suppuration, Paste of the roots made with lime juice is a remedy for rheumatism (Gill and Nyawuame, 1994).
- Leaves are anthelmintic, antiperiodic. Also useful as vermic wasp bite (Singh & Sharma, 2002).
- Root paste useful for eczema and snake bite. Cooked leaves are laxative, removes unwanted materials like hairs etc. through excreta (Kothari & Londhe, 1999) and the whole plant used for psoriasis (Koche & al., 2008). Root paste also applied as antidote for scorpion-sting (Aher & Patil, 2009).
- Juice of leaves mixed with coconut oil (*Cocus nucifera* L.) and applied on scabies (Pawar & Patil, 2011).
- Leaves purgative, juice applied on skin infections, decoction used in leprosy; root paste used for ringworm; seed powder with honey used for worms and skin diseases (Karne, 2011).

Catunaregam spinosa (Thunb.) Tirveng. (*'Gela'*) RUBIACEAE

Trees, armed with strong, straight, opposite decussate spines. Leaves ovate or obovate, base cuneate, apex obtuse, more or less rounded or attenuate into petiole. Flowers fragrant, yellowish-white, axillary, at the ends of leaf bearing branches. Berries globular. Seeds flat, embedded in the pulp.

Fl. & Fr.: April–September.

Distrib.: Common. Ambeghar, Dhankel, Dicholi, Shirshinge, Zadoli.

Uses:

- Seeds washed with water. One tea spoon of water is given to the children for the treatment of pneumonia. It induces vomiting and cough gets released.
- The juice of the fruit is applied on the outgrowth of piles.

Additional Information:

- The fruits are sold in nearby towns. In Ayurveda the fruits are used for '*Vaman*-one of the methods of *Panchakarma'* in which vomiting is induced by using these fruits for purification of stomach.
- Fruits are crushed & added into the water reservoir for fishing. It acts as fish poison.
- Fruit paste applied on swellings (Upadhye & al., 1994).
- Paste of fruit is given for emesis and applied on pimples (Bhatt & al., 2001).
- Flowers and fruits edible as vegetable. Stem bark useful for diarrhoea and vomit and fruits for swellings and as detergent (Singh & Sharma, 2002). The fruits and seeds also used as insecticides (Singh & Ramesh Kumar, 2009).

Celastrus paniculatus Willd. ('*Malkanguni, Karadkanguni'*) CELASTRACEAE

Climbing shrubs, young branches lenticelled. Leaves broadly elliptic, ovate or obovate, apex acuminate, margins crenate-serrate. Flowers greenish-white or yellow in terminal and axillary panicles. Capsules subglobose, 3–4 valved, bright yellow. Seeds 1–6, brown, ovoid.

Fl. & Fr.: April–August.

Distrib.: Very common. Avasari, Dhankel, Dicholi, Ghatmatha, Kisarule, Nauja, Rammala, Shirshinge, Zadoli.

Uses:

- Leaves used for the treatment of rickets.
- Root paste is used as antidote for snake bite.
- Root paste is applied for the treatment of Herpes zoster.
- Root power is given for the treatment of white discharge (Leucorrhoea).
- Seed powder is given to increase the sexual debility.
- Root paste applied over the abscess for bursting as well as for wound healing.

Additional Information:

- Climbers used for tying purposes by locals.

- Roots useful for tumor cancer (Singh and Prakash, 1994). Also for headache; seeds for rheumatic pains, piles, stomach disorder and its oil for earache & memory. Bark for wounds, cough, and cold. Fruits for skin diseases, dysentery (Kothari & Londhe, 1999).
- Root paste applied on headache; leaf decoction used in leprosy and as brain tonic. Barks for cough, cold, wounds; fruits for dysentery while seed oil used in joint pain and as memory tonic (Bhosle & al., 2009; Karne, 2011).

Chemical constituents: Fixed oil from seed contains fatty acids, *viz*. oleic, linoleic, linolenic, palmitic, stearic, crude lignoceric acid, benzoic and acetic acid as volatile acids; Several sesquiterpene polyalcohols *viz.* polyalcohol A, polyalcohol B, polyalcohol C, polyalcohol D and Paraffinic hydrocarbons, β-sitosterol, β-amyrin and a pentacyclic triterpene diol paniculatadiol. The aqueous extract of seed contains traces of tannins and reducing sugars. Seed husk on saponification yield palmitic and stearic acids. The fatty acid composition of 4 lipid fractions of seed *viz*. normal triglycerides (20.2%), polar triglycerides (44.4%), polar non glyceridic ester (23.5%) and non polar non glyceridic ester (11%) was reported (Bhanumathy & al., 2010).

Celosia argentea L. (*'Kuradu'*) AMARANTHACEAE

Herbs. Leaves linear-lanceolate or ovate, base tapering into petiole. Flowers pinkish white in dense cylindric spikes; bracteoles linear-lanceolate; perianth lobes lanceolate, margins scarious. Capsules ellipsoid. Seeds sub-reniform, black, shining.

Fl. & Fr.: February–November.

Distrib.: Growing as a weed in cultivated fields and along roadside. Dicholi, Gojegaon, Navaja, Rammala, Shirshinge, Zadoli.

Uses: The decoction of seeds taken for the treatment of kidney stone.

Additional Information:

- Tender leaves used as vegetable and also sold in the local market.
- Seeds useful for mouth ulcers, eye and blood diseases, urinary disorder and catelizer in sexuality (Kothari & Londhe, 1999).
- Whole plant extract is useful in dysentery (Koche & al., 2008).

Chlorophytum glaucoides Blatt. (*'Musali'*) LILIACEAE

Herbs, rootstock hard, scapes clothed with narrowly lanceolate sheaths. Flowers in racemes, bracts lanceolate. Capsules triquetrous, black.

Fl. & Fr.: August–October.

Distrib.: Dicholi, Ghatmatha, Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

*Uses:*The roots are used for sexual debility.

Additional Information: Endemic (Singh & al., 2000).

Cinnamomum verum J.S. Presl (*'Dalchini'*) LAURACEAE

Trees, young parts glabrous. Leaves and bark aromatic and pungent; leaves ovate-oblong or elliptic-ovate, coriaceous shining above, pale beneath, 3–5 ribbed. Flowers greenish to creamy, in lax, pubescent panicles. Berries ovoid-oblong, shortly apiculate, purplish.

Fl. & Fr.: November–March.

Distrib.: Dicholi, Kisarule, Rasati (Research nursery), Rammala, Zadoli.

Uses:

- A small piece of bark is eaten frequently along with sugar for cough.
- One tea spoon bark powder is given thrice a day for the treatment of joint pain.
- One tea spoon bark powder along with ginger is given for abdominal disorders and vomiting.
- Root paste is applied on twisted joints and swellings.
- Two teaspoon root paste is taken at night for the treatment of constipation.
- *Additional Information:* Bark is used as spices.

Cissampelos pareira L. var. **hirsuta** (Buch.-Ham. ex DC.) Forman (*'Pahadvel'*) MENISPERMACEAE

Climbers, branches striate, pubescent. Leaves ovate-orbicular, glabrous or sparsely pubescent above pale and pubescent on nerves below, apex rounded, base subcordate. Male flowers in axillary cymes; petals connate into a short cup; female flowers in axillary racemes. Drupes ovoid, red, hairy.

Fl. & Fr.: July–August.

Distrib.: Common. Avasari, Rammala, Zadoli.

Uses:

- Root powder is given in dysentery.
- The entire plant is crushed and applied on skin infection.

Additional Information:

- Leaf juice dropped in the ears for deafness and also used for gastric troubles, leaf paste for swellings and rheumatism (Pawar & Patil., 2008).
- Juice extracted from the leaf is taken orally along with rice flour to heal wounds soon. Dosage: 50 ml of juice is taken twice a day before food (Ayyanar and Ignacimuthu, 2009).
- Ethanol (95%) extract of leaf and stem used for leprosy (Gupta & al., 2010).

Citrullus coclocynthis (L.) Schrad. (*'Kadu indrayan'*) CUCURBITACEAE

Herbs, trailing. Stems angular, scabrid or hirsute. Leaves ovate-deltoid, 3–7 lobed, lobes deeply dissected, acute or sub-acute. Flowers pale yellow, axillary, solitary. Fruits globose, variegated green and white.

Fl. & Fr: November–February.

Distrib.: Common. Kati, Rammala, Vanzole.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: One tea spoon fruit powder mixed with cow urine out of which 1/4th tea spoon is given to the children four times in a day for the treatment of pneumonia.

Additional Information:

- Plant used in jaundice and rheumatism (Deshpande & al., 1993).
- Fruit pulp and rind used in fever, piles, dropsy, jaundice, skin diseases, for gargle and mouthwash and as purgative (Karne, 2011).

Citrus aurantifolia (Christm. & Panz.) Swingle (*'Limbu'*) RUTACEAE

An armed small tree. Leaves elliptic oval, crenate, petioles winged. Flowers solitary or few in axils, white. Fruits globose, Yellow when ripe; pulp sour.

Fl. & Fr.: More or less throughout the year .

Distrib.: Cultivated for fruits near home. Donichawada, Paytyachawada.

Uses: Fruit juice is useful for indigestion.

Additional Information:

- Leaves are added in the tea for flavor.
- The fruit has religious importance in marriage ceremony.
- Fruits are edible, made into prickles and sold in the market.
- Fruit juice used for indigestion and calculi (Bhatt & al., 2001).

Clematis gouriana Roxb. ex DC. (*'Morvel'*) RANUNCULACEAE

Climbers, stem grooved. Leaves uni- bi- or tri-pinnate. Leaflets ovate, toothed, rounded or cordate at base, petioles slender. Flowers yellowish in branched panicles. Achenes ovoid, hairy, tail feathery.

Fl. & Fr: November–February.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Rammala, Shirshinge, Zadoli.

Uses:

- Leaf juice applied externally on skin infection and scabies.
- Leaf juice of Morvel (*Clematis gouriana*), Katrinigad (*Vitex negundo*) & Burambi (*Leucas stelligera*) is mixed and given as an antidote for snakebite.

Additional Information:

- The leaf juice is poisonous to skin and in excess quantity causes irritation.
- In veterinary medicine the leaf juice is used as an antidote for snakebite. Leaf juice is also dropped in nose of cattle, this method is locally termed as '*nath dene'*.

Clematis hedysarifolia DC. (*'Morvel'*) RANUNCULACEAE

Woody climbers; younger branches puberulous. Leaves pinnate; leaflets ovate-lanceolate, base rounded, irregularly toothed along margins, apex acuminate, petioles twining. Flowers in compound panicles. Achenes ovoid, compressed, hairy, tail feathery.

Fl. & Fr.: November–February.

Distrib.: Common. Avasari, Ghatmatha, Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses:

- Leaf juice applied externally on skin infection and scabies.
- Leaf juice of *Morvel, Katri nigad* (*Vitex negundo*) *& Burambi* (*Leucas stelligera*) is used as an antidote for snakebite.

Clerodendrum inerme (L.) Gaertn. (*'Koynel'*) VERBENACEAE

Shrubs, much branched, straggling. Leaves elliptic-obovate, apex obtuse, base attenuate. Flowers white with pink tinge. Drupes pyriform, black at ripe, enclosed by persistent enlarged calyx.

Fl. & Fr.: April–December.

Distrib.: Commonly grown as hedge plant. Manainagar, Navaja, Rammala, Vanzole.

Uses: Leaves are heated gently and applied on the affected and painful part of the body due to rheumatoid arthritis.

Additional Information: The leaf extract used for cuts and wounds. Also it is boiled with coconut oil and applied on swellings, pains and inflammations. The leaves are the main ingredient in most of the pain killer oils (Sripathi and Uma Sankari, 2010).

Clerodendrum multiflorum (Burm.f.) O. Ktze. (*'Airan'*) VERBENACEAE

Large bush or small tree; branches pubescent. Leaves ovate-sub-rhomboid, apex obtuse or acute, margins crenate-dentate. Flowers pinkish white, fragrant, in small dichotomous axillary cymes. Drupe broadly obovoid, 4-lobed, calyx persistent.

Fl. & Fr.: December–April.

Distrib.: Occasional. On the way to Patan-Koyna, Rammala (planted in garden), Rasati, Shiral.

Uses: The decoction of the roots and steam bath of the leaves is given for the treatment of rheumatism.

Additional Information: The leaves are used in inflammation; root is used as bitter tonic and given in convalescences and measles (Ingole, 2011).

Clerodendrum serratum (L.) Moon. (*'Bharangi'*) VERBENACEAE

Shrubs. Stem sub-quadrangular. Margins of the leaves coarsely serrate. Flowers pale blue in pubescent dichotomous cymes. Drupes obovoid, 4-lobed.

Fl. & Fr.: July–November.

Distrib.: Common. Ambeghar, Dicholi, Donichawada, Ghatmatha, Kisarule, Kondhavale, Rammala, Zadoli.

Uses:

- Root decoction is given in cough and asthma.
- The crushed roots are taken internally as well as applied over the bite as an antidote for saw scaled viper.
- Tender leaves and flowers used as vegetable which is having medicinal importance in malarial fever.
- The tender leaves are sold as vegetable in the local market.
- Roots also useful in cholera, fistula and in rheumatic pains (Kothari & Rao, 1999).

Chemical Constituents: Glucose and D-mannitol isolated from root bark, hydrolysis of crude saponin from bark yielded oleanolic acid, queretaroic acid and serratagenic acid (Rastogi and Mehrotra, 1990). Phenylpropanoid glycoside, serratumoside -A from aerial part (Hui YANG, 2000) Stimasterol, α-spinasterol, luteolin, luteolin-7-0 glucuronide, apigenin, baicalin and scutellarin 7-0 glucuronide from leaf (Krishna & al., 2007) and Serratin, from the essential oil (Ravikumar & al., 2008) was isolated. Plants have many phytochemicals which are potential source of natural antioxidants, such as phenolic diterpenes, flavonoids, tannins and phenolic acids. It contains significant amounts of polyphenolics (flavonoids, hydrolysable tannins), terpenoids and saponins. (Ali & al., 2012).

Clerodendrum viscosum Vent. (*'Kadavi'*) VERBENACEAE

Shrubs, woody; branches yellow, quadrangular, villous. Leaves broadly ovate, villous on both sides, apex acuminate, base cordate or rounded. Flowers white with pinkish tinge, in terminal panicles. Drupes globose, seated on enlarged pink calyx, black when ripe.

Fl. & Fr.: July–December.

Distrib.: Common. Karate, Vajegaon, Zadoli.

Uses:

- Steam bath of the leaves is given for the treatment of rheumatism.
- The fresh leaves are applied to burst the abscess.

Additional Information:

- Dried leaves used as insecticide to control the stored grains pest.
- Juvenile leaves ground with a pinch of calcium and the paste is applied on cuts and wounds (Rajendran & Henry, 1994).

- Leaves have been used as cheap substitute for *'chiretta'* as a tonic and antiperiodic (Singh & al., 2001). The decoction of leaves is also used to obtain green colour (Sinha & Ramesh Kumar, 2009).
- The plant is used for gonorrhea and the juice as lotion. The leaves and roots are employed externally for tumors and skin disorders (Ingole, 2011).

Clitoria ternatea L. (*'Gokarna'*) FABACEAE

Perennials, twining. Leaflets elliptic-oblong, sparsely hairy, apex obtuse, base acute or obtuse. Flowers bright blue, axillary, solitary. Pods sharply beaked with 5 persistent sepals. Seeds 6–10, yellowish brown.

Fl. & Fr.: May–December.

Distrib.: Planted around residential areas. Avasari, Rammala, Zadoli.

Uses: Powder of the plant is taken twice a day for the treatment of fever.

Additional Information:

- Leaf juice applied for earache, root decoction for bronchitis, root powder for gonorrhea, irritation of bladder and urethra, roasted seed powder used for colic pain and constipation (Gill and Nyawuame, 1994).
- Roots, leaves and seeds useful for cold. Roots also useful for leprosy (Kothari & Moorthy, 1996).
- Whole plant useful as diuretic, purgative and anti-poison for snake bite (Singh & Sharma, 2002).
- Roots used for tooth ache (Pawar and Patil, 2008).
- Whole plant used as antidote for poisonous stings; seeds and roots purgative; roots and bark laxative, diuretic and powerful cathartic (Karne, 2011).

Cocos nucifera L. (*'Naral'*) ARECACEAE

Trunk annulate, thickened at base, with a mass of rootlets. Leaflets equidistant, linear lanceolate, coriaceous. Spadix stout, androgynous, at length drooping, simply panicled. Fruits 3-gonously obovoid or subglobose, green-yellowish.

Fl. & Fr.: Throughout the year..

Distribution: Planted. Manainagar, Navaja, Rammala, Vanzole.

Uses:

- Fresh coconut along with sugar is prescribed for controlling the haematorrhagic dysentery.
- The oil obtained by burning the pericarp or ash or the paste of the pericarp is applied on scabies and other skin diseases.

Additional Information: The ash of the fibrous pericarp along with honey is prescribed frequently for vomiting or hiccup (Sathe, 2008).

Colebrookea oppositifolia Sm. (*'Baman'*) LAMIACEAE

Shrubs, pubescent; branches subquadrangular, grooved. Leaves crowded at the ends of the branches, opposite or whorled, oblong-lanceolate, acute at both ends, margins crenate or serrate, pubescent. Flowers white in paniculate spikes.

Fl. & Fr.: December–April.

Distribution: Common. Dhankel, Dicholi, Kondhavale, Manainagar, Navaja, Rammala, Zadoli.

Uses:

- Root bark is used as antidote for snake bite.
- Root power is given for the treatment of epilepsy.
- Leaf juice is applied on wound and abscess.
- Leaf juice is applied on piles.

Additional Information:

- Leaves used as insect repellent (Kulkarni & Kumbhojkar, 1996).
- Leaf paste applied on wounds and bruises and root useful in epilepsy (Kothari & Shirodkar, 2006).

Colocasia esculenta (L.) Schott (*'Alu'*) ARACEAE

Herbs. Rootstocks tuberous. Leaves thinly coriaceous, peltate-ovate, cordate at base; petiole erect; peduncles much shorter than the petiole. Spathes pale yellow, tube greenish, oblong. Spadix much shorter than spathe, rather slender. Female inflorescence as long as sterile male inflorescence.

Fl. & Fr.: August–October.

Distrib.: Cultivated in kitchen garden. Also available in moist waste places. Avasari, Dhankel, Rammala, Zadoli.

Uses:

- The vegetable of leaves is useful for lactation.
- The leaves along with *Piper nigrum* is given as antidote for snake bite.
- The ash of the petiole mixed with coconut oil and applied to burst the abscess.

Additional Information: Leaves, petiole edible as vegetable and sold in the local market.

Chemical Constituents: Juice of tubers contains amylase, sapotoxin. Leaves and petioles are the good source of pro-vitamin A and vitamin C (Chopra & al., 1956).

Cordia dichotoma Forst.f. (*'Bhokar'*) BORAGINACEAE

Trees. Leaves broadly ovate, base rounded, apex obtuse, 3-nerved. Flowers white, polygamous in axillary and terminal paniculate cyme. Drupes ovoid, pinkish, becoming black, shining.

Fl. & Fr.: April.

Distribution: Kondhavale, Manainagar, Navaja.

Uses:

The seed powder is used in white discharge.

The seeds made into paste in cow urine & applied on face for black heads.

Additional Information:

- Unripe fruits used as vegetable and pickle and ripe fruits are edible.
- Fruits are effective on cough, chest & urinary diseases.
- Bark powder clearing & strengthening intestine. Its decoction used as throat cleaner and strengthening teeth & gums (Kothari & Londhe, 1999). Bark powder with coconut oil applied on burns till cure (Aher & Patil, 2009).

Cordia macleodii (Griff.) Hook.f. & Thoms. (*'Dhaivan'*) BORAGINACEAE

Trees; bark corky, grey. Leaves as long as broad, ovate, 3–5 nerved, scabrous, base cordate, margins crenate, dentate. Flowers white in terminal paniculate cymes. Drupes ovoid, acute, seated on persistent calyx.

Fl. & Fr.: April.

Distrib.: Ghatmatha, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: Bark is given for the treatment of dysentery & jaundice.

Additional Information:

- Wood is used for agricultural implements.
- Seeds useful as brain tonic for mental disorders, madness, tuberculosis and sexual impotency (Kothari & Londhe, 1999).

Coriandrum sativum L. (*'Kothmir'*) APIACEAE

Herbs. Leaves pinnatisect, lower leaves ternately or pinnately lobed or pinnate with incised leaflets, upper cauline leaves decompound with linear or filiform segments. Flowers in peduncled umbel, white.

Fl. & Fr.: Throughout the year.

Distribution: Cultivated near home premises. Chiteghar, Ker, Rammala.

Uses: Leaves are cooling and used for burning micturition.

Additional Information: Leaves edible as vegetable. Whole plant and seeds used as condiment.

Costus speciosus (Koen.) J. E. Sm. (*'Pev'*) ZINGIBERACEAE

Herbs, rootstock tuberous; stem more or less woody at base. Leaves subsessile, oblong or oblanceolate-oblong, acute or acuminate, often cuspidate, glabrous above, silky pubescent beneath, base rounded. Inflorescence of dense spikes. Flowers white. Capsules globosely 3-gonous, red. Seeds black, aril white.

Fls. & Frts.: August–February.

Distribution: Occasional. Dicholi, Shirshinge.

Uses:

- Rhizome crushed and given for constipation.
- Roots given for common cold, fever and as purgative.

Additional Information:

- Rhizome used as vegetable.
- The drops of filtered rhizome paste poured into ear to cure pus formation and pain (Rajendran & Henry, 1994).
- Rhizome useful for constipation, fever, asthma, dropsy and earache; bark and leaves for stomach disorder; roots and rhizome for snakebite (Kothari & Rao, 1999).

Crateva magna (Lour.) DC. (*'Vayavarna'*) CAPPARACEAE

Trees. Leaves 3-foliolate; leaflets ovate-lanceolate, base attenuate, margins entire. Flowers greenish-white in corymbs, sepals petaloid.

Fl. & Fr.: March–May.

Distribution: Avasari, Goshatwadi, Zadoli.

Uses:

- Steam bath of leaves is given for the treatment of joint pain.
- One tea spoon bark powder is given, twice a day for 3 days for the treatment of fever.

Additional Information: Tender leaves and flowers used as vegetable.

Crossandra infundibuliformis (L.) Nees (*'Aboli'*) ACANTHACEAE

Herbs or small shrubs. Leaves elliptic-oblong, acute at both ends. Flowers orange-yellow, sessile, in dense terminal and axillary spikes. Capsules oblong, subacute. Seeds compressed.

Fl. & Fr.: December–June.

Distribution: Planted around home premises for flowers. Goshatwadi, Rammala.

Uses:

One-handful roots are added in one cup of milk along with 3 cups of water. The mixture is then boiled to evaporate all the water. The remaining milk is then filtered and taken for the treatment of white discharge. This medicine is taken twice a day for 5–6 days.

Crotalaria retusa L. (*'Dingal'*) FABACEAE

Undershrubs, robust. Leaves obovate-oblong, or oblanceolate-oblong, pubescent beneath, apex obtuse or retuse, base cuneate. Flowers bright yellow, many in compact, terminal racemes. Pods linear-oblong, stalked.

Fl. & Fr.: November–April.

Distrib.: Common. Avasari, Dhanagarwada, Dicholi, Ghatmatha, Gojegaon, Nahimbe ambeghar, Shirshinge, Zadoli.

Uses: To burst the abscess leaf juice of Dingal (*Crotalaria retusa*) & Tipan (*Allophylus cobbe* L.) mixed and applied on abscess.

Additional Information:

- Seeds are poisonous for hens (birds).
- Whole plant useful for impetigo and scabies (Kapoor & Mitra, 1994).
- Decoction of leaves taken for fever, powder and decoction of roots recommended for colic and vermifuge (Gill and Nyawuame, 1994).
- Stem fibre used as cordage (Singh & Sharma, 1998).

Cryptolepis buchanani Roem. & Schult.(*'Mothi Kavali'*) PERIPLOCACEAE

Shrubs, climbing, stem terete. Leaves elliptic-oblong, apex acute or shortly acuminate, base acute, green above, whitish beneath, lateral nerves at right angles to the midrib. Flowers small greenish in dichotomous cymes. Follicles divaricate. Seeds ovate, black with long, white, silky coma at apex.

Fl. & Fr.: April–June.

Distrib.: Avasari, Dicholi, Kondhavale, Navaja, Zadoli.

Uses:

- Leaves used for rickets.
- The leaf juice two teaspoon full thrice a day is given for the treatment of rheumatism.

Additional Information:

- Plant useful for blood purification & fever (Singh & Sharma, 2002).
- Plant is used for rickets, lactation and also as fibre (Pant and Samant, 2010).

Curculigo orchioides Gaertn. (*'Kalimusali'*) HYPOXIDACEAE

Herbs, acaulescent, rootstock stout, root fibrous, copious. Leaves radical, plicate, base sheathing, Flowers yellow in racemes, perianth lobes 6, lanceolate, stamens 6, stigmas 3, oblong. Capsules hypogaeous, 1–4 seeded with slender beak.

Fl. & Fr.: June–October.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Rammala, Shirshinge, Zadoli.

Uses: Rhizome used on piles and skin diseases.

Additional Information:

- Rhizomes are useful for asthma, diarrhoea, jaundice and as a tonic (Kothari & Moorthy, 1993). It is also useful as a sex stimulant and for diabetes (Sinha & Ramesh Kumar, 2009).

- The rhizomes are abortifacient for poison and also used in eye complaints like white spots on ball, galactagogue, itching, leucoderma, bleeding through nose, piles, antidote for scorpion sting and snake bite, skin disease, venereal complaints and for cuts and wounds (Pant and Samant, 2010).

Curcuma aromatica Salisb. (*'Ambahalad'*) ZINGIBERACEAE

Rhizomes yellow within, aromatic, tubers globose. Leaves elliptic-oblong, apex caudate-acuminate, petiole longer than the leaves, base deltoid. Flowers pinkish-white in long spikes.

Fl. & Fr.: May–July.

Distrib.: Occasional. Avasari, Rammala (Planted in garden), Shirshinge, Zadoli.

Uses:

- Rhizomes are applied on contusion and swellings.
- The paste of the rhizome is made into curd and applied all over the body for measles.
- The rhizome powder applied on face for achne.

Curcuma pseudomontana Grah. (*'Ranhalad'*) ZINGIBERACEAE

Roots fibrous, tubers subglobose, white, without yellow within. Leaves lanceolate or oblong, apex acuminate. Flowers with bright yellow staminodes, in spikes; sterile bracts oblong lanceolate, lower purple, upper green with purple margin. Capsules subglobose, 3-valved. Seeds arillate.

Fl. & Fr.: June–September.

Distrib.: Occasional. Koyna (Forest nursery), Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1995).

Uses:

Tuber powder mixed with *Emblica officinalis* (Awala) fruit powder in equal proportion. One tea spoon from this mixture is taken twice a day for diabetes.

Additional Information:

- Endemic (Singh & al., 2000).
- Tuber extract is useful as blood purifier (Bhosle & al., 2009).

Cuscuta reflexa Roxb. (*'Aakashvel'*) CUSCUTACEAE (PLATE: IV-2)

Twiners, stem greenish-yellow, coarsely terete, verrucose with red marks. Flowers shortly pedicellate, bracteate in cymose or paniculate clusters. Capsules globose-conical, apiculate, circumscissile.

Fl. & Fr.: January–April.

Distrib.: Parasite. Avasari, Manainagar, Navaja,. Zadoli.

Uses:

- Whole plant crushed and its juice is applied on skin infection and abscess.
- Plant juice is applied to whole body for the treatment of fever.
- Plant juice is useful to stop vomiting.

Additional Information:

- Whole plant juice is used as tonic for birds. It is given to chickens as precautionary major for epidemics.
- Plant sap is an antiseptic and used to wash sores (Kothari & Rao, 1999).
- An infusion of this plant is used in the treatment of lice infections, and for the washing of sores (Koche & al., 2008).
- Juice used in intestinal worms, jaundice; seeds purgative; whole plant extract used for washing sores and in family planning medicines (Karne, 2011).
- Whole plant used as antidote for snake-bite (Singh & al., 2012).

Cyathocline purpurea (Buch.-Ham. ex D. Don.) O. Ktze. var. **purpurea** (*'Gang-utra'*) ASTERACEAE

Suberect herbs, viscid and glandular. Basal leaves radical and cauline, sessile, segments toothed, pubescent. Heads in terminal-corymbose panicles; involucral bracts linear, acute, margins scarious, ciliate. Achenes minute, oblong.

Fl. & Fr.: Throughout the year.

Distrib.: Common near water bodies. Ambavane, Dicholi, Ghatmatha, Navaja, Rammala, Shirshinge, Zadoli.

Uses: Leaf juice singly or mixed with the flour of *Ragi* (*Eleusine coracana*) and applied to the body for the treatment of fever.

Cyclea peltata (Lam.) Hook.f. & Thoms. (*'Chorati'*) MENISPERMACEAE

Herbaceous twiners; young parts pubescent. Leaves oblong-elliptic, apex acuminate or shortly mucronate, base subcordate or hastate, glabrous and shining above, pubescent beneath. Flowers in axillary panicles. Drupes obovoid, pilose, whitish when ripe.

Fl. & Fr.: February–August.

Distrib.: Common. Avasari, Dicholi, Koyna, Shirshinge, Zadoli.

Uses:

- Leaves applied on fractures and tied with cloth.
- Fruits are eaten in the treatment of conjunctivitis.

Additional Information: Roots useful to heal wounds in cattle (Singh & Sharma, 2002).

Cymbopogon citratus (DC.) Stapf (*'Gavati chaha'*) POACEAE

Perennial herbs. Leaves aromatic, arising in dense fasciles from short, oblique rhizomes, glaucous green, rough along margins.

Fl. & Fr.: September–October.

Distrib.: Cultivated around home. Dhankel, Donichawada. Goshatwadi, Karate, Rammala (Planted in Nursery), Rasati, Shirshinge.

Uses: Leaves of *Gavati Chaha*, *Adulasa* (*Justicia adhatoda*), stem of *Gulvel* (*Tinospora cordifolia*) and Adrak are mixed and crushed together. 1/4th decoction is made and taken twice a day for the treatment of common cold.

Additional Information: Leaves used to treat respiratory and digestive problems (Saraf & Gour-Broome, 2012).

Cynarospermum asperrimum (Nees) Vollesen (*'Dikana'*) ACANTHACEAE (PLATE: XI-6)

Herbs suberect or prostrate, rooting at nodes. Leaves ovate-lanceolate, rough on both surface with sharp, bulbous based hairs, apex acute or acuminate, finely apiculate, base tapering entire or spinous-dentate. Flowers blue, solitary or paired sessile in upper axils or in terminal short spikes. Capsules oblong, apiculate.

Fl. & Fr.: October–March.

Distrib.: Ambeghar, Dicholi, Ghatmatha, Goshatwadi, Zadoli.

Uses: Root is used for the treatment of opacity.

Additional Information:

- Endemic (Singh & al., 2000).
- Used as fodder.

Cynodon dactylon (L.) Pers. (*'Harali'*) POACEAE

Perennial herbs, stolons creeping, Leaves linear, flat or convolute, sparsely hairy. Rachis of the spike flat, keeled, scabrid, spikelets alternate on the lower surface, sessile, elliptic.

Fl. & Fr.: Throughout the year.

Distrib.: Common weed. Ambeghar, Dhankel, Dicholi. Rammala, Shirshinge, Zadoli,

Uses: One tea spoon of plant juice is taken every morning for 10 days for the treatment of white discharge and body heat.

Additional Information:

- Used as fodder.
- Whole plant useful for bleeding piles, cuts and wounds (Singh & Sharma, 2002).
- Juice used in acidity, body heat, diarrhoea and prevents bleeding (Karne, 2011).

Cyperus rotundus L. ssp. **rotundus** (*'Nagarmotha'*) CYPERACEAE

Herbs, stout, perennial. Leaves narrowly linear. Inflorescence a compound umbel. Spikelets linear, reddish-brown.

Fl. & Fr.: Throughout the year.

Distrib.: In marshy places**.** Avasari, Dicholi, Kondhavale, Zadoli.

Uses: Rhizome powder is taken twice a day for excess body heat and fever.

Additional Information:

- Tubers are useful for stomach disorders and lice (Singh & Sharma, 2002).
- Leaves chewed after bite of 'Dhaman'- aquatic snake species (Patil & al., 2009).

Dalbergia horrida (Dennst.) Mabb. var. **horrida** (*'Vavi'*) FABACEAE

Scandent shrubs; branches twisted, spiny. Leaflets oblong or obovate, pubescent, apex emarginated or obtuse. Flowers white, in axillary panicles. Pods flat, pubescent. Seeds 1–3.

Fl. & Fr.: November–February.

Distrib.: Frequent. Avasari, Dhanagarwada, Ghatmatha, Govare, Khudupalewadi, Nav, Shirshinge, Zadoli.

Uses:

- Bark is chewed for the treatment of mouth ulcer. The tongue & saliva becomes blackish after chewing.
- Leaves crushed & applied over the abscess. After bursting, root paste of Malkanguni (*Celastrus paniculatus,* Willd.) is applied on it.

Additional Information: Endemic (Singh & al., 2000).

Dalbergia sissoo Roxb. (*'Sisam'*) FABACEAE (PLATE: IX-5)

Trees; bark grayish-brown, rough, fissured. Leaflets broadly ovate or sub-orbicular, terminal ones largest. Flowers white, in axillary panicles. Pods strap-shaped, stalked. Seeds 1–4.

Fl. & Fr.: February–October.

Distrib.: planted. Rammala, Goshatwadi, Shirshinge, Ambavane.

Uses: Five to six tender leaves are eaten for the treatment of dysentery.

Additional Information:

- Wood is used for furniture and also used for the preparation of agricultural implements.
- In verinary medicines the leaves are given to the cattle for the treatment of dysentery.
- The bark powder used in the treatment of gonorrhea (Koche & al., 2008).
- Root, bark and leaves used for swellings, leprosy and fever (Thakur & al., 2011).

Datura metal L. (*'Kala Dhotara'*) SOLANACEAE

Herbs, erect, glabrous or subglabrous; stems often muricate and tinged with purple. Leaves broadly ovate, triangular, shallowly lobed, base truncate, apex acute. Flowers purple, axillary, solitary. Capsules drooping, globose.

Fl. & Fr.: October–December.

Distrib.: Growing in waste places. Goshatwadi, Rammala, Vanzole.

Uses:

- Leaves are applied on boils, joint pains, lumbago, sciatica, painful swelling.
- Flowers are crushed and applied on wounds and contusion to reduce pain.

Additional Information:

- Leaves and seeds are antiseptic and used for skin diseases (Singh & Sharma, 2002).
- Leaf decoction of its allied species *Datura inoxia* Mill. is administered after snake bite (Patil & al., 2009).
- Leaf juice used in worm infection in children and boils; flower poultice reduce wound pain; seeds, leaves and roots are antiseptic, to treat insanity, fever, diarrhoea, skin diseases, bronchitis, asthma, insomnia (Karne, 2011).

Dendrobium barbatulum Lindl. (*'Kankidani'*) ORCHIDACEAE

Pseudo-bulbs; stem leafless when flowering, one to several noded. Leaves alternate, distichous, sheathing at base, lanceolate or ovate-lanceolate, acute, entire. Flowers in racemes of 1–30 flowers. Capsules ellipsoid, greenish-purple with 3-broad and 3- narrow bands, beaked.

Fl. & Fr.: January–July.

Distrib.: Ghatmatha, Navaja, Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1995).

Uses: Juice of the plant is dropped in the ear for the treatment of otitis media (inflammation of the ear).

Additional Information: Endemic (Singh & al., 2000).

Dendrophthoe falcata (L.f.) Etting var. **falcata** (*'Bandgul'*) LORANTHACEAE

Shrubs, bushy, stem parasites. Leaves broadly elliptic-oblong, coriaceous, amplexicaul, sessile. Flowers scarlet, in axillary, solitary or fascicled racemes. Berries red, oblong, covered by cupular calyx.

Fl. & Fr.: July–August.

Distrib.: Common as parasite on *Mangifera indica* and *Flacourtia indica*. Goshatwadi, Kamargaon, Navaja-dicholi, Rammala, Zadoli.

Uses: The decoction of the bark is taken every morning during menstruation period to get relief from painful menstruation.

Additional Information: Half cup of stem infusion along with cow-ghee in 1:1 ratio taken orally in early morning for fortnight to cure eye complaints (Pawar & Patil, 2009).

Desmodium gangeticum (L.) DC. (*'Salvan'*) FABACEAE

Undershrubs. Leaves ovate-oblong, glabrous above, appressed pubescent beneath, apex acute. Flowers bluish-violet, in terminal and axillary racemes. Pods reddish-brown, subfalcate, hairy, 4–6 jointed.

Fl. & Fr.: March–November.

Distrib.: Govare, Shirshinge, Zadoli, Avasari, Khudupalewadi.

*Uses:*The decoction of the roots given in asthma.

Additional Information:

- Infusion of leaves for urinary disorders, decoction of root for fever, diarrhoea, dysentery, asthma and also for infections of chest and brain (Gill and Nyawuame, 1994).
- Roots also useful for dysentery, urinary disorder, ophthalmia and as tonic. Seeds are insecticide for cattle (Singh & Sharma, 2002).

Desmodium laxiflorum DC. (*'Ranganja'*) FABACEAE

Shrubs, hairy. Leaflets elliptic or lanceolate, base rounded or acute, apex acute, glabrous above, silky beneath. Flowers bluish violet, in axillary and terminal racemes. Pods flat, linear.

Fl. & Fr.: August–November.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Kisarule, Nauja, Rammala, Shirshinge, Zadoli.

Uses: The 1/4th decoction of the whole plant is mixed with equal amount sesame oil. The mixture is then boiled till only oil remains. This oil is applied on rheumatic pains.

Desmodium triangulare (Retz.) Merr. (*'Ranchikati'*) FABACEAE

Shrubs, pubescent. Stipules bristle pointed, striate. Leaflets elliptic-oblong, base subacute, apex acuminate, silky pubescent beneath. Flowers white in dense, axillary, umbellate heads. Pods brown, slightly falcate, pubescent.

Fl. & Fr.: August–November.

Distrib.: Occasional. Avasari, Ghatmatha, Kisarule.

Uses: The decoction of the whole plant is given to cure fever.

Desmodium triflorum (L.) DC. (*'Ranmethi'*) FABACEAE

Herbs. Leaflets obovate, membranous, base cuneate, apex rounded or emarginate, glabrous above, hairy beneath. Flowers in axillary fascicles, bracts ovate, acute, ciliate. Pods disarticulating.

Fl. & Fr.: May–November.

Distrib.: Occasional. Avasari, Ghatmatha, Kisarule.

Uses: The leaf powder is given for the treatment of cough.

Additional Information: 10–15 leaves boiled in a cup of milk and given as galactagogue (Upadhye & al., 1994).

Desmodium triquetrum (L.) DC. (*'Kakganga'*) FABACEAE

Undershrubs, stem triangular, grooved, glabrescent. Leaflets ovate-oblong to ovate-lanceolate, acute at apex. Pods oblong, flat, beaked, hairy.

Fl. & Fr.: September–January.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Rammala, Rasati.

Uses: One tea spoon leaf juice is taken twice a day for urinary problems and burning micturition.

Dendrocalamus strictus (Roxb.) Nees (*'Managa'*) POACEAE

Deciduous densely tufted bamboo, stems strong with small cavity, glaucous-green when young, dull green or yellowish when old; nodes swollen, the lower often rooting; stem-sheaths striate, slightly auricled, hairy. Leaves linear-lanceolate or ovate-lanceolate, shortly petioled. Flowers in large branching panicles of dense globular heads. Spikelets hairy, ovate, acute, hairy, spinescent.

Fl. & Fr.: May–June.

Distrib.: Common. Goshatwadi, Rammala, Zadoli.

Uses:

- The juice of young leaves is dropped in the ear for the treatment of otitis media (inflammation of the ear).
- The stem is used to tie the body part after setting the fractured bone.
- *Additional Information:* The stem is used for preparation of household instruments like baskets for storing grains (Locally called '*Kanagi'*) etc.

Dillenia pentagyna Roxb. (*'Karmel'*) DILLENIACEAE

Trees, 8–10 m high. Leaves oblong-lanceolate, at the apex of branches, downy when young. Fruits in axillary fascicles with persistent sepals, 5-seeded.

Fl. & Fr.: June.

Distrib.: Rare. Kusavade, Shirshinge.

Uses:

- The paste of inner bark is applied on wound for 3–4 times a day.
- The roots & coconut kernel are crushed together and taken for the treatment of bleeding piles.

Additional Information:

- The wood is used for furniture making and as firewood.
- Fruits edible as vegetable.

Diospyros montana Roxb. (*'Gavanda'*) EBENACEAE

Trees, small or medium sized. Leaves ovate, oblong or elliptic, base truncate, apex acute or obtuse. Flowers greenish white; female flowers axillary, solitary. Berries globose, with persistent calyx, orange when ripe.

Fl. & Fr.: June–November.

Distrib.: Ambeghar, Dhankel, Dicholi, Rammala, Shirshinge, Zadoli.

Uses:

- Leaf juice of Govanda and Adulasa (*Justicia adhatoda*) are mixed in equal proportion. One tea spoon at morning is given for the treatment of pneumonia. It induces vomiting and cough gets released.
- Leaves are crushed & applied on cracks in feet.

Additional Information: Fruits or leaves used as fish poison.

Diplocyclos palmatus (L.) C. Jeffrey (*'Shivalingi'*) CUCURBITACEAE

Climbers. Leaves palmately 3–7 lobed, membranous, base cordate, apex obtuse, scabrid above, glabrous beneath, margin dentate. Flowers creamy-white, male and female in same axils. Fruits spherical, variegated, smooth. Seeds obovoid, yellowish brown.

Fl. & Fr: September–December.

Distrib.: Common. Chiteghar. Rammala, Vanzole.

Uses: Leaves are applied over swellings.

Additional Information: The fruit powder is used in urinary complaints (Ghorband and Biradar, 2012).

Drosera indica L. (*'Chikati'*) DROSERACEAE

Herbs, slender with glandular-hairy stems. Leaves with gland tipped tentacles in upper half, lower leaves recurved, upper leaves erect, filiform, shortly petioled. Inflorescence leaf opposed. Flowers pink. Capsules 3-valved.

Fl. & Fr.: August–November.

Distrib.: Insectivorous herbs. Common on rocky hills and wet places. Kati, Avasari.

Uses: The whole plant is crushed and applied over the corns.

Additional Information: Affects markedly on respiratory organs and useful for whooping cough (Boericke, 1996).

Eclipta prostrata (L.) L. Mant. (*'Maka'*) ASTERACEAE

Annual herbs, erect or prostrate, rooting at nodes; stems and branches white hairy. Leaves sessile, oblong-lanceolate or oblong-elliptic, base cuneate, apex acute, sparsely strigose on both the surfaces. Heads solitary or 2-together, on unequal, axillary peduncles. Achenes oblong-obovate, trigonous, brown to black.

Fl. & Fr.: October–December.

Distrib.: Common in marshy places and rice fields. Avasari, Dicholi, Kondhavale, Navaja, Rammala, Zadoli.

Uses: One tea spoon of leaf juice with honey and leaf juice of *Justicia adhatoda* in equal proportion is given for the treatment of cough as well as for pneumonia.

Additional Information:

- Fresh shoots of *Eclipta prostrata* along with fresh fruits of *Terminalia chebula, Terminalia bellirica* and *Emblica officinalis* are used by the local Tai Khamtis for the preparation of writing ink (Borthakur and Gogoi, 1994).
- Whole plant useful for leucoderma, skin rash and roots for veterinary wounds (Singh & Sharma, 2002).
- Leaves useful as antidote for snakebite (Rakecha, 2008).
- Root juice used for jaundice (Bhosle & al., 2009).
- The ethanol extract (80 %) of the aerial part is used in leprosy (Gupta & al., 2010).
- Plant is emetic, rejuvenator used in hepato-toxicity, skin diseases; leaves anti-inflammatory (Karne, 2011).

Elaeagnus conferta Roxb. (*'Dombal'*) ELAEAGNACEAE

Shrubs, Scandent. Leaves broadly elliptic, base truncate or subacute, apex acute, green with small, white, scales above, silvery white beneath. Flowers bell shaped, creamish, in axillary clusters. Nuts obovoid.

Fl. & Fr.: November–February.

Distrib.: Dhankel, Ghatmatha, Kisarule, Koyna, Navaja, Punavali, Zadoli, Zadoli ambeghar.

Uses: Leaves crushed and applied on wound to stop bleeding.

Additional Information:

- Fruits edible and sold in local market.
- Flowers and fruits used for sores and ulcer. (Pant and Samant, 2010).

Elephantopus scaber L. (*'Hastipad'*) ASTERACEAE

Herbs, erect, softly pubescent. Leaves radical, ovate-oblong, few cauline. Heads arranged in terminal, dichotomous cymes. Flowers bluish. Achenes oblong ribbed, tapering at base, hairy in between ribs.

Fl. & Fr.: August–January.

Distrib.: Common. Avasari, Rammala, Shirshinge, Zadoli.

Uses: Roots are used for the treatment of dysentery and stomachache.

Additional Information:

- Leaf paste diluted in water and administered orally to cattle to control loose motions (Rajendran & Henry, 1994).
- Roots also useful for eczema, swellings, toothache, ulcer, vomit and for snake bite (Singh & Sharma, 2002).

Embelia ribes Burm.f. (*'Vavdinga'*) MYRSINACEAE

Scandent shrubs, branches with long internodes. Leaves elliptic-lanceolate, thinly coriaceous, base rounded or acute, apex obtusely acuminate, punctuate below. Flowers greenish yellow. Fruit globose.

Fl. & Fr.: December–May.

Distrib.: Rare. Kisarule. Zadoli.

Uses: The fruits are edible useful in treatment of intestinal worms.

Additional Information:

- The plant is rare. Fruits edible. The fruits of *Embelia basal* or sometimes *Maesa indica* are collected and sold as *Embelia ribes*.
- Fruits are anthelmintic, astringent used for fever and skin disease and roots for cough, diarrhoea (Singh & Sharma, 2002).

Emblica officinalis Gaertn. (*'Awala'*) EUPHORBIACEAE

Trees; bark greenish rough. Leaves pinnate; leaflets subsessile, closely set, distichous, linear. Flowers greenish yellow. Berries fleshy, globose, green with a pink tinge.

Fl. & Fr.: April–September.

Distrib.: Very common. Avasari, Dhankel, Dicholi, Kisarule, Kondhavale, Rammala, Zadoli.

Uses:

- The fruits are edible, useful in treatment of hyperacidity.
- Bark is anti-inflammatory applied on swelling and also given for diarrhoea and dysentery.

Additional Information:

- Fruits edible, sold in local market for Ayurvedic preparations.
- In Ayurveda it is termed as 'Aamalaki', 'Dhatri' (mother) and a component of famous Ayurvedic drug 'Triphala'.

- Juice of the young stem is dropped in the ear to check pus formation and ear-ache (Singh and Prakshs, 1994).
- The fruit is diuretic, laxative, carminative, stomachic, astringent, antidiarrheal, antihaemorrhagic and antianaemic (Joy & al., 2001).
- Fruits and seeds are useful for bronchitis and leaves for wound maggots (Singh & Sharma, 2002).
- Raw fruits are eaten for loss of vision (Bhosle & al., 2009). The stem bark is used to obtain black colour (Sinha & Ramesh Kumar, 2009).
- Fruit ash mixed in sesamum oil and applied on scabies while the fruit powder mixed equally with the *Withania somnifera* fruit powder and taken with milk to improve complexion (Pawar & Patil, 2011).

Ensete superbum (Roxb.) Cheesm. (*'Chavan'*) MUSACEAE (PLATE: VII-5)

Herbs, trunk narrow below leaves. Leaves oblong, narrowed to base, inflorescence of sub terminal stout spikes. Fruits oblong, subcoriaceous, ripens dry. Seeds numerous, subglobose, smooth, brown or black.

Fl. & Fr.: August–January.

Distrib.: Occasional. Kamargaon, Manainagar, Navaja.

Uses: One tea spoon **s**eed powder twice a day for 3 days along with water is given for the treatment of stomachache and cough. The same treatment for 10 days for the kidney stone.

Additional Information:

- Endemic (Singh & al., 2000).
- In veterinary medicines the paste of the tubers is applied on swelling in cattle.
- Flowers and fruits are edible and used as vegetable and fruits as pickle.
- Raw scape is eaten for kidney stone (Bhosle & al., 2009).
- Stem and unripe fruits are consumed as vegetable (Jagtap & al., 2008).

Entada rheedei Spreng. (*'Gaidhad, Kapa'*) MIMOSACEAE

Lianas. Leaves 2-pinnate, pinnae 2 pairs; leaflets 4 pairs, ovate-obovote, apex obtuse, base subacute, rachis terminating into bifid rachis. Flowers cream coloured in long axillary spikes. Pods woody, segmented. Seeds 6–15, orbicular or orbicular-oblong, compressed, hard.

Fl. & Fr.: April–October.

Distrib.: Rare. Dicholi, Rammala (Planted in garden), Shirshinge, Zadoli.

Uses:

- Seeds paste is applied on the affected part during the treatment for joint pain and swellings.
- Seed paste is also applied to burst the abscess and skin diseases.

Additional Information:

- Seeds are cooked and eaten. Its excess quantity may cause abortion in pregnant women.
- Bark is used in treating cattle against snakebite (Gadagil & Vartak, 1973).
- Largest climber in semi-evergreen forest. It is on the way of depletion due to large-scale habitat disturbances & loss of seeds due to decay and ant activity that are easily attracted to sugary exudates and gummy substances in the bark and pods (Nayar, 1979). The species is used for food, fibre, medicines and non-edible oil (Kapoor & Mitra, 1994).
- Seed paste applied externally on skin diseases (Upadhye & al., 1994).
- Bark and wood used for ulcers (Kothari & Rao, 1999).

Eranthemum roseum (Vahl) R.Br. (*'Dasmuli'*) ACANTHACEAE

Shrubs; stems quadrangular, hairy. Leaves oblong lanceolate, lineolate on both surfaces, apex acuminate, base tapering, often decurrent into a petiole, margins entire or obscurely crenulate. Flowers blue, fading red in subinteruppted, lax axillary and terminal spikes, solitary or occasionally 2–3 together forming a terminal panicle, bracts white with green nerves, hairy. Capsules clavate, pointed.

Fl. & Fr.: Throughout the year.

Distrib.: Dicholi, Goshatwadi, Kisarule, Paytyachawada, Zadoli.

Uses: Root paste is applied on leucoderma.

Additional Information:

- Endemic (Singh & al., 2000).
- In veterinary medicines fresh or powdered roots are used as a tonic for the cattle.
- Roots also useful for leucorrhoea (Singh & Sharma, 2002).
- Fresh root juice is given for stomachache (Jagtap & al., 2008).

Erinocarpus nimmonii Grah. ex Dalz. (*'Cher'*) TILIACEAE (PLATE: XI-3)

Trees. Leaves orbicular, 5–7 lobed, irregularly toothed, base cordate, scabrid above. Flowers bright yellow in terminal lax panicles; sepals fulvous, pubescent outside; petals glandular at base, ciliate on margins. Fruits 1–4 celled, triquetrous, woody, angles winged. Seed 1 in each cell.

Fl. & Fr.: September–April.

Distrib.: Common. Ambeghar, Avasari, Rasati, Zadoli.

Uses:

- Bark paste is applied on bone fracture.
- Bark is given along with milk or curd for the treatment of dysentery.
- The flowers are tied on the stomach for treatment of urinary problems.

Additional Information: Endemic (Singh & al., 2000). Leaves used as fodder and the flowers used in funeral functions.

Erythrina variegata L. (‘*Pangara’*) FABACEAE

Trees, deciduous. Leaflets rhomboid-ovate, base rounded or truncate, apex acute, pubescent when young. Flowers bright red in axillary and terminal raceme. Pods cylendric. Seeds subreniform, brown.

Fl. & Fr.: April–May.

Distrib.: Common. Avasari, Khudupalewadi, Rammala, Shirshinge, Zadoli.

Uses:

- Bark decoction is given for the treatment of white discharge (Leucorrhoea).
- Seeds are given for treating intestinal worms.

Additional Information:

- 8–10 flowers pounded with milk and given as aphrodisiac (Upadhye & al., 1994). The flower powder is applied on face for pimples (Pawar & Patil, 2011).
- Leaf juice used for cough & chest pain and bark for eye complaints (Kothari & Rao, 1999). Young leaves and shoots are edible (Singh & Sharma, 2002).
- Leaves used for constipation (Karne, 2011).

Eucalyptus globulus Labill. (*‘Nilgiri’*) MYRTACEAE

Trees. Bark bluish, smooth. Leaves linear-lanceolate, falcate, coriaceous. Flowers axillary, solitary. Fruits globular to conical, 4-ribbed.

Fl. & Fr.: July–October.

Distrib.: Common. Planted on hilly slopes and around fields. Avasari, Rammala, Zadoli.

Uses: Leaves are boiled and inhaled for the treatment of cough and cold.

Additional Information: Wood is used for house construction as well as for furniture making and as a fire wood.

Eulophia nuda Lindl. (‘*Amarkanda*’) ORCHIDACEAE

Terrestrial herbs. Tubers spherical, brownish-green, ridges transverse. Leaves from side of tubers forming short pseudo stem, oblong lanceolate, acute, entire, plicate. Flowers greenish-purple, white, pale yellow and dark purple in lax racemes. Capsules fusiform, ribbed.

Fl. & Fr.: April–September.

Distrib.: Occasional in grasses. Ambeghar, Rammala, Vankusavade, Zadoli.

Uses: Tuber made into paste and applied for the treatment of piles.

Additional Information: Fruit decoction is useful for cough (Draxe, 1997).

Euphorbia fusiformis Buch.-Ham. ex D. Don (*'Khirkand'*) EUPHORBIACEAE

Tuberous rootstock with milky latex. Leaves obovate or oblanceolate, obtuse at apex, decurrent at base, fleshy. Flowers pink on long pedunculate cymes from the rootstock crown when leafless.

Fl. & Fr.: March–May.

Distrib.: On the plateau. Dicholi.

Uses: The latex is applied externally on twisted bone and joint pain.

Additional Information:

- Latex is poisonous for eyes.
- Whole plant useful for asthma, cough. Leaves edible as vegetable (Singh & Sharma, 2002).
- Bhosle & al. (2009) reports that it is useful for conjunctivitis.

Euphorbia geniculata Orteg. (*'Dudhani'*) EUPHORBIACEAE

Herbs, annual, erect. Leaves broadly elliptic or obovate. Upper surface glabrous, lower hairy. Involucres surrounded with thick glands at mouth. Each gland with a white petaloid limb. Inflorescence of terminal branched cymes. Capsule 3-celled.

Fl. & Fr.: April–July.

Distrib.: Common weed. Ambeghar, Dicholi, Ghatmatha, Goshatwadi, Rammala, Zadoli.

Uses: A drop of latex is applied on pimples and abscess.

Additional Information: Leaves used for diarrhoea, dysentery (Pahani Kumar and Chaturvedi, 2010).

Euphorbia hirta L. (*'Dudhi'*) EUPHORBIACEAE

Herbs, erect, diffuse or prostrate; branches densely or sparsely clothed with spreading hairs. Leaves elliptic or ovate-oblong. Capsules appressed hairy. Seeds reddish-brown.

Fl. & Fr.: August–December.

Distrib.: Common weed in fields and waste places. Dicholi, Ghatmatha, Goshatwadi, Rammala, Shirshinge, Zadoli.

Uses:

- Whole plant is antiseptic and useful for skin diseases.
- Leaf juice is given in cough and asthma.

Additional Information:

- Paste of the whole plant is applied on carbuncle boil for suppression and healing (Singh and Prakash, 1994) while the extract is used in the treatment of cough, asthma, piles, and semen debility (Koche & al., 2008).

- Leaves are used for lactation (Bhosle & al., 2009) and also in urinary disorders, itches and gonorrhea (Pahani Kumar and Chaturvedi, 2010).
- Leaves also used as antidote in snake bite, skin infections (Pant and Samant, 2010).
- Whole plant used as vermicide and in bowel complaints, asthma and cough. Roots stop vomiting (Karne, 2011) as well as used in relaxation of bronchioles. It is useful in women disorders like gonorrhea, urino-genital diseases and also for lactation. Roots used to stop vomiting while leaves used as vegetable (Thakur & al., 2011).

Euphorbia laeta Heyne ex Roth (*'Dudhi'*) EUPHORBIACEAE

Herbs with milky latex. Stems with reddish tinge, densely leafy. Leaves sessile, lanceolate. Involucres solitary; glands with 2-acute, curved horns.

Fl. & Fr.: September–May.

Distrib.: Common. Dicholi, Rammala, Shirshinge, Zadoli.

Uses: Whole plant crushed and applied on skin diseases.

Additional Information: In veterinary medicines leaves are cooked & applied on the shoulder of the bullocks for contusion.

Euphorbia pulcherrima Willd. ex Klotzsch (*'Dudhi'*) EUPHORBIACEAE

An unarmed shrub with slender woody branches naked below. Upper floral leaves opposite, brightly coloured, crimson or occasionally yellowish-white.

Fl. & Fr.: September–January.

Distrib.: Grown in garden as an ornamental plant, Koynanagar, Rammala.

Uses: Whole plant crushed and heated gently and applied on rheumatic pains.

Euphorbia thymifolia L. (*'Dhakatidudhi'*) EUPHORBIACEAE

Prostrate herbs, hispid. Leaves oblong, base and apex rounded, glabrous above, sparsely pubescent beneath, margins serrulate, stipules fimbriate. Involucres axillary, solitary or 2–3 together, hairy. Glands minute, red. Capsules minute, pubescent.

Fl. & Fr.: April–January.

Distrib.: Koyna, Ker, Vanzole.

Notes: Included on the authority of Deshpande & al. (1995).

Uses: Whole plant is heated and latex is applied on the joint pain as well as on swellings.

Additional Information: Whole plant anti-inflammatory and relieves joint pains, also applied on bone dislocation of animals. Leaves used as an antidote for snakebite, astringent, anthelmintic against ringworms and seeds as laxative for children (PahaniKumar and Chaturvedi, 2010).

Ficus arnottiana (Miq.) Miq. (*'Pair'*) MORACEAE

Trees; bark grey-brown. Leaves spirally arranged, veins and petiole bright pink, ovate, cordate, base deeply cordate, apex caudate-acuminate, sub-coriaceous. Figs in axillary pairs and raised below leaves, ripening yellow brown or red with green spots.

Receptacles: February–June.

Distrib.: Occasional. Dicholi, Shirshinge, Zadoli, Zadoli ambeghar.

Uses: The paste of bark is applied on twisting of joints and swellings.

Additional Information:

- In veterinary medicines the bark is crushed & given to the cattle for the treatment of dysentery. Wood is used for furniture preparation; Receptacles used as vegetable. The bark is useful for tying the bundles of grasses, timber wood as well as for constructions of houses.
- Latex useful for wound maggots and leaves as fodder (Kulkarni & Kumbhojkar, 1996; Singh & Sharma, 2002).

Ficus benghalensis L. (*'Vad'*) MORACEAE

Trees with numerous aerial roots from spreading branches. Leaves ovate, coriaceous. base cordate, stipules stout, deciduous. Figs sessile, axillary, paired, ripening orange-red, depressed globose.

Receptacles: April–June.

Distrib.: Kamargaon, Rammala, Rasati, Shirshinge.

Uses:

- Latex applied on mouth ulcer.
- Juice of the tender aerial roots is given for white discharge.

Additional Information:

- Pounded young prop roots eaten raw to increase height (Upadhye & al., 1994). Latex is used as fixative for providing durability and permanence to the colours (Jha and Basak, 1994). The warm paste of the aerial roots together with egg paste is applied on bone fracture and tied with *Dendrocalamus strictus* for the treatment of bone fracture (Singh and Prakash, 1994). Root tip and latex for spermatorrhoea (Bhatt & al., 2001).
- Bark useful as astringent as for diabetes, diarrhoea, dysentery. Latex for lumbago, rheumatic pains, wound maggots. Fruits edible (Singh & Sharma, 2002). The latex is used to treat dysentery, diarrhea, piles, tooth decay, rheumatism, skin diseases (Koche & al., 2008) and also for cracks in feet (Bhosle & al., 2009).
- Bark juice with garlic and turmeric used in diabetes; growing tips stops vomiting; latex used in rheumatic pain (Karne, 2011).

Ficus exasperata Vahl (‘*Kharavat’*) MORACEAE

Shrubs or small trees; bark greyish. Leaves variable in size and shape, elliptic -oblong, obovate or more or less 3-lobed, scabrid, base cuneate, apex acute to acuminate, sinuate-crenate to serrate along the margins. Receptacles solitary, axillary, pubescent, tracts absent, greenish to yellow and reddish at maturity.

Receptacles: April–June.

Distrib.: Common. Dicholi, Goshatwadi, Rammala, Shirshinge, Zadoli ambeghar.

Uses:

- Latex is applied on forehead for the treatment of migraine.
- Latex is applied on corn.

Additional Information: Receptacles used as vegetable. Leaves used as fodder.

Ficus hispida L.f. (*‘Bhuiumber’*) MORACEAE

Shrubs to small trees. Bark grey, smooth, hispid. Leaves ovate, oblong or sub-ovate, base cordate to cuneate, apex acute, margins crenate-serrate, scabrid above, hispid beneath. Receptacles axillary to cauliflorous, pubescent, yellow when ripe.

Receptacles: September–April.

Distrib.: Common. Dicholi, Goshatwadi, Navaja, Rammala, Shirshinge, Zadoli.

Uses: Fresh or one tea spoon of root bark powder is given at morning for 4–5 days, for the treatment of jaundice.

Additional Information:

- Receptacles used as vegetable.
- Boiled green fruits are given to women for milk secretion (lactation) (Koche & al., 2008).

Ficus racemosa L. (*‘Umber’*) MORACEAE

Trees, much branched, often with well spreading canopy, bark greyish-white or pinkish, smooth. Leaves ovate-oblong, elliptic-lanceolate, base cuneate, apex subacute or subacuminate, entire, subcoriaceous. Receptacles in large clusters on the main branches or trunks, obovoid, pyriform, pale green to red on ripening.

Receptacles: February–June.

Distrib.: Common. Dicholi, Goshatwadi, Navaja, Rammala, Shirshinge, Zadoli.

Uses:

- The receptacles are mixed with flower powder of *Woodfordia fruticosa* in equal proportion & 1 tea spoon is given for leucorrhoea (white discharge).
- The receptacles mixed with banana and given twice a day, for the treatment of white discharge.
- Galls on leaves crushed, mixed with curd and given twice a day for 10–15 days for the treatment of piles.

- The galls on the leaves are crushed and given along with honey for the treatment of cough.
- The exudates/water collected by breaking the roots and given at morning for the treatment of chicken pox.

Additional Information:

- Ripened receptacles edible. Raw receptacles used as vegetable.
- In shepherd community the tree is worshiped during the marriage ceremony.
- Leaf juice together with boiled rice water and jaggery is given for the treatment of paralysis. Sheep butter is applied externally on the paralyzed portion (Singh and Prakash, 1994).
- Bark and fruits wormicide and used in leucorrhoea (Bhatt & al., 2001).
- The leaves used as a mouthwash for spongy gums, latex for piles, diarrhoea and fruits for stomachache (Koche & al., 2008).
- Leaves, bark and fruits useful for skin diseases, diabetes and urinary disorders (Patil, 2009).
- Bark is also used for strengthening the gums and teeth (Bhosle & al., 2009).
- Latex is applied regularly for sprained body part (Pawar & Patil, 2011).
- Sap used in dysentery, Piles, diarrhoea; leaves carminative, leaf juice with boiled rice water and jaggery given twice a day for one month in treatment of paralysis (Karne, 2011).

Ficus religiosa L. (*'Pimpal'*) MORACEAE

Trees. Leaves coriaceous, ovate orbicular, base truncate, apex caudate-acuminate with long acumen, margins often sinuous. Receptacles axillary, paired, sessile, pink, purple or black when ripens.

Receptacles: May–July.

Distrib.: Occasionally planted near temples. Avasari, Shirshinge.

Uses: Bark crushed and given twice a day for the treatment of White discharge.

Additional Information:

- Fruits are purgative, gum used for heart disease (Bhatt & al., 2001).
- Bark decoction useful for gonorrhoea and scabies and the edible fruits used as a laxative (Koche & al., 2008).
- A symbolic religious and social plant with magical uses to purify environment, evil spirit and also to cure asthma etc. fruits edible (Roma Mitra, 1994; Patil, 2009).
- Bark powder used for asthma (Bhosle & al., 2009).
- About 15 ml extract of leaves consumed daily for few days after snake bite (Patil, 2009).
- Bark ash used in asthma and as voice improver; bark infusion used in scabies (Karne, 2011).

Ficus rumphii Blume (*'Aashit'*) MORACEAE

Deciduous, glabrous tree, epiphytic in early stage. Leaves broadly ovate, subcoriaceous, apex sub cordate, caudate-acuminate, entire along margins; stipules ovate-lanceolate. Receptacles axillary, sessile, or shortly peduncled in pairs, globose, glabrous, white with dark spots when young, black when ripe, basal bracts 3, rounded. Male flowers near the mouth; tepals spathulate; stamen 1. Galls and female flowers sessile, tepals 3, lanceolate.

Receptacles: May–June.

Distrib.: Dicholi, Shirshinge, Zadoli.

Uses: Latex applied on affected parts due to joint pain (rheumatism).

Additional Information:

- Latex is used for skin infection in veterinary medicine.
- Wood is used for house construction.

Flemingia strobilifera (L.) Ait. & Ait.f. (*'Kanphuti'*) FABACEAE

Shrubs, pubescent when young. Leaflets oblong-lanceolate, glabrous above, silky on the nerves beneath, apex acute, base rounded. Flowers in axillary and terminal racemes. Pods oblong, mucronate, pubescent. Seeds dark brown to black.

Fl. & Fr.: February–April.

Distrib.: Common. Ghatmatha, Goshatwadi, Navaja, Payatyacha wada, Rammala, Shirshinge, Zadoli.

Uses: Two tea spoon of root powder is given twice a day or for longer time to cure epilepsy.

Additional Information: Leaves useful as a fodder, roots for body pain and plant for hysteria (Singh & Sharma, 2002).

Frerea indica Dalz. (*'Shindal Makadi'*) ASCLEPIADACEAE (PLATE: XI-1)

Herbs or undershrubs, trailing or pendulous, sap watery; stems and branches green, fleshy, quadrangular, marked with scars of fallen leaves. Leaves oblong or elliptic, obtuse or mucronate at apex. Flowers solitary extra-axillary; corolla fleshy, yellowish-green on outer side, deep purple on inner, with purple hairs on edges; corona stamina, outer bowl-shaped.

Fl. & Fr.: September–January.

Distrib.: Among rocky crevices on hill cliffs, rare. Ghatmatha, Rammala (Planted in garden).

Uses: Whole plant made into paste, boiled in coconut oil, filtered and applied to hair for healthy growth.

Additional Information: Endemic and critically endangered (Singh & al., 2001). Plants introduced in BSI garden, Pune and Rammala nursery Koyna for *ex-situ* conservation.

Glochidion ellipticum Wight (*'Bhoma'*) EUPHORBIACEAE

Trees. Leaves elliptic-lanceolate, apex acuminate, base acute, often oblique. Flowers greenish-yellow in axillary clusters. Capsules sessile, globose, 4-lobed. Seeds red, smooth.

Fl. & Fr.: September–May.

Distrib.: Common. Donichawada, Ghatmatha, Goshatwadi, Paytyachawada, Shirshinge, Zadoli.

Uses: One tea spoon bark powder is given 1–2 hour before taking food for the treatment of dyspepsia and mouth ulcer. It is useful in distaste of the mouth.

Additional Information: Endemic (Singh & al., 2000).

Gloriosa superba L. (*'Kalalavi'*) LILIACEAE

Climbers; herbaceous, perennial. Leaves ovate-lanceolate, more or less sessile, apex acuminate ending in tendril. Flowers when young green, at maturity scarlet to crimson in upper part, yellow in lower part, large, solitary or in sub-corymbose cymes towards ends of the branches, Capsules linear-oblong.

Fl. & Fr.: August–September.

Distrib.: Ghatmatha, Goshatwadi, Navaja, Payatyacha wada, Rammala, Shirshinge, Zadoli.

Uses:

- Bulb is tied on the lower abdomen to induce the pains of pregnancy.
- Consumption of bulb may abortive in pregnant women hence it is considered as poisonous.
- Paste of the bulb is applied on snakebite.

Additional Information:

- Roots useful as laxative, for piles, scabies, leprosy and neurologic pains; leaf juice for hair lice; seeds for cancer treatment and seed paste for quick delivery (Kothari & Londhe, 1999).
- Rhizome is oxytocic, anticancerous, antimalarial, stomachic, purgative, cholagogue, anthelmintic, alterative, febrifuge and antileprotic. Leaf is antiasthmatic and anti-inflammatory. (Joy & al., 2001).
- Roots are used as antidote for venomous stings, paste used in scabies; tuber paste used for quick delivery while decoction used in asthma, stomach disorders; seeds relief in acute pain, arthritis (Karne, 2011).

Chemical Constituents: The flowers, leaves and tubers contain colchicine, superbin; tubers also contain gloriosine. Leaves in addition contain chelidonic acid, 2-hydroxy 6-methoxy benzoic acid and sitosterol glucoside. Seeds contain Colchicine, demethyl colchicine and colchicoside. The toxic properties are due to presence of alkaloids chiefly colchicines (Joy & al., 2001). Leaves and tubers contain

abundance of phenols, tannins and glycosides where as flavonoids and steroids were found in a moderate concentration. Tuber contains higher concentration of alkaloids and moderate concentrations of saponins. (Rehana banu and Nagarajan, 2012).

Gmelina arborea Roxb. (‘*Shivan’*) VERBENACEAE (PLATE: VIII-4)

Trees. Leaves broadly ovate, base cordate, apex acuminate, tomentose. Flowers light yellowish brown in paniculate cymes. Drupes obovoid or pyriform, orange yellow when ripe.

Fl. & Fr.: April–May.

Distrib.: Dicholi, Kisarule, Rammala, Rasati, Shirshinge, Zadoli.

Uses: Bark powder is given for the treatment of dysentery.

Additional Information:

- Fruits edible.
- Wood is hard, used for house construction and agricultural implements.
- In south India the bark of the tree is used by arrack manufacturers to regulate the fermentation of toddy (Sivarajan and Balachandran, 1994).
- Berries purgative, root juice used as an antidote for snake bite and insect stings (Chhetri, 1994).
- Leaves useful for stomach pain and ulcer (Kothari & Moorthy, 1996).
- Fruits used for skin disease and urticaria (Bhatt & al., 2001).
- The whole plant is used as an antidote for snake bite and scorpion sting. Roots useful in hallucination, fever, dyspepsia, piles and burning sensation. Bark is used in fever and dyspepsia. Leaf juice is a good wash for foul ulcers. Flowers are recommended for leprosy and skin diseases. (Joy & al., 2001).
- Bark useful for cholera; leaves for bronchitis, dyspepsia, fever, spleen and throat trouble, syphilis, sores etc. (Singh & Sharma, 2002).
- Extract of the leaves used for urinary disorders (Bhosle & al., 2009).
- Root paste is mixed with a pinch of common salt and turmeric powder. (*Curcuma longa* L.) and applied on herpes (Pawar & Patil, 2011).
- Leaf juice is used for ulcers. Flowers are given blood diseases. Root is bitter tonic. Leaves are used as a feed for silk worms (Ingole, 2011).

Gnidia glauca (Fresen.) Gilg. (*‘Rametha’*) THYMELAEACEAE

Shrubs. Leaves subsessile, crowded at apex, lanceolate, base and apex acute. Flowers yellow in terminal heads, bracts elliptic, silky, deciduous, perianth tube cylindric, densely silky villous. Fruits ellipsoid-oblong.

Fl. & Fr.: December–May.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Karate, Katitek, Rammala, Shirshinge, Zadoli.

Uses: Whole plant tied on stomach for the treatment of Bright’s disease (*Nalgud*) -an inflammation of the kidney.

Additional Information:

- Bark used as fibre to tie the bundles of grasses, firewood as well as during the construction of huts and as fish poison.
- Poisonous plant causes swelling when rubbed to the skin.
- Whole plant used as blistering agent and leaves on swelling (Kothari & Shirodkar, 2004).
- Leaves veterinary useful for wound maggots (Singh & Sharma, 2002).

Grewia tiliifolia Vahl (‘*Dhaman’*) TILIACEAE

Trees, young branches pubescent. Leaves ovate acuminate at apex, obliquely cordate at base, margins serrate to crenate-serrate, glabrescent above pubescent or tomentose beneath. Flowers yellow in umbellate cymes. Drupes entire or 2-lobed, sparsely hirsute, black.

Fl. & Fr.: May–August.

Distrib.: Dicholi, Kisarule, Rammala, Shirshinge, Zadoli.

Uses: Bark powder is given for the treatment of dysentery.

Additional Information:

- Fruits edible, wood is used for agricultural implements, stem fibre for cordage and leaves used as fodder.
- The wood is used in the making of furniture and agricultural implements. The leaves used for fodder whereas the bark is utilized for making fibre and ropes. (Koche & al., 2008).

Gymnema sylvestre (Retz.) R.Br. ex Schultes (‘*Bedaki’*) ASCLEPIADACEAE

Twining shrubs stem much branched, cylindrical, young branches densely pubescent. Leaves petiolate, ovate or elliptic-lanceolate or oblong, base rounded, puberulous above, apex acute or shortly acuminate. Flowers yellow in extra axillary cymes. Peduncles, pedicels & calyx pubescent, corolla campanulate. Corona of 5 fleshy processes inserted on throat of corolla tube, alternating with lobes. Follicles lanceolate, beaked. Seeds ovoid, oblong with marginal wing, brown with white coma.

Fl. & Fr.: November–June.

Distrib.: Common. Donichawada, Khudupalewadi, Paytyachawada, Zadoli.

Uses:

- There is no taste of sugar after chewing the leaves. 2–3 fresh leaves or 1 tea spoon powder is taken twice a day is taken for diabetes.
- Leaves are chewed for the treatment of mouth ulcer and urinary complaints.
- Roots are used to induce vomiting.

Additional Information:

- Leaves are bitter, acrid, anthelmintic, anti-diabetic, used in eye disorders, diseases of heart, asthma, urinary troubles, reduces body weight; roots emetic, expectorant (Karne, 2011).

- Roots used as antidote against snakebite (Jain, 1981; Singh & al., 2012).

Haldina cordifolia (Roxb.) Ridsdale (*'Hedu'*) RUBIACEAE

Trees, young branches pubescent, bark thick, grey, rough. Leaves ovate-orbicular, apex acute, crowded at the ends of the branches. Flowers in globose, yellow, peduncled heads. Capsule of 2-downy, pubescent cocci. Seeds winged.

Fl. & Fr.: May–September.

Distrib.: Rare. Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: Young branches are chewed for toothache.

Additional Information: Tooth is brushed with young branches for toothache (Jagtap & al., 2009).

Hedyotis corymbosa (L.) Lam. (*'Pittapapada'*) RUBIACEAE

Herbs, branches dichotomous, scaberulous-hispid, reddish. Leaves whorled, linear-lanceolate, base decurrent into a short petiole, apex acute, margins recurved and scabrous. Flowers white to pale violet in axils. Capsules globose.

Fl. & Fr.: May–September.

Distrib.: Common. Dicholi, Ghatmatha, Zadoli.

Uses:

- Two teaspoon juice of the whole plant is given thrice a day for three days for the treatment of fever.
- Two spoon juice is given with empty stomach for dyspepsia and also for body heat.

Additional Information:

- Whole plant used in fever, diarrhoea, vomiting, burning sensation, distaste and giddiness (Shiddamallaya & al., 2010).
- Whole plant used for dyspepsia by Gond tribe in Orissa (Mohapatra and Sahoo, 2008).

Hedyotis herbacea L. (*'Paripath'*) RUBIACEAE

Herbs, branches dichotomous, scaberulous-hispid. Leaves linear-lanceolate, base decurrent into a short petiole, apex acute, margins recurved, stipules bristly. Flowers white. Seeds pale brown.

Fl. & Fr.: May–September.

Distrib.: Dicholi, Navaja, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses:

- 1/4 Decoction or one tea spoon powder of the whole plant is given for the treatment of Chickenpox.
- 1/4 Decoction or one tea spoon powder of the whole plant is given for the treatment of fever.
- 1/4 Decoction or one tea spoon powder of the whole plant is given to control the vomiting.

Helicanthes elastica (Desr.) Danser (*'Bandgul'*) LORANTHACEAE

Undershrubs, dichotomously branched, swollen at nodes, woody, parasitic. Stems pendulous, terete. Leaves opposite, ovate or elliptic, thickly coriaceous, dark green, sessile. Flowers greenish-white, sessile, in fascicles at nodes. Berries subglobose, sessile. pink when ripe.

Fl. & Fr.: October–January.

Distrib.: Common parasite on *Syzygium cumini.* Manainagar, Navaja, Rammala, Zadoli-ambeghar.

Uses: Whole plant is used for kidney stone.

Additional Information:

- Endemic (Singh & al., 2000).
- The plant is antidote for poison, check abortion, removal of urinary bladder and kidney stones (Shanavaskhan & al., 2012).
- The plant shows anti-asthmatic and anti-anaphylactic activities may be due to presence of polyphenolic compounds. Nimgulkar & Joshi (2010).

Helicteres isora L. (*'Murudshenga', 'Kivan'*) STERCULIACEAE

Shrubs; young branches stellately hairy. Leaves bifarious, oblong-ovate, base subcordate, apex round or acute, stellately hairy on both surfaces. Flowers bright red, distinctly bilabiate, in axillary clusters. Follicles screw like twisted, beaked. Seeds numerous, angular, wrinkled.

Fl. & Fr.: August–February.

Distrib.: Avasari, Dicholi, Ghatmatha, Kondhavale, Navaja, Zadoli.

Uses:

- Fruits made into paste & given for stomach ache and dysentery.
- Fruits crushed and given in diphtheria.
- Bark is used for the treatment of diarrhoea.

Additional Information:

- Leaves used as fodder and bark as fibre.
- Seed oil used as pain killer and roots for colic pain (Kothari & Moorthy, 1993).

- Aqueous extract of the root is given for the treatment of dog bite (Singh and Prakash, 1994).
- The seeds of *Helicteres isora* have seed coat dormancy and mechanical scarification is simple method for germination (Badave & Jadhav, 1998).
- Roots useful for diabetes, wounds, cough, snakebite and fruits for earache (Sharma, 2002).
- Bark extract is used for bronchitis and diabetes (Koche & al., 2008).
- Bark paste applied on wounds; tender twigs and fruits powder extract for cough; fruits stomach problems (Karne, 2011).

Heliotropium indicum L. (*'Ranbibba'*) BORAGINACEAE

Erect or some time decumbent ascending, annual herbs, branches hirsute. Leaves ovate-elliptic or ovate-oblong, sparsely hairy on both sides, apex acute, base sometimes contracted into partially winged petiole. Flowers white or bluish-white, sessile in 2-ranked, dense, scorpioid cymes. Fruits deeply bifid. Nutlets beaked, angled.

Fl. & Fr.: Almost throughout the year.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Katitek, Rammala, Shirshinge, Zadoli.

Uses: Leaves are applied for the irritation and burning caused due to *Semecarpus anacardium* and also applied on burns.

Additional Information: Whole plant useful for boils, sore throat, ulcer and insect bite (Singh & Sharma, 2002).

Hemidesmus indicus (L.) Schult. var. **indicus** (*'Dudhi,'*) ASCLEPIADACEAE (PLATE: VII-2)

Twiners. Stem terete, swollen at nodes, Leaves variable linear-lanceolate, elliptic-oblong, apex apiculate, base rounded. Flowers in axillary subsessile cymes. Follicles in pairs, slender, tapering to a point at apex.

Fl. & Fr.: July–December.

Distrib.: Common. Ambeghar, Dicholi, Ghatmatha, Goshatwadi, Navaja, Rammala, Shirshinge, Zadoli.

Uses:

- Leaves are chewed for treating mouth ulcer.
- Two tea spoon leaf juice or the decoction of root is given every morning for the treatment of excess body heat.
- The powder of *Hemidesmus indicus* (root), *Tinospora cordifolia* (stem) & *Holarrhena antidysenterica* (root) is mixed in equal proportion. From this formulation, one teaspoon is taken orally twice a day for 4–5 days for the treatment of white discharge/leucorrhoea (locally called *'Pradar'*).
- One-drop leaf juice is dropped in eye for the treatment of opacity.

Additional Information:

- In veterinary medicines the wound is washed with water and leaf juice of *Dudhi* (*Hemidesmus indicus*) is applied on it.
- Roots useful for blood purification, fever, rheumatic pains, skin disease, syphilis, scorpion sting and snakebite and as appetizer and tonic. Latex veterinary for wound maggots (Singh & Sharma, 2002).
- Entire plant used in fever, diabetes, cough and blood disorders. It is also used as a tonic and for the treatment of hypertension (Koche & al., 2008).
- Roots are anti-rheumatic, with garlic paste used as an antidote for snake bite, also used in liver, skin diseases, loss of appetite, urinary complaints (Karne, 2011).

Heterophragma quadriloculare (Roxb.) K. Schum. (‘*Varas’*) BIGNONIACEAE (PLATE: VIII-2)

Trees. Leaves crowded at the tip of branches, leaflets elliptic oblong, base unequal, apex acuminate, tomentose when young. Flowers fragrant. Capsules linear, tomentose when young.

Fl. & Fr.: January–February.

Distrib.: Dicholi, Donicha wada, Kisarule, Rammala, Shirshinge, Zadoli.

Uses: Bark is given in the treatment of dysentery.

Additional Information:

- Tender leaves are used as vegetable. Wood is hard and used for construction of houses. The door frames of the houses are mostly constructed by using this wood.
- Extract of wood used in skin diseases and roots for snakebite (Kothari & Moorthy, 1993).

Hibiscus rosa-sinensis L. (‘*Jasvand’*) MALVACEAE

Shrubs; stem woody. Leaves ovate or ovate-lanceolate, tapering at base, acuminate at apex, serrate to dentate or crenate at margins, glabrous on both sides or with a few minute stellate hairs on the veins beneath. Flowers solitary, axillary; pedicel jointed above the middle.

Fl.: Throughout the year.

Distrib.: Cultivated as an ornamental plant. Avasari, Manainagar, Nahimbe ambeghar, Navaja, Navaja Dicholi. Rammala.

Uses:

- Flowers are crushed and applied for the treatment of alopecia (loss of hairs).
- Two to three flowers are kept in hot water for 5 min; filtered and taken twice a day, for 4 days, for the treatment of white discharge. Also 2–3 flowers are crushed, 1 teaspoon sugar is added in it and taken as mentioned above.

Additional Information:

- Flowers are sold in the herbal co-operative for making hair oil.
- Root powder is useful for red discharge (Bhosle & al., 2009).
- Paste prepared exclusively from petals is applied on face to treat pimples (Pawar & Patil, 2011).

Hiptage benghalensis (L.) Kurz (‘*Haladvel’*) MALPIGHIACEAE

Extensive woody climber. Leaves elliptic, coriaceous, shining above, sparsely pubescent beneath, acute or acuminate at apex. Flowers creamy white, throat yellowish, in terminal racemes or panicles. Mericarps 1–3, unequally 3-winged, pubescent.

Fl. & Fr.: February–March.

Distrib.: Occasional. Avasari, Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: Leaf juice applied for the treatment of chicken pox, measles and scabies. Locals also use the climbers for tying purposes.

Additional Information: Crushed leaves applied on scabies (Upadhye & al., 1994).

Holarrhena pubescens (Buch.-Ham.) Wall. ex G. Don (‘*Pandharakuda*’) APOCYNACEAE (PLATE: VI-2)

Shrubs or small trees. Leaves elliptic-oblong, obtuse at base, obtusely acuminate apex. Flowers white in terminal corymbose cymes, bracteate. Follicles twin, cylindric, motted with white spot. Seeds linear-oblong, coma brown with deciduous hairs.

Fl. & Fr.: April–November.

Distrib.: Abundant at Ambeghar, Avasari, Khudupalewadi, Kisarule, Punavali, Rammala, Shirshinge, Zadoli.

Uses:

- One tea spoon root or stem bark powder, twice a day for 3 days taken orally for the treatment of dysentery, stomachache and fever.
- Stem bark powder mixed with *Tinospora cordifolia* (stem powder) & *Hemidesmus indicus* (root powder) in equal proportion. One tea spoon from this combination is taken orally for the treatment of white discharge (leucorrhoea).
- Leaf juice mixed with honey in equal proportion. One drop is dropped in eyes for the treatment of opacity.
- One tea spoon seed powder is taken orally twice a day, for 3 days for the treatment of stomachache.
- Seed powder as well as leaves also given for treatment of intestinal worms.

Additional Information:

- The wood used for agricultural implements. Flowers, young pods and seeds used as vegetable.

- Plant is much useful for afforestation also (Kothari & Moorthy, 1993). The seeds are consumed as antitetanic (Upadhye & al., 1994). Powdered bark for swelling and decoction of the bark is used for malarial fever (Singh and Prakash, 1994). Seeds useful for asthma, anti titanic drug, colic pain, cough, labour complaints and latex for snakebite (Singh & Sharma, 2002).
- Methanol extract of the bark is used in leprosy (Gupta & al., 2010).
- Stem, root and bark anti-dysenteric, astringent, anthelmintic, colic, stomachic, used in amoebic dysentery, diarrhoea; leaves chronic bronchitis, boils and ulcers (Karne, 2011).

Holigarna grahamii (Wight) Kurz (*'Hulgeri'*) ANACARDIACEAE

Trees, young branches tomentose. Leaves oblanceolate, base cuneate, apex acute, glabrous above, pubescent beneath. Flowers white or yellowish green, in terminal panicles, rusty tomentose. Drupes obliquely ovoid, basal portion enclosed by calyx.

Fl. & Fr.: December–June.

Distrib.: Occasional. Ghatmatha, Zadoli,

Uses: Oil from the fruit is applied on the affected part for the treatment of joint pain.

Additional Information: Endemic (Singh & al., 2000).

Holoptelea integrifolia (Roxb.) Planch. (*'Vavala'*) ULMACEAE

Deciduous tree. Leaves elliptic-acuminate, base rounded or cordate. Flowers brownish, polygamous in axillary, short racemes or panicles on leafless branches. Fruits winged, samaroid, orbicular, wing of fruit emarginated at tip and crowned by persistent styles.

Fl. & Fr.: January–June.

Distrib.: Avasari, Ker, Chiteghar.

Uses:

- The bark crushed and applied on swelling, contusion and rheumatic pain.
- The paste of the bark applied on skin infection.
- The root bark crushed and applied on corns.

Additional Information:

- Leaves useful for healing wounds and bark as fish poison (Singh & Sharma, 2002).
- Leaves boiled with coconut oil and applied on wounds (Upadhye & al., 1994).
- Tender leaves used for abscess (Padal & al., 2010).
- Leaves in powder form are applied on boils and bark powder is applied on wound (Pawar & Patil, 2011).
- Bark is astringent, acrid, anti-inflammatory, digestive, carminative used in inflammations, dyspepsia, flatulence, colic, vomiting, skin diseases, leprosy, diabetes, hemorrhoids, rheumatism (Shashikant & al., 2011).

Homonoia riparia Lour. (*'Sherani'*) EUPHORBIACEAE

Shrubs. Leaves linear-lanceolate, closely set, base acute or rounded, glabrous above, clothed beneath. Flowers dioecious, sessile in axillary bracteates spikes. Capsule globose, hairy, 3-ribbed, style persistent.

Fl. & Fr.: November–June.

Distrib.: Common along river beds. Dhakka (Sangamnagar), Helwak, Kamargaon. Navaja-dicholi.

Uses: Leaves applied on skin diseases.

Additional Information:

- Fruits used for washing the clothes.
- Roots laxative and diuretic. Root decoction is given in gonorrhea, syphilis and chest pain. Leaves and fruits are used in skin diseases (Kothari and Shirodkar, 2006).

Hoya wightii Hook.f. (*'Dudhyel'*) ASCLEPIADACEAE

Climbers, becoming epiphytic; stems terete, with adventitious roots all over surface. Leaves elliptic or elliptic-lanceolate, apex bluntly acuminate, base acute or subacute. Flowers white to pale yellow, many, in lateral, pendulous umbellate cymes. Corona fleshy. Follicles linear, cylindrical.

Fl. & Fr.: November–June.

Distrib.: Occasional epiphytic perennials. Avasari, Rammala, Zadoli.

Uses: Leaves applied to burst the abscesses.

Hygrophila schulli (Buch.-Ham.) M.R. & S.M. Almeida (*'Kate Kolisna'*) ACANTHACEAE (PLATE: VI-3)

Herbs, erect, 1–1.5 m high; stem stout, branches sub-quadrangular. Leaves sessile, appear whorled with 6 sharp yellow spines, oblong-lanceolate or oblanceolate, sparsely hispid on both surfaces. Flowers purple-blue in whorls at each node. Capsules linear oblong, pointed. Seeds 4–8 orbicular.

Fl. & Fr.: November–June.

Distrib.: Common in swampy places. Khudupalewadi, Manainagar, Navaja, Rammala, Shirshinge, Zadoli.

Uses:

- One cup leaf juice is collected by crushing the fresh plant of *Hygrophila schulli*. It is added with two cup of water. Boiled it to remain 1 cup. This decoction is taken every morning, for three days, for the treatment of the urinary problems. This decoction should be freshly prepared.
- Leaves are applied on scorpion sting.
- One teaspoon seed powder, with a cup of milk is taken twice a day, for three months to increase the sperm count.

- Fresh root paste is applied on insect bite.
- Root powder is taken for the treatment of urinary problem.

Additional Information:

- The tender leaves used as vegetable.
- The plant is aphrodisiac, diuretic and used for jaundice, rheumatic pains and urino-genital disorder (Singh & Sharma, 2002).
- Bark is useful for hepatitis (Pande & al., 2008).
- Paste of whole plant is applied on herpes (Pawar & Patil, 2011).

Hypoxis aurea Lour. HYPOXIDACEAE

Herbs, perennial. Rootstock elongate and erect. Leaves narrowly linear, subcoriaceous, acute. Flowers yellow, solitary, perianth lobes green, hairy on back. Capsule oblong.

Fl. & Fr.: July–September.

Distrib.: Common. Avasari, Dicholi.

Uses: Tuber is applied on cuts, wounds and swellings.

Ixora nigricans R.Br. ex Wight & Arn. (*'Katkuda'*) RUBIACEAE

Shrubs. Leaves dark green above, pale beneath, elliptic-oblong, base rounded, apex acute, stipules triangular, bristle tipped. Flower buds narrowly fusiform. Flowers white, odorous, in sub-paniculiform, cymes. Fruits globose or didymous.

Fl. & Fr.: November–September.

Distrib.: Dicholi, Ghatmatha, Koyna dam, Navaja, Shirshinge, Zadoli.

Uses: Tender leaves are given in dysentery.

Jasminum malabaricum Wight (*'Kusar'*) OLEACEAE (PLATE: V-1)

Shrubs; stem climbing. Leaves broadly ovate, acuminate at apex, rounded or cordate at base. Flowers white, fragrant, in trichotomous, many flowered terminal cymes. Berries ovoid purplish black.

Fl. & Fr.: March–June.

Distrib.: Common. Dicholi, Goshatwadi, Kisarule, Rammala, Shirshinge, Zadoli.

Uses:

- Leaf juice is used to stop vomiting.
- The tender leaves crushed and mixed with curd and applied to the affected part for the treatment of herpes zoster.

Additional Information:

- Endemic (Singh & al., 2000).
- Fruits edible.
- Leaves also used as fodder and lizard poison (Singh & Sharma, 2002).

Jasminum officinale L. var. **officinale** (*'Jai'*) OLEACEAE

Scandent shrubs, branches green. Leaves pinnate; leaflets elliptic-ovate, acute to acuminate at apex, acute at base, pubescent. Flowers white, fragrant, in lax, terminal and dichasial cymes.

Fl. & Fr.: March–October.

Distrib.: Planted in gardens. Ghatmatha, Kondhavale, Navaja, Rammala, Shirshinge.

Uses:

- Leaves are chewed for the treatment of mouth ulcer.
- Roots are crushed or made into powder and given twice a day for the treatment of dysentery.

Jatropha curcas L. (*'Malya erand'*) EUPHORBIACEAE

Shrubs. Leaves ovate-cordate, entire or 3–5 lobed or angled. Flowers greenish-yellow in axillary and terminal cymes. Capsule subglobose.

Fl. & Fr.: June–July.

Distrib.: Avasari, Kondhavale, Navaja, Rammala, Vajegaon.

Uses:

- Leaf juice given for body heat.
- Stem chewed for toothache.

Additional Information:

- Seeds used as purgative and plant for fencing (Singh & Sharma, 2002).
- The seeds used in cholera, dysentery and stomach disorders and the leaves for skin diseases and rheumatism (Koche & al., 2008).
- The seeds are laxative used in stomach disorders and the stem bark is used to obtain black colour (Sinha & Ramesh Kumar, 2009) while the bark powder with salt is used for cough (Karne, 2011).

Justicia adhatoda L. ('*Adulasa*') ACANTHACEAE

Shrubs, bushy. Leaves elliptic-lanceolate. Flowers white in short, dense, axillary, pedunculate spikes towards the ends of the branches.

Fl. & Fr.: September–April.

Distrib.: Common on Hedges. Avasari, Ghatmatha, Rammala, Rasati, Shirshinge, Vankusavade, Zadoli.

Uses:

- Yellow mature leaves steamed and crushed. Juice is collected. 2 tea spoon juice is mixed with equal quantity of honey and taken twice a day for 3 days to cure cough.

- Leaf juice of Adulasa and Maka (*Eclipta alba*) mixed in equal proportion. 1 tea spoon, twice a day is given for 3–4 days for the treatment of pneumonia.

Additional Information:

- In 'Ayurveda' the plant is known as *'Bhisagmata'* (Mother of doctors, Credit donner to doctors) curing breathing diseases like cold, cough, asthma, tuberculosis, etc. Leaves also useful for constipation, vomit, rheumatic pains, skin diseases and roots for delivery pain (Parabia & Pathak, 2002).
- Whole plant contains pyrroloquinazoline alkaloid, vasicine, vesicinone and hydrozyketone (Sharma and Pandey, 2009).
- The leaves are useful for leprosy (Gupta & al., 2010).
- The plant is antipyretic, anthelmintic, antiseptic, antispasmodic, useful in asthma, bronchitis, child birth, cold, consumption cough, dislocation of joints, eczema, malaria, pulmonary affect, rheumatism, swelling, venereal complaints (Pant and Samant, 2010).
- Leaves of the plant and turmeric (*Curcuma longa* L.) are crushed in cow urine and applied over scabies (Pawar & Patil, 2011).

Justicia trinervia Vahl (*'Suta'*) ACANTHACEAE

Herbs, procumbent, rootstock woody. Leaves sessile, elliptic, apex obtuse, base tapering, bracts lanceolate, white with green nerves, calyx lobes lanceolate, 3-nerved, corolla lobes ovate, concave. Capsules oblong, clavate, shortly apiculate, pubescent.

Fl. &Fr.: October–January.

Distrib.: Avasari, Ghatmatha, Goshatwadi, Karate, Rammala.

Uses: One tea spoon of root juice is given for intestinal worms.

Additional Information: Endemic (Singh & al., 2000).

Kalanchoe pinnata (Lam.) Pres. (*'Panphuti'*) CRASSULACEAE

Succulent herbs; branches terete, reddish speckled with white. Leaves simple, 2–5 lobed, elliptic, oblong, obtuse, rounded or narrowed at base, margins crenate-serrate. Flowers in lax panicles. Follicles enclosed in persistent, papery calyx and corolla. Seeds numerous, linear.

Fl. & Fr.: April.

Distrib.: Dicholi, Navaja, Ghatmatha, Rammala (planted in garden), Shirshinge, Zadoli.

Uses:

- Leaves are fried in ash & tied on the twisted bone, contusion and swellings.
- One tea spoon leaf juice twice a day for 3–4 days is given for cough.
- Three to four matured leaves are eaten twice a day for 10 days for kidney stone.
- Leaf juice applied on bruises and wounds.

Additional Information:

- Single raw leaf is eaten for seven days to get relief from cough (Upadhye & al., 1994).
- The paste of the leaves applied on muscle pain (Bhosle & al., 2009).
- Whole plant is used in amoebic dysentery, body heat, boils, sores, wounds, gastric complaints, headache, influenza, insect bite and kidney stone (Pant and Samant, 2010).

Lagerstroemia microcarpa Wight (*'Nanya'*) LYTHRACEAE

Trees. Leaves elliptic or elliptic-ovate, base and apex acute, glabrous above, hoary tomentose beneath. Flowers inodorous, in terminal panicles. Capsules ellipsoid, 4-volved, brownish-red. Seeds many.

Fl. & Fr.: April–December.

Distrib.: Avasari, Ambeghar, Dicholi, Kondhavale, Shirshinge, Zadoli.

Uses: Bark is given for the treatment of stomachache.

Additional Information:

- Endemic (Singh & al., 2000).
- Wood is used for the construction of houses, furniture making.
- Leaves useful for wound maggots (Kulkarni & Kumbhojkar, 1996).

Lantana camera L. var. **aculeata** (L.) Moldenke (*'Ghaneri'*) VERBENACEAE

Shrubs, much branched with strong, disagreeable smell. Leaves ovate-elliptic, apex acute, base rounded, margins crenate-serrate. Flowers orange-red, pink or white in terminal and axillary spikes. Drupes globose, fleshy, black coloured when ripe.

Fl. & Fr.: Throughout the year.

Distrib.: Common, growing as a weed. Dicholi, Goshatwadi, Kisarule, Rammala, Rasati, Shirshinge, Zadoli.

Uses:

- Flower powder given for pneumonia.
- One tea spoon of leaf juice is given twice a day for 4 days for the treatment of white discharge.

Additional Information:

- Fruits are edible.
- Leaves are antiseptic and useful for healing wounds (Singh & Sharma, 2002).
- Fruit powder is used for menstrual disorders (Bhosle & al., 2009).
- Leaves contain tannins, sugars, and resin, lantadenes, steroid such as lan-camarone. Bark contains quinine with strong antipyretic and antispasmodic properties. The flowers yield volatile oil similar to that of leaf oil. Leaves and

twigs used for green manure in forest, polishing woods, substitute for tea. Fruits edible. Stems are used as toothbrush. A decoction is given in case of tetanus, rheumatism, malaria, etc (Ingole, 2011).

Lawsonia inermis L. (*'Mendi'*) LYTHRACEAE

Shrubs, spiny. Leaves sessile, lanceolate, apex acute. Flowers white in terminal and axillary cymes. Capsules globose.

Fl. & Fr.: June–December.

Distrib.: Planted around home. Rammala (Planted in garden), Rasati, Shirshinge.

Uses:

- The paste of the leaves is applied on fungal infection on skin as well as on infection between fingers caused by mire.
- Leaves applied on forehead for headache. Also useful in body heat & burning feet.

Additional Information: Leaf juice consumed for jaundice (Pawar, 2012).

Leea indica (Burm.f.) Merr. ('*Dinda'*) LEEACEAE

Shrubs, sometimes with aerial or stilt roots during monsoon. Leaves ovate or ovate oblong, apex acute or acuminate, margins crenate or dentate. Flowers greenish-white in terminal or dichotomous cymes. Fruits dorsally compressed, 1–4 lobed.

Fl. & Fr.: April–December.

Distrib.: Common. Ambeghar, Dicholi, Punavali, Shirshinge. Zadoli.

Uses: Root paste is applied on skin infection and abscess. In excess quantity causes irritation.

Additional Information:

- The root paste is useful in ringworm. The roots are also used in Guinea worm (Desai, 1975).
- Roots useful for diarrhoea, dysentery. Leaves edible as vegetable (Singh & Sharma, 2002).

Leucas aspera (Willd.) Link (*'Kumbha'*) LAMIACEAE

Erect, diffuse, herbs. Stem and branches hispid with spreading herbs. Leaves subsessile, verticillate, oblong-lanceolate, margins crenate. Flowers sessile, white in terminal whorls. Nutlets oblong, brown.

Fl. & Fr.: September–November.

Distrib.: Common around cultivated fields and open grasslands. Avasari, Khudupalewadi, Kondhavale, Rammala, Vankusavade.

Uses: Leaf juice is dropped in the eyes for the treatment of opacity and applied on psoriasis, skin diseases.

Leucas ciliata Bth. (*'Burambi'*) LAMIACEAE

Herbs, stem and branches obtusely 4-angled with brownish hairs. Leaves ovate or lanceolate, hairy, apex acute, base cuneate, margins serrate. Flowers white in axillary, distant whorls. Nutlets oblong, brown.

Fl. & Fr.: October–April.

Distrib.: Common around cultivated fields and open grasslands. Avasari, Bopoli, Khudupalewadi, Kondhavale, Rammala, Vankusavade.

Uses: Leaf juice applied on scabies.

Leucas stelligera Wall. (*'Burambi'*) LAMIACEAE

Herbs, stem and branches quadrangular, hairy with erect and spreading hairs. Leaves elliptic-lanceolate or narrowly lanceolate, softly hairy on sides, apex subacute, base tapering, margin serrate. Flowers white in dense, many flowered in axillary and terminal whorls. Nutlets ovoid, smooth.

Fl. & Fr.: November–April.

Distrib.: Common. Avasari, Chapher, Dicholi, Ghatmatha, Khudupalewadi, Kondhavale, Rammala. Shirshinge, Vankusavade, Zadoli, Zadoli ambeghar.

Uses:

- Leaf juice of *Vitex negundo*, *Colebrookea oppositifolia*, *Leucas stelligera* and *Clematis gourina* are mixed in equal proportion. Half cup of this combination is given as antidote for snake bite.
- Leaves are crushed & applied on scabies.

Additional Information:

- A drop of fresh leaf juice dropped in opposite nostril in 'hemicrania' (Upadhye & al., 1994).
- Leaf juice dropped into nostrils of cattle to get relief from suffocation. The leaves used as mosquitoes and bedbugs repellent.
- Leaves useful for wound maggots and as fish poison (Singh & Sharma, 2002).

Litsea deccanensis Gamble (*'Kala pisa'*) LAURACEAE

Shrubs or small trees, young branches softly yellow tomentose. Leaves elliptic-lanceolate, apex acute or acuminate. Flowers white or yellow, in simple, umbellate heads; umbels 4–5 flowered. Berries globose, black when ripe.

Fl. & Fr.: October–December.

Distrib.: Dicholi, Ghatmatha. Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1995).

Uses:

- The bark used as plaster on bone fracture.

- Leaves applied on wounds.
- One tea spoon bark is given for treating dysentery.

Lobelia nicotianaefolia Roth ex R. & S. (*'Devnal'*) LOBELIACEAE (PLATE: VII-3).

Stems hollow, shining, stout, cylindrical. Leaves sessile, oblong-lanceolate, base tapering, apex acute, glabrous above, pubescent beneath, margins serrulate. Racemes stout, pedicels pubescent. Capsules subglobose, seeds many.

Fl. & Fr.: November–February.

Distrib.: Common at Dicholi, Ghatmatha, Kisarule, Shirshinge, Zadoli,.

Uses: The root is applied on eyes & tied on the ears for the treatment of opacity.

Additional Information:

- The plant is poisonous and used as insecticides for household insects.
- Leaf juice also used in veterinary medicines to control the lice in cattle, as well also used externally in foot rot disease.
- Leaves useful for asthma, cold, stem for cough and roots for eye disease. Leaves also expel tick and flea (Kothari & Moorthy, 1993).
- Hollow stem is placed in hot water and vapours inhaled as expectorant (Upadhye & al., 1994).
- Whole plant useful as antiseptic and as insecticide (Kothari & Shirodkar, 2006).

Ludwigia octovalvis (Jacq.) Raven ssp. **octovalvis** (*'Panlavang'*) ONAGRACEAE

Herbs, robust, branched, woody at base, subglabrous, puberulent or densely villous. Leaves subsessile, linear-lanceolate, base and apex tapering. Flowers yellow, solitary, axillary. Capsule thin walled, terete, pale brown with 8 dark ribs, breaking up between the ribs.

Fl. & Fr.: November–April.

Distrib.: Common in swampy places and rice fields. Dastan, Kolane, Rammala, Rasati.

Uses: Whole plant is crushed and paste is boiled in coconut oil and applied on skin diseases.

Additional Information:

- Ash of whole plant is mixed in mustard oil. The ointment thus Obtained is applied externally to treat eczema and skin diseases (Prusti and Behera, 2007).
- Boiled extract of the whole plant is used as antidiabetic (Khan and Yadav, 2010).
- Leaf infusion is laxative (Soladoye & al., 2010).

Luffa acutangula (L.) Roxb. (*'Randodaka'*) CUCURBITACEAE

Annuals, extensive climbers, stem slender. Leaves broadly ovate, entire or 3–7 lobed, membranous with glands on upper surface. Flowers pale yellow, male and female flowers in the same axil. Berries linear-obovoid or clavate-oblong, angled. Seeds black, ovoid, flat.

Fl. & Fr.: June–October.

Distrib.: Rare. Ghatmatha, Shirshinge, Zadoli.

Uses: Dried fruits crushed in water and taken as an antidote for snake poison.

Additional Information:

- Fresh fruits eaten as vegetable
- Fruits pulp of its var. *amara* (Roxb.) Cl. And jaggery advised daily for 4–5 days after dog bite (Patil & al., 2009).
- The fruit powder is used for jaundice (Gowtham & al., 2012).

Chemical Constituents:

Fruit contains cucurbetacin B, E, oleanalic acids, steroids/triterpenoids, tannins and flavonoids, starch, fixed oils, luffin, and colocynthin, oleanane type triterpene saponins–acutoside A, B, C, D, E, F, and G. While seeds contain saturated and unsaturated fatty acids: palmatic, stearic, oleic, linoleic and traces of lignoceric acid (Kalaskar & Surana, 2010).

Lygodium flexuosum (L.) Sw. (*'Vel-vakchouda'*) LYGODIACEAE

Climbers. Fronds with pinnules pinnate or variously lobed, serrulate. Sori protruding from margins.

Distrib.: Ghatmatha, Kolane, Male.

Uses: Leaf paste applied to whole body for jaundice.

Additional Information:

- Leaves used as vegetable.
- Leaf paste diluted in water and administered orally to cattle to control loose motions (Rajendran & Henry, 1994).
- Leaves used to improve memory (Cherian and Ramteke, 2010).
- The main constitute of the plant is lygodinolide which is mainly used in wound healing (Yadav & al., 2012).

Macaranga peltata (Roxb.) Muell.-Arg. (*'Chandada'*) EUPHORBIACEAE

Trees. Leaves deltoid ovate, cuspidate. Flowers small in axillary, tomentose panicles. Capsules globose, hairy.

Fl. & Fr.: February.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Khudupalewadi, Kondhavale, Rammala, Shirshinge, Van Kusavade, Zadoli, Zadoli ambeghar.

Uses:

- Latex applied on bleeding wounds and cuts.
- The latex is sticky which is used as medium of plaster on bone fracture.
- Leaves used as plate for serving food, fruits etc.

Malaxis rheedi Swartz. (*'Patharkudi'*) ORCHIDACEAE

Stem erect, sheathed. Leaves 3–5, sheathed, ovate-lanceolate, broadly ovate or elliptic-lanceolate, acute, margins slightly denticulate, inflorescence dense or lax. Flowers yellow with pale purple tinge when young, becoming reddish purple at length. Capsules obovoid, pyriform.

Fl. & Fr.: July–March.

Distrib.: Dicholi, Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1995).

Uses:

- The bitter stem is taken in empty stomach for the treatment of stomach ache.
- The juice of stem is applied on infected wound.

Mallotus philippensis (Lam.) Muell.-Arg. (*'Rohini'*) EUPHORBIACEAE

Trees, young branches tomentose. Leaves ovate-lanceolate, glabrous above, pubescent and with red glands beneath. Flowers in terminal panicles. Capsules 3-valved. Seeds globose, black.

Fl. &Fr.: November–February.

Distrib.: Avasari, Dicholi, Ghatmatha, Rammala, Shirshinge, Zadoli.

Uses: Loam on the fruit is given along with jaggery at bed time for treatment of constipation as well as for intestinal worms.

Additional Information:

- The red powdery cover on the capsules yield a valuable dye for colouring silk and woolen fabrics. Seed oil used in paints, varnish, ointments etc. (Kothari & Moorthy, 1993).
- Powdered fruits with sugar given to expel tapeworms (Chhetri, 1994).
- Stem bark together with *Cuscuta reflexa,* stem bark of *Mangifera indica* and leaves of *Dendrocalamus strictus* is used for the treatment of jaundice (Singh and Prakash, 1994).
- Seeds are boiled to obtain red colour (Sinha & Ramesh Kumar, 2009).
- Ethanol extract (95%) of the plant is used in leprosy (Gupta & al., 2010).

Mangifera indica L. (*'Amba'*) ANACARDIACEAE

Trees. Leaves crowed at apex of branches, oblong-lanceolate, coriaceous. Inflorescence of pubescent terminal panicles. Flowers polygamous. Drupes obliquely pyriform or obovoid; stone compressed, fibrous, hard.

Fl. & Fr.: January–May.

Distrib.: Common. Cultivated. Avasari, Dicholi, Kisarule, Rammala, Zadoli.

Uses:

- Ash of fresh leaf applied on burns. After drying the wound sesame oil is applied.
- Leaf ash also used for pyorrhea.
- Bark and seeds useful in dysentery.

Additional Information:

- Raw fruits made into pickles. Raw and mature fruits edible and sold in the local market.
- As the plant is symbolic religious the leaves are tied on the door during festivals.
- The bark used as an appetizer, aphrodisiac, astringent and cardiac medicine. The fruits and seeds are used in the treatment of bleeding piles and skin diseases (Koche & al., 2008).
- Seed paste is useful in dysentery (Bhosle & al., 2009).
- Latex of fruits or leaves applied after scorpion sting. Paste of cotyledons also useful for the same (Patil & al., 2009).

Maytenus rothiana (Walp.) Lobreau- Collen (‘*Yenkli, Ikari’*) CELASTRACEAE

Scandent shrubs, Leaves broadly ovate-cuneate, apex rounded or shortly acuminate. Flowers greenish-white, Capsules 3-lobed. Seeds 6 ellipsoid with a small basal aril, brownish-orange, smooth, shining.

Fl. & Fr.: May–October.

Distrib.: Occasional. Nauja, Shirshinge, Zadoli.

Uses: Seed or bark powder is smoked for relief from asthma.

Additional Information: To restrict the snakes in houses bark of the plant is burned & fumigation is done.

Memecylon umbellatum Burm.f. var. **umbellatum** (*‘Anjan’*) MELASTOMATACEAE (PLATE: VIII-6)

Small trees. Leaves subacute or shortly acuminate at apex, attenuate or rounded at base. Flowers bluish, many in umbellate cymes from the axils of fallen leaves on old branches.Berries globose blackish when ripe.

Fl. & Fr.: January–June.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Khudupalewadi, Kondhavale, Shirshinge, Vankusavade, Zadoli ambeghar, Zadoli.

Uses:

- Leaves are given as antidote on snakebite.
- Leaves are used on skin disease.

Additional Information:

- Wood used for preparation of agricultural implements.
- Fruits edible.
- Poultice of bark with *Piper nigrum* and *Curcuma amada* is applied once as anti-inflammatory (Upadhye & al., 1994).
- Leaves are cooling and astringents, used in leucorrhoea and gonorrhea. Root decoction used in excessive menstrual discharge (Kothari & Shirodkar, 2006).

Chemical constituents:

Plant contains phytoconstituents such as umbellactone, amyrine, oleanolic acid, ursolic acid, sitosterol and organic acids. (Killedar & More, 2011). The leaves and barks contains umbelactone (4-hydroxymethyl-3-methyl-but-2-ane-4, 7-oide), β-amyrin, sitosterol, its glucoside, tartaric, maleic, oleanolic and ursolic acid (3-alpha hydroxyl-uro-12-en-oic acid) and isomer of oleanolic acid (triterpenoid compound) (Basha & al., 2011).

Meyna laxiflora Robyns (*'Aalu'*) RUBIACEAE (PLATE: V-3)

Shrubs or small tress, armed with thorns. Leaves elliptic, ovate or ovate-lanceolate, shining, apex acute, base cuneate tapering into petiole. Flowers greenish yellow, in axillary clusters, Drupes fleshy, green when young, chocolate-colour when ripe. Seeds 5–6.

Fl. & Fr.: February–July.

Distribution: Common in Dicholi, Donichawada, Khudupalewadi, Payatyacha wada, Zadoli.

Uses:

- Fruits used in the treatment of Diphtheria.
- Seed powder used for treatment of stomachache.

Additional Information:

- Fruits edible, sold in local market.
- Roots useful for colic pain, leaves for diphtheria and fruits in dysentery, boils and as narcotic (Kothari & al. 2003).
- According to Anonymous (1948–76, 1986) dry powder of fruits of this species has narcotic value. Ethnobotanical study reveals that although young fruits show some intoxicating properties the ripe fruits are not harmful to health. The proximate chemical analysis shows rich nutritive contents in ripe fruits. Nutritive values are quiet comparable with that of well known in market fruits like Sapota, Guava, Apple & Fig (Vartak & Ghate, 2004).

Michelia champaca L. (*'Sonchapha'*) MAGNOLIACEAE

Trees. Leaves elliptic-oblong or lanceolate, coriaceous, glabrescent, acute at apex. Flowers bright yellow, axillary, solitary. Follicles oblong, green with brownish spots. Seeds orbicular, reddish-brown.

Fl. &Fr.: May–August.

Distrib.: Planted near house for fragrant flowers. Avasari, Koyna, Rammala.

Uses:

- Bark powder is given in fever.
- Decoction of root bark given for the menstrual problem.
- Root paste applied on abscess, inflammation and skin disease.

Mimosa pudica L. (*'Lajalu'*) MIMOSACEAE

Herbs, branches diffuse, prickly and clothed with long bristles. Leaflets sessile, 12–20 pairs, coriaceous, elliptic-oblong, overlapping. Flowers pink, in globose heads. Pods flat, oblong, sutures clothed with yellowish bristles. Seeds 3–5.

Fl. & Fr.: July–August.

Distrib.: Frequent near cultivated fields. Avasari, Kolane, Nauja, Nav, Rammala.

Uses: Leaves crushed and applied for the treatment of prolapsed uterus, piles and wounds.

Additional Information:

- The aqueous extract of the leaves used for leprosy (Kirtikar and Basu, 1933). Infusion of leaves and decoction of roots useful in piles and fistula. Hot decoction of the leaves is recommended for hipbath for relieving pains (Gill and Nyawuame, 1994). Leaves are also useful for hydrocele (Singh & Sharma, 2002). Root paste mixed with raw rice water and given orally as antidote for snakebite (Koche & al., 2008).
- Leaf paste applied on painful piles, skin diseases, sores, urinary problems and used to wash wounds (Karne, 2011).
- Handful of leaves mixed with one spoon of *Curcuma longa* and little bit of lime juice and applied over the breast for mastitis (Naik & al., 2012).

Mimusops elengi L. (*'Bakul, Haval'*) SAPOTACEAE

Trees, evergreen. Leaves elliptic, coriaceous, shortly acuminate or acute at base, apex shortly acuminate. Flowers white, fragrant, solitary or in clusters of 2–6. Berries ovoid, yellow when ripe. Seeds solitary, compressed, ovoid, shining, brown.

Fl. & Fr.: February–April.

Distrib.: Occasional. Dhankel, Kusavade, Zadoli.

Uses:

- Bark taken for the treatment of white discharge.
- Seed powder taken for the treatment of stomachache.
- Bark applied on toothache also used for strengthening gum and teeth.

Additional Information:

- Fruits edible.

- Bark is astringent and also useful in fever and as tonic; leaves for snakebite and fruits in dysentery (Singh & Sharma, 2002).

Mirabilis jalapa L. (*'Gulbakshi'*) NYCTAGINACEAE

Herbs, stems thickened at nodes. Leaves ovate-triangular, in unequal pairs, apex acute, base cuneate, rounded, truncate or slightly cordate, margins undulate. Flowers variously coloured red, pink, white, yellow or variegated in dense corymbs crowded at the ends of the branches. Fruits globose, ribbed, black.

Fl. & Fr.: August–November.

Distrib.: Planted as ornamental plant. Dhankel, Koynanagar, Rammala.

Uses: The leaves are purgative also applied on wounds, swellings and boils.

Additional Information:

- Crimson colour is obtained from flowers (Jha and Basak, 1994).
- Root powder applied on piles and leaf paste for itching, boils and blisters (Karne, 2011).

Mitragyna parvifolia (Roxb.) Korth. (*'Kalam'*) RUBIACEAE

Trees. Leaves elliptic-obovate, subcoriaceous, base rounded or acute, apex acute or acuminate, nerves prominent on lower surface; stipules oblong-spathulate, pink. Flowers greenish yellow, fragrant, in globose heads. Capsules oblong, 10-ribbed.

Fl. & Fr.: May–August.

Distrib.: Occasional. Ghatmatha, Goshatwadi, Navaja, Payatyacha wada, Rammala, Shirshinge, Zadoli.

Uses:

- Decoction of bark is given in fever.
- Decoction of bark or powder is given for treatment of stomach ache.
- Bark useful for joint pain and muscular pain.
- Juice of leaf or decoction of bark is given at morning for 5 days for the treatment of Jaundice.

Additional Information:

- The plant is worshiped during marriage ceremony.
- Leaves used as fodder.

Momordica dioica Roxb. ex Willd. (*'Karatoli'*) CUCURBITACEAE

Climbers, perennials. Leaves broadly ovate, 5-lobed, base cordate. Flowers bright yellow. Male and female flowers solitary. Berries broadly ovoid, fusiform, muricate or echinate, beaked.

Fl. & Fr.: June–September.

Distrib.: Occasional. Avasari, Dicholi, Khudupalewadi, Shirshinge, Zadoli.

Uses: The fresh leaf juice is used as antiseptic and applied on cuts and wounds.

Additional Information:

- Fruits used as vegetable.
- Leaf paste applied to skin; also administered orally 2–3 times for skin diseases (Rajendran & Henry, 1994).
- Leaves useful as anthelmintic, aphrodisiac, asthma; roots for bleeding piles, fever, jaundice; fruits laxative (Singh & Sharma, 2002).

Moringa oleifera Lam. (*'Shevaga'*) MORINGACEAE

Trees. Leaves 3-pinnate; leaflets elliptic to obovate, deciduous. Flowers white in large axillary panicles. Pods elongate, ribbed. Seeds 3-angled, winged.

Fl. &Fr.: January–May.

Distrib.: Common. Avasari, Dicholi, Rammala, Shirshinge, Zadoli.

Uses:

- Young tender leaves used medicinally to regulate menstrual period and to increase hemoglobin in blood.
- The bark is useful for the treatment of kidney stone.
- The bark extract is applied on insect bite especially to get relief from the irritation caused due to honeybee sting.

Additional Information:

- Young tender leaves and fruits used as vegetable and sold in the local market.
- Seed oil useful in rheumatic pains, itching and healing of wounds (Kothari, 2008).
- The aqueous extract of the seeds is useful for leprosy (Kirtikar and Basu, 1933).
- Leaf extract used in high blood pressure while leaf juice is stimulant, anti-pyretic, anti-rheumatic, anti-inflammatory and used in jaundice, eczema, diabetes; gum used in joint pain; flower Juice improves flow of milk, flowers with milk used for sexual potency and improves fertility (Karne, 2011).

Moullava spicata (Dalz.) Nicols. (*'Waghati'*) CAESALPINIACEAE (PLATE: X-2)

Shrubs, Scandent; main rachis with recurved prickles. Leaflets 5–6 pairs, shining above, pale beneath, apex obtuse, base rounded. Flowers in spikes, rachis brown pubescent, armed with prickles; calyx scarlet, densely pubescent; petals spathulate. Pods tomentose when young.

Fl. & Fr.: November–April.

Distrib.: Common. Avasari, Ghatmatha, Kisarule, Rammala, Shirshinge, Zadoli.

Uses:

- One-teaspoon leaf powder twice a day is given for the treatment of dysentery.

- One teaspoon root powder is given for the treatment of excess bleeding, red discharge in women and also for body heat.
- Seed powder is applied for skin disease and for the treatment of abscess.

Additional Information:

- Endemic (Singh & al., 2000).
- Roots useful for pneumonia and stem-bark for skin diseases (Kapoor & Mitra, 1994).
- Fruits are useful for body heat and leaves for conjunctivitis (Draxe, 1997).

Mucuna monosperma DC. ex Wight FABACEAE

Climbers, large, woody; young branches rusty tomentose. Leaflets elliptic or ovate-oblong, glabrous above, pubescent beneath, base rounded, apex acuminate. Flowers purple in axillary racemes; calyx with irritant bristles. Pods thick with brown bristles, 1-seeded.

Fl. & Fr.: November–February.

Distrib.: Infrequent. Dicholi, Ghatmatha, Rammala.

Uses: One-teaspoon seed powder with honey is taken twice a day for the treatment of cough.

Additional Information:

- The seed is an alternative source for L-DOPA (Inamdar & al., 2012).
- Seeds used in cough and asthma (Bapuji & Ratnam, 2009).

Mucuna pruriens (L.) DC. (*'Khaj khujali, Kavaskuli'*) FABACEAE

Twiners, extensive. Leaflets ovate-oblong, rhomboid-ovate, apex subacute, base cuneate or inequilateral, appressed silky hairy. Flowers purple-mauve to black in axillary, pendulous cymes. Pods falcately curved on both ends, densely bristly. Seeds 4–6, ellipsoid, dark brown, spotted black.

Fl. & Fr.: August–January.

Distrib.: Frequent. Avasari, Gojegaon, Kisarule, Rammala (Grown at demo garden), Shirshinge, Zadoli ambeghar.

Uses:

- One tea spoon seed powder is taken along with a cup of milk at bed time for the treatment of sexual debility. It also increase the sperm count in male. The seed powder twice a day in the same proportion is given for white discharge and venereal diseases.
- The root paste is applied over inflammations and swellings.

Additional Information:

- The hairs on the fruit are given to the cattle for intestinal worms.

- The plant used as food, fodder, medicinal and environmental restoration (Kapoor & Mitra, 1994). Powdered hairs on pods administered with honey for expelling intestinal worms (Gill and Nyawuame, 1994). Seeds are soaked overnight in water and the water is taken with empty stomach for twice a week for the treatment of bone fracture (Koche & al., 2008).
- Seeds useful for skin diseases, cough and scorpion bites. Local use the twiner for tying purposes (Patil, 2009). Fruit powder mixed with water advised as tonic for 7–15 days (Aher & Patil, 2009). Roosted seed powder with cow milk aphrodisiac, anthelmintic, nerve tonic used in paralysis. Root decoction used for purification of blood, fever, cough, indigestion (Karne, 2011).

Musa paradisiaca L. (*'Keli'*) MUSACEAE

Herbs, trunk cylindric, Leaves oblong, green. Inflorescence a terminal pendulous spike. Flowers unisexual, usually in two rows under each bract, those of lower bracts pistillate and of upper one staminate. Fruits oblong, trigonous, ripens yellow.

Fl. & Fr.: Throughout the year.

Distrib.: Cultivated for its fruits. Dicholi, Rammala, Zadoli.

Uses:

- The vegetable of the stem pith and floral buds is useful in intestinal worms (anthelmintic). Also useful in haematorrhagic dysentery and dyspepsia.
- A cup of pith juice is taken twice a day for four days for white discharge.
- The pith juice along with turmeric is administered orally for wound healing and skin diseases.

Additional Information:

- Fruits edible and sold in the local market.
- Leaf juice is added as fixative for providing durability and permanence to the colours and the flowers are used to obtain orange colour (Jha and Basak, 1994) while the peduncle is used to obtain black colour (Sinha & Ramesh Kumar, 2009).
- The pulp is edible as refrigerants and for treating spermatorrhoea and piles. Essence of the banana is collected by crushing the stolon and stem pith which is cooling and diuretic (Sathe, 2008).
- Stem and leaf juice is given in diabetes (Karne, 2011).

Myristica dactyloides Gaertn. (*'Jayphal'*) MYRISTICACEAE

Trees. Leaves elliptic or oblong-lanceolate, coriaceous, base rounded. Flowers cream coloured; male in pedunculate cymes, perianth ovoid, rusty tomentose; female in few flowered, axillary cymes. Drupes yellow tomentose.

Fl. & Fr.: April–September.

Distrib.: Rare. Dicholi, Shirshinge, Zadoli.

Uses: Fruit paste is given for the treatment of dysentery.

Nerium indicum Mill. (*'Kaner'*) APOCYNACEAE

Shrubs, erect, woody. Leaves whorled, 3-per node, linear lanceolate with tapering ends. Flowers red, pink or white, fragrant, in terminal corymbose cymes.

Fl.: January–July.

Distrib.: Cultivated in gardens and near temples for flowers. Avasari centre, Dhankel, Kondhavale, Navaja, Navaja dicholi.

Uses: Flower paste is applied on joint pain and twisted joints.

Additional Information:

- Roots medicinally useful for leprosy and skin diseases (Singh & Sharma, 2002).
- Leaf decoction (one cup) administered before tea cure tuberculosis (Aher & Patil, 2009).
- Paste of leaves prepared in butter-milk is applied for ventilago (Pawar & Patil, 2011).

Nyctanthes arbor-tristis L. (*'Parijatak'*) OLEACEAE

Small tree, shrubs, branches quadrangular. Leaves ovate, acute to acuminate at apex, cuneate to rounded at base, margins entire or distinctly dentate. Flowers white, bracteate in terminal cymes. Capsules as long as broad, obcordate, flattened.

Fl. &Fr.: Throughout the year.

Distrib.: Planted around home. Karate, Mirgaon, Rammala.

Uses: The decoction of the leaves is given for the treatment of fever.

Additional Information:

- Orange colour is obtained from flowers (Jha and Basak, 1994) while yellow colour from the bark (Sinha & Ramesh Kumar, 2009).
- Leaves useful as antidote for snake bite (Rakecha, 2008).
- The bright orange corolla tube contains a coloring matter nyctanthin, a glucoside. The corolla tubes were formerly used for dyeing silk. Sometimes in conjunction with safflower, turmeric, indigo. Grown in gardens and courtyards for fragrant flowers (Ingole, 2011).

Ocimum basilicum L. (*'Tulas'*) LAMIACEAE

Herbs; hispid. Leaves ovate or elliptic lanceolate. Flowers white in dense whorled racemes. Nutlets ellipsoid.

Fl. &Fr.: August – October.

Distrib.: Cultivated. Ghatmatha, Goshatwadi, Navaja, Rammala, Shirshinge.

Uses:

- Leaf juice applied on skin infection.

- Leaf juice is inhaled through opposite side nostrils, to get relief from Migraine. In addition, the leaf paste is applied on the forehead.
- Two teaspoon leaf juice is given twice a day for the treatment of cough.

Additional Information:

- The religious plant is planted in front of houses and worshiped.
- Ether extract of the leaves is used in leprosy (Kirtikar and Basu, 1933).
- Whole plant is used for cholera, fever, cough, cold and asthma (Bhatt & al., 2001).

Ocimum gratissimum L. (*'Rantulas'*) LAMIACEAE

Herbs or undrshrubs, much branched, young parts pubescent. Leaves ovate or ovate-elliptic, membranous, pubescent and gland dotted on both sides, margins crenate-serrate. Flowers greenish-yellow, in softly hairs whorls, in simple or branched racemes. Nutlets subglobose.

Fl. & Fr.: August–November.

Distrib.: Occasional. Avasari, Ghatmatha, Rammala, Shirshinge.

Uses: Leaf juice is applied to hairs to remove dandruff.

Olea dioica Roxb. (*'Parjambhal'*) OLEACEAE

Trees. Leaves elliptic-lanceolate, coriaceous, apex acute-acuminate, margins serrate. Flowers polygamous, in axillary or leaf opposed cymes. Drupes ellipsoid, purple, becoming black when ripe.

Fl. & Fr.: December–April.

Distrib.: Common. Avasari, Goshatwadi, Rasati, Zadoli.

Uses: The bark powder is given for the treatment of fever.

Oroxylum indicum (L.) Vent. (*'Tetav', 'Tetu'*) BIGNONIACEAE

Trees. Leaflets ovate or ovate-elliptic, base rounded or cordate, apex acuminate. Inflorescence of numerous flowered racemes, pubescent. Flowers yellowish purple. Capsules flat, tapering at both the ends. Seeds many, winged.

Fl. & Fr.: April–September.

Distrib.: Infrequent Avasari, Rammala, Zadoli.

Uses:

- Bark mixed with bark of *Bauhinia racemosa* (*Aapata*) and given as antidote for snakebite.
- Decoction of root is given twice a day, for one month for the treatment of joint pain.

Additional Information:

- Young floral buds, tender fruits & seeds are used as vegetable. It is a belief that eating of this vegetable before the monsoon will be helpful to abstain from the emerging illnesses.

- Bark and fruits used for tanning and dyeing. Roots as astringent in treatment of tuberculosis (Kothari & Moorthy, 1993).
- Crushed leaves are applied on rheumatic pains (Upadhye & al., 1994).
- Root bark for diarrhoea, rheumatism, ear-ache and seeds as purgative (Kothari & Londhe, 1999).

Chemical Constituents: Crystalline bitter substance oroxylin separated from bark and seeds and baicalein from bark (Chopra & al., 1956). Baicalein, its 6-glucuronide, and 7-glucoronide, scutellarein, its 7-glucuronide isolated from leaves and stem bark while oroxyline A, chrysin and scutellarein-7 rutinoside isolated from stem bark. Prunetin and ß-sitosterol isolated from heartwood (Rastogi & Mehrotra, 1991).

Paracalyx scariosus (Roxb.) Ali (*'Ranghevada, Kanphuti'*) FABACEAE

Twiners, extensive; stem and branches woody, finely downy or tomentose. Leaflets terminal rhomboid, laterals obliquely ovate, velvety pubescent, apex acute, base rounded. Flowers yellow, in axillary peduncled racemes. Pod oblique, downy, enclosed in calyx, 1-seeded.

Fl. & Fr.: November–February.

Distrib.: Common. Dicholi, Dhanagarwada, Donicha wada, Ghatmatha, Khudupalewadi, Shirshinge, Zadoli.

Uses:

- One teaspoon root powder is taken for the treatment of leucorrhoea.
- Root paste is applied on the skin for the treatment of leucoderma.
- Root paste/juice or powder is taken twice a day, for 2–3 days for the treatment of dysentery.

Additional Information:

- Seeds are edible. Also used as vegetable.
- Roots externally applied (with other medicines) to reduce tumors and its decoction is good remedy for leucorrhoea and dysentery (Kothari & al., 2003).

Paracaryopsis malabarica (C.B. Cl.) R. Mill. (*'Nechardi'*) BORAGINACEAE

Stout, branched herbs, branches tomentose. Leaves radical, broadly ovate, strigose with white bulbous based hairs above, softly hairy beneath, apex acute, base cordate, cauline leaves smaller in size, ovate. Flowers uniformly blue, in terminal dense racemes, forming corymbs, calyx enlarged in fruits, corolla lobes rounded. Nutlets ovoid, glochidiate along margins.

Fl. & Fr.: August–October.

Distrib.: Common. Ambeghar, Avasari, Dicholi, Kondhavale, Shirshinge, Zadoli, Ghatmatha.

Uses:

- Rhizome crushed & applied as plaster on bone fracture.

- The rhizome is applied on wound caused due to Guinea worm.

Additional Information: Endemic (Singh & al., 2000).

Passiflora foetida L. (*'Ghanvel'*) PASSIFLORACEAE

Climbers, glandular hairy and tendrillar. Leaves ovate, 3-lobbed, serrate, base cordate, apex acute, glandular hairy. Flowers white, axillary, solitary. Berries ovoid.

Fl. & Fr.: July–September .

Distrib.: Occasional. Koynanagar, Vanzole.

Uses: The leaves are made into paste and kept for some time to reduce the fetid smell and then applied on the forehead for the treatment of headache.

Additional Information: In 'Homeopathy' *Passiflora* spp. used for 'Insomnia' (Loss of sleep) (Boericke, 1996).

Pavetta crassicaulis Bremek. ('*Phapat'*) RUBIACEAE

Shrubs, stem quadrangular. Leaves elliptic oblong, base acute apex acuminate. Flowers white. Berries black when ripe.

Fl. & Fr.: April–October.

Distrib.: Common. Ambeghar, Avasari, Dicholi, Ghatmatha, Kamargaon, Kisarule, Rammala, Shirshinge, Zadoli.

Uses:

- Root paste or powder is given for the treatment of fever.
- One cup of leaf juice of '*Phapat'* and '*Naraka'* (*Nothapodytes nimmoniana*) is given every morning, for 21 days for the treatment of tuberculosis (T.B.).
- Leaf juice is applied on wound.
- Root paste or powder is given for the treatment of ascites.
- Root paste is applied as an antidote for the stinging of saw scaled viper.
- Root paste is applied on contusion.
- Leaf juice of *Eclipta alba* (*Maka*), *Phapat & Tulas* is mixed in equal proportion. One tea spoon of this combination is given every morning for three days for the treatment of pneumonia.
- The leaves of *Phapat, Creteva religiosa* (*Vayavarna*)*, Justicia adhatoda* (*Adulasa*) *and Gnidia glauca* (*Rametha*) are added in bath water and bath is given after the evidence of snakebite.

Additional Information:

- The flowers are used as vegetable.
- Leaves used as fodder (Singh & Sharma, 2002). Fruits are edible and cooked with other vegetables and taken as curry which act as anthelmintic for round-worms in children (Kothari & al., 2003).

Persicaria auriculata (Meissn.) Dixit, Datt & Roy ('*Pharol', 'Gilumbi'*) POLYGONACEAE (PLATE: V-2)

Herbs or scandent undershrubs, rambling with woody base. Stem cylindric, young branches reddish. Leaves elliptic-ovate, glabrous above, hairy on the nerves beneath, margins crenulate; petioles auricled at base; stipules lanceolate. Flowers white in corymbose, paniculate; peduncles glandular hairy. Nutlets black.

Fl. & Fr.: September–December.

Distrib.: Common. Avasari, Dicholi, Ghatmatha, Kisarule, Navaja, Rammala, Shirshinge, Zadoli, Zadoli Ambeghar.

Uses: Tender leaves are placed on the eyes for the treatment of opacity.

Additional Information: Fruits edible, sweet in taste.

Phyllanthus amarus Schum & Thonn. (*'Bhuiavali'*) EUPHORBIACEAE

Herbs. Leaves oblong-obtuse, slightly oblique at base and glaucous beneath. Flowers axillary, minute, greenish white. Capsules depressed globose, scarcely lobed.

Fl. & Fr.: July–October.

Distrib.: Common Avasari, Dicholi, Ghatmatha, Kisarule, Navaja, Rammala, Shirshinge, Zadoli ambeghar.

Uses: 1/2 cup leaf juice mixed with equal quantity of curd and given twice a day, for 3 days for the treatment of jaundice.

Additional Information:

- Whole plant used as fodder.
- Whole plant used in urino-genital infections and as liver tonic (Koche & al., 2008).
- Whole plant used to cure urinary problems, roots used for stomach pain while leaves for skin diseases (to remove white patches) (Pahani Kumar and Chaturvedi, 2010).
- Leaf decoction and fruits used in jaundice, for appetite and urino-genital diseases (Karne, 2011).

Physalis minima L. (*'Ranpopati, Thanmodi'*) SOLANACEAE

Herbs. Leaves ovate, elliptic or elliptic-oblong, base rounded, apex acute. Flowers axillary, solitary. Berries ovoid or subglobose. Seeds orange-yellow, subreniform.

Fl. & Fr.: February–August.

Distrib.: Common weed. Avasari, Koynanagar. Rammala, Navaja.

Uses: Leaf juice is given for asthma.

Additional Information:

- Leaves fried in cooking oil and consumed for stomach swelling (Rajendran & Henry, 1994).
- Fruits are laxative and leaves are crushed to make a paste and applied to tighten/strengthen the breast of the women (Pandey and Chunekar, 2006).

- Leaves are laxative, diuretic and anti-inflammatory and used on asthma (Koche & al., 2008).

Pinda concanense (Dalz.) P.K. Mukh. & Constance (*'Pand'*) APIACEAE (PLATE: X-3)

Herbs, more or less hairy. Lower leaves biternate, leaflets 3-lobed or ternate, margins serrate, pubescent, upper leaves scaly. Flowers white, usually in umbels, petals of radiant flowers 2-lobed. Fruits flattened, absolutely winged.

Fl. & Fr.: July–October.

Distrib.: Dicholi, Shirshinge, Zadoli.

Uses: whole plant crushed and applied to whole body for the treatment of fever.

Additional Information: Endemic (Singh & al., 2000). Tuber is edible as vegetable.

Piper longum L. (*'Pimpali'*) PIPERACEAE

Stems prostrate or ascending. Leaves cordate, glabrous; the lower ones with long petioles, the upper sessile. Fruits small, blackish-green, sunk in the fleshy spike.

Fl. & Fr.: October–March.

Distrib.: Rammala (Planted in garden), Rasati.

Uses: The powder of unripe fruits mixed with powder of *Piper nigrum* and *Zingiber officinale*. Half tea spoon of the mixture is taken twice a day for the treatment of indigestion and headache.

Additional Information: The root is pungent, hot, stomachic, laxative, anthelmintic and carminative. The fruit is sweetish, pungent, hot, stomachic, aphrodisiac, laxative, antidysenteric, emmenagogue, abortifacient, diuretic and tonic (Joy & al., 2001).

Piper nigrum L. (*'Miri'*) PIPERACEAE

Stout climbers, stems terete, nodes swollen. Leaves coriaceous, broadly ovate, acuminate, glabrous. Flowers subtended by bracts forming a short cup. Fruits globose, yellow when young, red when ripe.

Fl. & Fr.: April–September.

Distrib.: Ambeghar, Goshatwadi, Rammala (Planted in garden), Rasati, Shirshinge.

Uses: The fruit powder used either single by mixing with powder of *Piper longum* and *Zingiber officinale* for indigestion.

Additional Information: The ripe fruits used as spices and sold in the local market.

Pittosporum dasycaulon Miq. (*'Gapsundi, Ikari'*) PITTOSPORACEAE

Small trees. Leaves oblong-lanceolate, crowded at apex, apex acute or acuminate, glabrous above, pubescent on midrib beneath. Flowers yellowish-white, fragrant, in dense terminal corymbs. Capsules globular, blackish pink, 2-valved. Seeds red.

Fl. & Fr.: September–February.

Distrib.: Rare. Shirshinge.

Uses:

- The bark powder is smoked in asthma.
- The bark is burned in the houses to restrict the entry of the snakes.

Additional Information: Endemic (Singh & al., 2000).

Pittosporum wightii A.K. Mukherjee (*'Yekadi'*) PITTOSPORACEAE

Trees. Leaves oblong or lanceolate, base cuneate, apex acuminate, entire or sinuate–dentate. Flowers yellow in terminal corymbs. Capsule globose, 2-valved. Seeds red turning black.

Fl. & Fr.: February–September.

Distrib.: Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: Bark is good expectorant and used in chronic bronchitis. Bark poultice is applied locally in rheumatism and sciatica.

Plectranthus mollis (Ait.) Spr. (*'Lalaghada'*) LAMIACEAE

Pubescent herbs, stems succulent. Leaves broadly ovate, membranous, sparsely pubescent on nerves, apex acute or acuminate, base deeply cordate, margins crenate. Flowers bluish, in racemes. Nutlets oblong, brown with dark spots.

Fl. & Fr.: July–September.

Distrib.: Common weed in the waste places. Koynanagar, Rammala, Rasati.

Uses: Leaves applied on wound.

Additional Information:

- Whole plant used medicinally as insecticidal (Singh & Sharma, 2002).
- Leaves used as healing agent (Vanila & al., 2008).

Plumbago zeylanica L. (*'Pandhara Chitrak'*) PLUMBAGINACEAE (PLATE: VII-1)

Undershrubs, perennial, erect. Leaves ovate or ovate-lanceolate, base tapering into petiole, apex subacute, petiole auricled at base. Flowers white in terminal spikes. Calyx densely covered with stalked glands. Capsules oblong, membranous, pointed with persistent calyx.

Fl. & Fr.: January–October.

Distrib.: Common. Dicholi. Donicha wada, Navaja, Rammala, Rasati.

Uses:

- Root paste is applied for the treatment of piles.

- Roots powder or fresh roots taken before meal to increase the appetite as well as for the treatment of indigestion.
- Juice of roots and leaves is applied on scabies as well as other skin infections.

Additional Information:

- In veterinary medicines the leaves along with a salt is given to the cattle for the treatment of foot rot caused due to sticking of thorns.
- It promotes appetite and is useful in dyspepsia. A paste made from the root is employed as a vesicant and applied in leprosy and other skin diseases as well as in rheumatism (Cooke, 1958).
- Root powder with boiled oil applied on rheumatic pains and its infusion for influenza (Kothari & Londhe, 1999).A sorcery plant with magical belief keeps away evil spirits. An important medicinal plant useful for arthritis, leucoderma, abortifacient, paralytic affections, digestion should be rationally utilized (Pandey & Bisaria, 1998). Roots used for intestinal disorders, skin diseases and rheumatism (Koche & al., 2008).
- Root paste applied on skin diseases (Bhosle & al., 2009).
- Roots used in diarrhoea, piles, skin diseases, muscular pain; leaf juice in diarrhoea; stem paste used in piles; flower paste in rheumatic pains, wounds; seed oil in skin diseases; whole plant paste increases blood circulation, arthritis, back pain and toothache (Karne, 2011).

Plumeria rubra L. (*'Pandhara Chapha'*) APOCYNACEAE

Trees. Leaves alternate, oblong-lanceolate or oblanceolate, narrowed at base, acuminate at apex. Flowers white or red, fragrant in terminally peduncled corymbose.

Fl. & Fr.: October–December.

Distrib.: Planted as ornamental plant near temple and houses. Ambavane, Shirshinge.

Uses: Oil is applied over the leaves and roasted and applied on abscess as well as on skin infection.

Additional Information: In Kunabi-Maratha community the flowers along with the flowers of *Calotropis gigantea* (Ravi) are made into garland ('*Mandavali*') & tied on the forehead of husband & wife during marriage ceremony.

Pogostemon benghalensis (Burm.f.) O. Ktze. (*'Pangala'*) LAMIACEAE

Herbs or undershrubs; stem and branches rounded or subquadrangular, glabrous or slightly pubescent, purple. Leaves ovate or ovate-lanceolate, glabrous or slightly pubescent, apex acute or acuminate, base cuneate, margins coarsely and irregularly crenate-dentate. Flowers white with purple tinge, in terminal pubescent, panicled spikes. Nutlets obovoid, brownish.

Fl. & Fr.: November–April.

Distrib.: Dicholi, Ghatmatha, Navaja, Shirshinge, Zadoli.

Uses:

- Leaf juice is given for the treatment of kidney stone.
- Leaf juice is applied on burns and wound as antiseptic and healing.
- Leaf juice is applied on piles.

Additional Information:

- In veterinary medicines the root juice is given to the cattle as antidote for snakebite while leaves are crushed and applied on wounds.
- Half table spoon of leaf juice is given twice a day for two days to reduce the fever (Upadhye & al., 1994).
- Seeds and leaves also useful as mosquito and insect repellent (Singh & Sharma, 2002).

Pogostemon deccanensis (Panigr.) Press LAMIACEAE

Herbs, aquatic, stems pubescent with long hairs. Leaves linear, long, sessile, margins revolute. Flowers pink in dense spikes, whorls close and crowded. Nutlets ellipsoid, minute, yellowish-brown.

Fl. & Fr.: October–January.

Distrib.: Kondhavale, Shirshinge, Zadoli.

Uses: Fresh leaves crushed and applied on wounds.

Additional Information: Endemic (Singh & al., 2000).

Polyalthia longifolia (Sonn.) Thw. (*'Ashok'*) ANNONACEAE

Trees with straight trunk and grayish brown bark. Leaves oblong lanceolate to narrowly lanceolate, acuminate at apex, margins undulate. Flowers greenish-yellow, in clusters of axil of fallen leaves. Fruits ovoid-ellipsoid, obtuse at both ends, yellowish, ultimately reddish or black.

Fl. & Fr.: March–September.

Distrib.: Cultivated in gardens. Kondhavale, Koynanagar, Rammala.

Uses: Two to three tea spoons of the bark decoction is given twice a day for intestinal worms (vermifuge).

Additional Information: Decoction of leaves is given in diarrhoea (Bhatt & al., 2001).

Polycarpon prostratum (Forssk.) Aschers. & Schweinf. CARYOPHYLLACEAE

Herbs, prostrate, branches dichotomous. Leaves linear-oblong, base narrow, apex obtuse, pubescent or glabrous. Flowers pinkish-purple in axillary and terminal dichotomous cymes. Capsules ovoid-globose, 3-valved.

Fl. & Fr.: April–July.

Distrib.: Common in wet places. Shirshinge, Zadoli ambeghar.

Notes: Included on the authority of (Deshpande & al., 1993).

Uses: Whole plant is crushed, heated and used poultice on swelling.

Additional Information: The plant is said to be toxic and has anti-inflammatory and anodynic activities (Ding & al., 1999).

Polygonum glabrum Willd. (*'Marvel'*) POLYGONACEAE

Herbs, stem reddish brown. Leaves lanceolate, base tapering into petiole, apex acuminate, stipules tubular. Flowers pink in racemes, bracts oblong, margins scarious.

Fl. & Fr.: Throughout the year.

Distrib.: Common. Avasari, Gojegaon, Rammala, Zadoli ambeghar.

Uses:

- Roots are crushed and applied on piles.
- Whole plant is applied to the body for the treatment of fever.
- Whole plant is boiled to make paste and applied on cuts and wounds.

Additional Information: Stem useful for dislocated bones; young shoot edible as vegetable (Singh & Sharma, 2002). The whole plant applied on cuts and wound (Koche & al., 2008).

Pongamia pinnata (L.) Pierre (*'Karanj'*) FABACEAE

Trees. Leaflets broadly ovate or elliptic base rounded or acute, apex shortly acuminate, gland dotted beneath. Flowers white with purple tinge in axillary, drooping racemes. Pods elliptic-oblong, thick, compressed. Seeds reddish-brown, reniform, rugose.

Fl. & Fr.: February–July.

Distrib.: Common. Avasari, Gojegaon, Rammala, Zadoli ambeghar.

Uses:

- Seed powder or its decoction or leaf juice is applied on scabies and other skin infection.
- Decoction of bark is given for the treatment of fever.
- The chronic wound is washed with the decoction of leaf and bark powder is applied on it.

Additional Information:

- Bark useful for piles; leaves for diarrhoea, stomach disorder; seed oil for ear ailment and skin diseases; roots for ulcer sores and as fish poison; twig as tooth brush, fuel (Singh & Sharma, 2002).
- Pods over exploited for bio-diesel (Patil, 2009).
- The whole plant and the seed oil used for all skin diseases; Roots for cleaning teeth, strengthening gums, Bark in hemorrhoids, beriberi, ophthalmopathy

and vaginopathy. Leaves for flatulence, dyspepsia, cough, rheumatalgia, piles and oedema. Flowers in diabetes. Fruits in urinary disease and piles. Seeds in inflammations, otalgia, lumbago, pectoral diseases, chronic fevers, hydrocele, hemorrhoids and anaemia. The seed oil is used for ophthalmia, hemorrhoids, herpes and lumbago. The seed oil is also valued for its industrial uses. The seed cake is suggested as a cheap cattle feed (Joy & al., 2001).

- Seed oil for whooping cough (Bhosle & al., 2009).

Portulaca oleracea L. (*'Ghol'*) PORTULACACEAE

Succulent prostrate herbs; stem reddish, swollen at nodes. Leaves subsessile, ovate-spathulate, base tapering, apex rounded. Flowers yellow terminal. Solitary or fascicled. Capsules ovoid, seeds many black granulate.

Fl. & Fr.: April–July.

Distrib.: Common weed. Avasari, Ghatmatha, Kisarule, Zadoli.

Uses: Fresh leaves are cooling and applied on burns, ulcers and swellings.

Additional Information:

- Tender leaves and stem are used as vegetable and as fodder for cattle.
- Aqueous extract of the leaves used in leprosy (Kirtikar and Basu, 1933).
- Leaves also useful for headache and fever (Singh & Sharma, 2002).
- Paste of leaves is applied on burns and inflammation (Pawar & Patil, 2011).
- Leaf decoction and fruits used in earache and toothache (Karne, 2011).

Psidium guajava L. (*'Peravi, peru'*) MYRTACEAE

Trees, bark smooth, peeling off. Leaves oblong-elliptic, pubescent on both the sides, apex acute, obtuse or rounded, base rounded. Flowers white, axillary, solitary. Berries ovoid, pulpy.

Fl. & Fr.: Throughout the year.

Distrib.: Planted around home for fruits. Avasari, Dicholi, Katitek, Rammala, Shirshinge, Zadoli.

Uses:

- Leaves are eaten for the treatment of dysentery and piles.
- Decoction of leaves is taken as an antidote for alcohol.

Additional Information:

- Fruits edible and also sold in the local market.
- Bark is used to obtain shades of red which is used in painting (Jha and Basak, 1994).
- Leaf decoction is given to reduce the blood pressure (Koche & al., 2008).

Pterocarpus marsupium Roxb. (*'Bivala'*) FABACEAE

Trees. Leaflets oblong or elliptic-ovate, base rounded. Flowers yellow, in terminal panicles. Pods orbicular, winged, 1-seeded.

Fl. & Fr.: December–March.

Distrib.: Occasional. Zadoli.

Uses:

- Paste of leaves is applied on wounds.
- Bark paste is applied on bone fracture and skin diseases.

Additional Information:

The powdered bark and fresh leaf extract is used in the treatment of leprosy, diabetes, ulcer and leucoderma. It is also used cosmetically for the skin complexion. The wood is used for agricultural tools and light furniture (Koche & al., 2008).

Radermachera xylocarpa (Roxb.) K. Schum. (*'Kharshing'*) BIGNONIACEAE

Trees. Leaflets elliptic-oblong, apex acute or acuminate, base rounded. Inflorescence a terminal panicle, erect pubescent. Flowers yellowish white. Capsules cylindric, slightly curved, rough with numerous hard tubercles. Seeds flat, with a membranous wing on either side.

Fl. & Fr.: February–October.

Distrib.: Rarely found. Avasari. Ghatmatha.

Uses:

- Leaf juice is given for the treatment of stomachache due to intestinal worms.
- The inner bark and pith of the wood is crushed and boiled in water. The oily layer on the water surface is formed which is collected and applied on all kinds of skin infections.

Additional Information:

- The young fruits are used as vegetables.
- In Junnar Taluka (Pune) 'Mahadev Kolis' heat the stem bark in an earthen pot. Oil /liquefied extracted is very effective to cure psoriasis, eczema etc. within a week (Kothari & al., 2003).

Raphanus sativus L. var. **sativus** (*'Mula'*) BRASSICACEAE

Herbs with thick white tap root. Leaves lyrate–pinnatifid. Flowers purple in racemes. Pods thick, erect longitudinally striate.

Fl. & Fr.: November–April.

Distrib.: Cultivated as vegetable. Avasari, Ambavane, Rammala.

Uses: Root juice is taken for constipation and piles.

Additional Information: Roots are useful for jaundice (Koche & al., 2008).

Rauvolfia serpentina (L.) Bth. ex Kurz (*'Sarpagandha, Hadaki'*) APOCYNACEAE (PLATE: IV-6)

Herbs. Leaves whorled, 3–4 at each node, lanceolate, acute to acuminate at apex, tapering at base. Flowers white, frequently tinged with violet in axillary, corymbose cymes, pedicels bright red, drupes of 2 pyrenes, connate at base.

Fl. & Fr.: August–November.

Distrib.: Rare. Ghatmatha, Rammala.

Uses: Roots used as an antidote for snakebite, scorpion sting as well as in hypertension.

Additional Information:

- Roots useful for blood pressure and whole plant for hypertension, mental disorder etc. Therefore plant is over exploited commercially, threatened (Kothari & Moorthy, 1996; Singh & Sharma, 2002; Patil & Kothari, 2009).
- Root powder with butter taken for insomnia (Koche & al., 2008) and as a brain tonic (Sinha & Ramesh Kumar, 2009).

Chemical constituents: Root contains 1.4–3% alkaloids. The alkaloids are classsified into 3 groups, *viz*. reserpine, ajmaline and serpentine groups. Reserpine group comprising reserpine, rescinnamine, deserpine etc. act as hypotensive, sedative and tranquillising agent. Overdose may cause diarrhoea, bradycardia and drowsiness. Ajmaline, ajmalicine, ajmalinine, iso-ajmaline etc. of the ajmaline group stimulate central nervous system, respiration and intestinal movement with slight hypotensive activity. Serpentine group comprising serpentine, sepentinine, alstonine etc. is mostly antihypertensive (Joy & al., 2001).

Reinwardtia indica Dum. (*'Abai'*) LINACEAE

Undershrubs; branches terete-angular. Leaves elliptic-obovate or oblong-lanceolate, acute, rounded or mucronate at apex, narrowed at base. Flowers bright golden-yellow, solitary or in fascicled, axillary racemes or in dense corymbs at the end of branches. Capsules globose, 6–8 valved.

Fl. & Fr.: August–November.

Distrib.: Dicholi, Zadoli.

Uses: Leaves are crushed and applied on skin disease (Ringworm).

Remusatia vivipara (Roxb.) Schott. & Endl. (*'Sukhalu'*) ARACEAE

Herbs, tubers clustered, depressed, rooting from the crown, bulbiferous shoots simple or shortly branched, bearing at the nodes clusters of oblong, squarrosely scaly bulbils. Leaves broadly peltate, ovate, membranous, spathes coriaceous. Male flowers of 2–3 stamens, female flowers of densely packed ovaries, neutral flowers mixed with the males. Berries obovoid, minute.

Fl. &Fr.: June–September.

Distrib.: Common on the tree trunks. Avasari, Ghatmatha, Goshatwadi, Karate, Kondhavale, Rammala.

Uses: Bulb is applied on the outgrowths of piles.

Additional Information: Roots useful for snakebite and tubers on wounds. Leaves and tubers edible as vegetable (Singh & Sharma, 2002).

Ricinus communis L. (*'Eranda'*) EUPHORBIACEAE

Shrubs or small trees. Leaves palmately 7–8 lobed, margins irregularly serrate. Flowers in terminal, subpaniculate racemes; male flowers crowded at apex; female flowers at the base of racemes. Capsules of 3, 2-valved cocci, subglobose, echinate.

Fl. & Fr.: January–July.

Distrib.: Common. Dicholi, Ghatmatha, Goshatwadi, Navaja, Rammala, Shirshinge. Zadoli.

Uses:

- One tea spoon leaf juice mixed with goat milk in equal proportion and taken at morning, for 4–5 days for the treatment of jaundice.
- Coconut oil, edible oil or butter applied to the *Erand* leaf, heated gently and placed on the scalp of the new born baby for the treatment of fever.
- Juice of young leaves, cumin seeds, coconut kernel and coconut milk crushed together & given at early morning with empty stomach, for 3–4 days, for the treatment of jaundice. This medicine may causes giddiness for some time but it is not harmful.
- Leaves are applied with butter and every morning placed on the scalp for the treatment of redness in the eyes caused due to excess heat in the body.

Additional Information:

- The whole plant is worshiped and burned in holy festival.
- Oil extracted from seeds is largely used for burning and also for medicines (Kothari & Moorthy, 1993). Leaves useful for headache and seeds for scorpion sting as purgative (Singh & Sharma, 2002).
- Leaves used for swellings (Koche & al., 2008).
- The juice of whole plant is used on leprosy (Gupta & al., 2010).

Rosa indica L. (*'Gulab'*) ROSACEAE

Prickly shrubs. Stipules narrow, almost adnate to the top. Leaflets 3–7, elliptic-lanceolate. Flowers pink, solitary or in short panicles.

Fl. &Fr.: Almost throughout the year .

Distrib.: Planted near home. Dicholi, Shirshinge, Zadoli.

Uses: The petals are used as refrigerants, purgative, for healing mouth ulcer and employed in the treatment of conjunctivitis.

Rostellularia procumbens (L.) Nees (*'Kalmashi'*) ACANTHACEAE

Herbs, procumbent, stems rooting at lower nodes. Leaves elliptic or ovate, softly pubescent on both the sides, apex obtuse, base rounded. Flowers pale violet to pink, in dense terminal, cylindrical spikes. Capsules oblong, shortly pointed, pubescent at tip. Seeds finely tuberculate.

Fl. &Fr.: August–November.

Distrib.: Dicholi, Shirshinge, Zadoli.

Notes: Included on the authority of Deshpande & al. (1995).

Uses: The juice of whole plant is given for the treatment of vomiting and acidity.

Rubia cordifolia L. (*'Vitali'*) RUBIACEAE

Perennial, prostrate, climbing herbs; stems 4-angled, retrorsely scabrid hairy on angles, on leaf nerves and margins. Leaves whorled, elliptic, cordiform or ovate-lanceolate, apex acute, rounded or cordate at base. Inflorescence axillary. Flowers in panicles of dichotomous cymes, greenish-yellow. Fruits bi-carpellate, globose, smooth, shining, purplish-black when ripe. Seeds black.

Fl. &Fr.: January–December.

Distrib.: Common. Ambeghar, Avasari, Karate, Kondhavale, Rammala, Zadoli.

Uses:

- Root powder taken orally for red discharge and to check menstrual problem.
- The root powder is applied on the wound to prevent further infection.
- One tea spoon root powder is taken twice a day for the treatment of skin diseases.

Additional Information:

- In veterinary medicines root powder is given to the cattle for skin infection.
- Plants have symbolic religious beliefs and useful in cough and stomach pain (Singh & Sharma, 2002).
- The juice of the leaves used for uterine pain (Bhosle & al., 2009).
- Used in oedema, rheumatoid arthritis, tumors, kidney stones, gall stones, used to regulate the liver, spleen, pancreas and kidneys (Karne, 2011).
- The red dye is obtained from roots (Sinha & Ramesh Kumar, 2009; Thakur & al., 2011).

Rungia repens (L.) Nees (*'Ghati-pittapapada'*) ACANTHACEAE

Herbs, rooting near base, Leaves subsessile, oblong-lanceolate, lineolate, on both sides, base tapering. Flowers white, blue or pink in terminal spikes. Capsules pubescent.

Fl. & Fr.: November–January.

Distrib.: Ambeghar, Dhankel, Dicholi, Shirshinge, Zadoli.

Uses:

Whole plant is dried in shade & powder is given twice a day, for 3 days, for the treatment of intestinal worms and fever.

Sansevieria roxburghiana Schult. & Schult.f. (*'Sirpin', 'Sarpin'*) LILIACEAE

Herbs, stems very short. Leaves in a tuft, broad towards the middle, suberect, rigid, pale green with transverse bands of dark green, with a terete rigid spine-like tip. Flowers greenish-white tinged with violet, in fascicles on long racemes.

Fl.: February–May.

Distrib.: Grown in gardens. Avasari, Rammala, Rasati.

Uses: Two tea spoons juice of young leaves along with honey is given twice a day for 4–5 days for cough and fever.

Additional Information:

- The root juice with honey is given for cough and the leaf juice is used as expectorant (Naik, 1998).
- The fibre produced is very strong used for fishing lines and bowstrings (Cooke, 1958).

Sapium insigne Bth. var. **malabaricum** (Wight) Hook.f. (*'Hurya'*) EUPHORBIACEAE

Trees with milky latex. Leaves clustered at the ends of branches, elliptic or oblong-lanceolate, base acute, apex acuminate, margins crenate-dentate. Inflorescence of spikes, pendulous. Capsules globose-ovoid, irregularly dehiscent.

Fl. & Fr.: December–February.

Distrib.: Dhankel, Manainagar, Shirshinge.

Uses: Latex is applied on bone fracture.

Additional Information:

- The latex is poisonous for eyes and also used as fish poison.
- Leaves useful for swellings and wood for fuel (Singh & Sharma, 2003).
- Latex is germicidal (Pant and Samant, 2010).

Scilla hyacinthina (Roth) McBride (*'Rankanda'*) LILIACEAE

Herbs, scapigerous, bulbs ovoid or subglobose. Leaves linear to lanceolate, ovate or obovate, acute or obtuse. Flowers purple or pink. Capsules obovoid, unequally trilobed. Seeds obovoid.

Fl. & Fr.: July.

Distrib.: Dicholi, Ghatmatha, Zadoli.

Uses: The juice of the bulb is given for cough and asthma.

Securinega virosa (Roxb. ex Willd.) Baill. (*'Pandharphali'*) EUPHORBIACEAE

Shrubs. Leaves elliptic-obovate, base acute, apex obtuse. Flowers greenish yellow. Capsules globose, ripens white.

Fl. & Fr.: April–October.

Distrib.: Common. Dicholi, Ghatmatha, Khudupalewadi, Kisarule, Zadoli.

Uses:

- Leaves are given for stomach ache and as vermifuge.
- Leaf juice applied on wound and scabies.

Additional Information:

- Fruits edible.
- Leaves also useful for constipation and worms (Singh & Sharma, 2002).

Semecarpus anacardium L.f. var. **anacardium** (*'Bibava', 'Bibba'*) ANACARDIACEAE

Trees, branches terete. Leaves obovate or elliptic, apex rounded, base cuneate. Flowers yellow with pink stripes in terminal panicles. Nuts reniform on juicy receptacles.

Fl. & Fr.: July–October.

Distrib.: Avasari. Ghanabi, Rammala.

Uses: Oil from the fruit is applied on the affected part for the treatment of joint pain.

Additional Information:

- Thalamus is applied on muscle pain and also used in asthma (Bhandary & al., 1995). Fruits used in skin diseases, dysentery. Loss of appetite, urinary discharges; Fruit oil on rheumatism (Kothari & Shirodkar, 2006).
- Nut ash for tooth-ache (Reddy, 1996).
- Fruits also useful as antidote for snakebite (Rakecha, 2008). Stem-bark decoction with milk and sugar useful for rheumatism (Aher & Patil, 2009).
- Seeds burnt and immediately kept inside holes to kill snakes (Patil & al., 2009). Nuts used for leucoderma, allergic dermatitis, poisonous bites and leprosy (Gupta & al., 2010).

Sida acuta Burm.f. (*'Lahan Chikana'*) MALVACEAE

Branched undershrubs, branches minutely stellate hairy. Leaves elliptic-lanceolate, subacute, puberulous beneath, margin serrate. Flowers yellow, axillary, solitary or in clusters of 2–3, pedicles jointed above the middle, carpels puberulous. Seeds black.

Fl. & Fr.: May–September.

Distrib.: Occasional. Nahimbe Ambeghar, Rammala, Rasati, Shirshinge.

Uses: The whole plant crushed and mixed with bark of *Erinocarpus nimmonii* (*Cher*) and applied on bone fracture.

Additional Information: Crushed leaves applied on fractures (Upadhye & al., 1994).

Sida cordifolia L. (‘*Chikana’*) MALVACEAE

Villous undershrubs, with an unpleasant smell. Leaves ovate-oblong, rarely orbicular, margins serrate to crenate. Flowers axillary, mostly solitary, sometimes in clusters of 2–5, pale yellow to nearly white. Mericarps flattened, trigonous. Seeds flattened, reniform, brown to black.

Fl. & Fr.: May–August.

Distrib.: Frequent. Avasari, Dicholi, Nahimbe ambeghar, Rammala, Zadoli.

Uses: Leaf juice applied on wound.

Additional Information: Whole plant useful for fracture. Leaves used as vegetable (Singh & Sharma, 2002).

Sida rhombifolia L. ssp. **rhombifolia** (‘*Chikankhada’*) MALVACEAE

Herbs or undershrubs. Leaves ovate-oblong, more or less rhomboid, margin entire at base, serrate to crenate towards apex. Flowers yellowish-orange, axillary, solitary or in clusters of 2–5; calyx accrescent, carpels 7–10, shortly awned.

Fl. & Fr.: October–December.

Distrib.: Common. Avasari, Nahimbe Ambeghar, Rammala.

Uses:

Root powder is used for the treatment of urinary problems.

Additional Information:

- Tender leaves used as vegetable.
- Leaves also useful for bone fracture (Singh & Sharma, 2003). While the powder of the leaves is used as appetizer (Bhosle & al., 2009).
- Root poultice applied on swellings; stem bark decoction used in fever, asthma, rheumatism (Karne, 2011).

Sida rhombifolia L. ssp. **retusa** (L.) Borss. (‘*Chikankhada’*) MALVACEAE

Undershrubs. Leaves ovate-orbicular to ovate, crenate, rhomboid-truncate with dentate apex. Flowers yellow. Carpels 10, shortly awned.

Fl. & Fr.: October–December.

Distrib.: Common. Avasari, Nahimbe ambeghar, Rammala, Rasati, Shirshinge.

Notes: Included on the authority of Deshpande & al. (1993).

Uses: Root powder is used for the treatment of urinary problems.

Additional Information: Tender leaves used as vegetable.

Smilax zeylanica L. (*'Aakar'*) SMILACACEAE (PLATE: VII-6)

Scandent vines; flowering branches slender, 4-angular, smooth or sparsely prickly. Leaves rounded or truncate at base, rounded or shortly cuspidate at apex. Umbels 1–3 on short axis. Receptacles 2–40 flowered.

Fl. & Fr.: June–February.

Distrib.: Common. Avasari, Dicholi, Khudupalewadi, Zadoli.

Uses:

- Stem ash is applied for the treatment of tooth-ache and also for healthy, strong gum & teeth.
- Fruits eaten to check the intestinal worms.

Additional Information:

- Freshly crushed fruits or its powder used for treatment of Diphtheria in cattle. Fruits edible and also used as fodder.
- Leaves used in blood dysentery and rheumatic pains. Young leaves and shoots useful as vegetable (Singh & Sharma, 2002).

Solanum anguivi Lam. (*'Ringaniwangi'*) SOLANACEAE

Undrshrubs or shrubs; stem prickly. Leaves broadly elliptic or elliptic-oblong or ovate, prickly on nerves. Inflorescence of extra axillary racemose cymes. Flowers blue. Berries globose, yellowish when ripe. Seeds minutely pitted.

Fl. & Fr.: June–November.

Distrib.: Common. Dicholi, Ghatmatha, Kondhavale, Manainagar, Navaja, Rammala, Zadoli.

Uses:

- Fumigation of the stem is given to the teeth for the treatment of toothache.
- One tea spoon root powder twice a day is taken for the treatment of cough.

Additional Information:

- Leaves and fruits used as vegetable.
- Roots useful for ear complaints; fruits for hyperacidity; fruits and seeds for toothache (Singh & Sharma, 2002).
- Seeds useful for asthma (Bhosle & al., 2009).
- Fruits laxative, digestive, antipyretic, anti-rheumatic, anti-inflammatory used in used in cough, cold, asthma, insect bites (Karne, 2011).

Solanum nigrum L. (*'Kangoni'*) SOLANACEAE

Herbs. Leaves ovate-lanceolate, base tapering, margins entire or slightly toothed, sparsely pubescent. Flowers white, in extra-axillary, sub-umbellate cymes. Berries globose, purplish-black when ripe.

Fl. &Fr.: Throughout the year.

Distrib.: Ghatmatha, Navaja, Shirshinge, Zadoli.

Uses:

- Leaves are used in rickets.
- One tea spoon of root powder is given at morning for 3–4 days for the treatment of jaundice.

Additional Information:

- The fruits are used as vegetable and sold in the local market.
- Fruits used to obtain violet colour (Jha and Basak, 1994).
- Whole plant useful for dysentery, piles and swellings (Singh & Sharma, 2002).
- Leaves are laxative (Bhosle & al., 2009).

Solanum virginianum L. (*'Kateringani'*) SOLANACEAE

Herbs; prostrate, branches diffuse, spines yellow, shining, Leaves ovate-elliptic, margins deeply lobed, stellately hairy on both sides, prickly on nerves. Inflorescence of extra axillary, few flowered cymes. Flowers purple. Berries yellow, blotched with green. Seeds numerous.

Fl. & Fr.: November–April.

Distrib.: Ghatmatha, Koyna dam, Navaja, Shirshinge, Zadoli.

Uses:

- One tea spoon root powder is given twice a day for the treatment of cough.
- Roots are chewed for the treatment of toothache.

Sopubia delphinifolia (L.) G. Don var. **delphinifolia** (*'Dudhali'*) SCROPHULARIACEAE

Herbs, 20–30 cm high; stems grooved, erect, branched, subquadrangular. Leaves pinnatisect, segments filiform. Flowers pale purple or white axillary, solitary or in terminal racemes, bracteoles filiform. Capsules ovoid, 2-valved, blackish-brown.

Fl. & Fr.: September–November.

Distrib.: Common in grasslands. Dicholi, Ghatmatha, Kondhavale, Navaja, Zadoli.

Uses: The juice of the plant is applied on wounds. Whole plant useful for healing / relieving sores.

Additional Information: A noteworthy partial parasitic plant.

Spermacoce pusilla Wall. RUBIACEAE

Herbs, stems 4-angled. Leaves sessile, linear-oblong, scabrous above, base tapering, apex acute. Flowers white in whorls of globose heads. Capsules oblong, pubescent at apex.

Fl. & Fr.: April–October.

Distrib.: Common. Dicholi, Shirshinge.

Uses: The tender leaves and inflorescence crushed and juice is applied on cuts and wounds.

Additional Information: The fresh buds associated with flowers are used for cuts and wounds. The leaves used for snake and scorpion bites as well as applied on scabies and bone fracture (Conserva & Ferreira, 2012).

Spermadictyon suaveolens Roxb. (*'Jitasaya'*) RUBIACEAE

Shrubs with tri-chotomous branchlets, bark peeling off in papery flakes. Leaves opposite, elliptic-lanceolate, base and apex acute, stipules ovate acute. Flowers white, fragrant, in terminal trichotomously branched cymes. Capsules ellipsoid.

Fl. & Fr.: November–December.

Distrib.: Dicholi, Rammala, Shirshinge.

Uses: The fetid pith of the stem is applied on the diabetic wound.

Additional Information: Roots useful for piles (Singh & Sharma, 2002).

Sphaeranthus indicus L. (*'Gorakhamundi'*) ASTERACEAE

Herbs, highly branched, spreading, wings of stem toothed, glandular hairy. Leaves sessile, oblong, dentate, glandular hairy, narrowed at base. Heads on glandular peduncles. Involucral bracts linear, acuminate. Achenes oblong, smooth or angled.

Fl. & Fr.: February–April.

Distrib.: Common near cultivated fields. Rammala, Dicholi, Khudupalewadi.

Uses:

- Two teaspoon leaf juice, powdered seeds or roots is given to the children as vermifuge.
- The paste of whole plant in coconut oil is applied an itching and skin diseases.

Spilanthus calva DC. (*'Akkalkara'*) ASTERACEAE

Herbs, suberect. Leaves opposite, ovate, base and apex acute, margins irregularly crenate-serrate. Heads yellow, solitary or subpanicled, involucral bracts uniseriate. Achenes oblong or obovoid, truncate, much compressed, nearly glabrous.

Fl. & Fr.: September–January.

Distrib.: Occasional, in wet fields at Dicholi, Khudupalewadi.

Uses:

- The whole plant paste is applied on skin for itching.
- The heads are chewed for the treatment of dyslexia.

Additional Information:

- Root extract is given for cold and cough (Upadhye &. al., 1986).

- Fruits edible and also used as pickle (Singh & Sharma, 2002).

Sterculia foetida L. (*'Jangali Badam'*) STERCULIACEAE

Large trees, bark whitish. Leaves digitate; leaflets subsessile, oblong-lanceolate, pubescent when young, base tapering, apex acute or acuminate. Flowers flesh coloured in axillary racemes. Follicles boat-shaped, shortly beaked, woody, bright red when ripe.

Fl. & Fr.: March–April.

Distrib.: Planted at Koynanagar, Rammala.

Uses:

- Leaves are aperients used for constipation in old age.
- Leaves are also used as insect repellent.

Additional Information: Bark fibre used for cordage (Singh & Sharma, 2002).

Sterculia urens Roxb. (*'Kad, Pandharukha'*) STERCULIACEAE

Trees, young parts pubescent, bark white, smooth, papery. Leaves as broad as long, crowded at the tips of the branches, shallowly palmately 5-lobed, scabrid above, velvety beneath, apex caudate-acuminate, base cordate. Flowers in branched, glandular-pubescent, terminal panicles. Follicles oblong, densely pubescent, the pubescence mixed with stinging hairs, bright red.

Fl. & Fr.: February–April.

Distrib.: Ambavade, Zadoli.

Uses: Gum used in throat infections and cough.

Additional Information:

- Leaves and tender branches when steeped in water yield a mucilaginous extract useful in pleura-pneumonia in cattle (Chopra & al., 1956).
- Stem exudes famous 'Kadya gum' (Kono) which is edible and useful medicinally for piles, sore throat and as tonic (Singh & Sharma, 2002)
- Infusion of leaves is used for whooping cough in children (Neelima & al., 2011).

Stereospermum chelenoides (L.f.) DC. (*'Padal'*) BIGNONIACEAE

Trees, young parts viscid hairy. Leaflets broadly ovate-obovate, acuminate at apex, rounded at base. Flowers in lax panicles, dull purple, fragrant, calyx campanulate; corolla 2-lipped. Capsules rough, with white tubercles. Seeds furrowed in the middle.

Fl. & Fr.: March–September.

Distrib.: Avasari, Rammala.

Uses: Bark decoction is given for the treatment of joint pain.

Swertia densifolia (Griseb.) Kashyapa (*'Kadavi'*) GENTIANACEAE (PLATE: XI-2)

Herbs; annual, stems erect, obtusely quadrangular, more or less 4-winged. Leaves sessile, opposite decussate. Flowers white in purple veins, many in dense corymbose cymes. Capsules ovoid, beaked, 2-valved. Seeds many, minute, dark brown.

Fl. & Fr.: October–January.

Distrib.: Navaja, Shirshinge, Zadoli.

Uses: Leaves of *Swertia densifolia, Naraka, Phapati, Nigad, Vayvarna, and Adulasa are* cooked together. Bath is taken with this medicated water for the treatment of Measles.

Additional Information: Endemic (Singh & al., 2000).

Symplocos racemosa Roxb. (*'Lodh'*) SYMPLOCACEAE

Trees. Leaves elliptic-oblong narrowed at base, acute to acuminate at apex, margins glandular serrate, crenate or sub-entire. Flowers white, fragrant, mostly in unbranched spikes or racemes, bracteoles foliaceous; calyx glabrous with subacute lobes; corolla in 1–2 series. Fruits ovoid-oblong.

Fl. &Fr.: November–April.

Distrib.: Dicholi, Ghatmatha, Shirshinge, Zadoli.

Uses:

- One tea spoon bark powder is taken twice a day for 4–5 days for white discharge.
- The decoction of the bark is used for gargling for the treatment of toothache**.**
- The paste of the bark is mixed with milk is applied on face at night for pimples.

Syzygium cumini (L.) Skeels (*'Jambhal, Hadaki'*) MYRTACEAE (PLATE: VIII-1)

Trees; bark thick, rough. Leaves elliptic oblong or elliptic or ovate, coriaceous, apex acute to acuminate or subobtuse. Flowers creemish white in paniculate cymes, fragrant. Berries globose or oblong, purple, fleshy.

Fl. & Fr.: April–July.

Distrib.: Dhankel, Dicholi, Ghatmatha, Kondhavale, Manainagar, Navaja, Rammala, Zadoli.

Uses:

- Leaf juice of *Jambhal* and *Kusar* (*Jasminum malabaricum*) mixed in equal proportion and given for the treatment of stomachache.
- One teaspoon of seed powder is taken every morning to control the diabetes.
- Equal proportion of bark powder and the leaf juice is homogenized. 1 tea spoon is taken twice a day for treating diarrhoea.
- The bark powder is also applied on skin for leucoderma and ringworms.

Additional Information:

- Fruits are edible and sold in local market.
- Wood is used for house construction and as fuel.
- Bark is useful as fish poison.
- Sky blue colour is obtained from fruit kernel (Jha and Basak, 1994).
- The decoction or the powder of the bark is applied on severe toothache (Bhosle & al., 2009).
- Paste of leaves is applied on the body part to remove scars due to burning (Pawar & Patil, 2011).
- Juice of tender leaves mixed with leaf juice of mango and *Terminalia bellirica* and taken with goat's milk and honey for dysentery with bloody discharge (Muniappan & Pandurangan, 2011).

Tabernaemontana divaricata (L.) R.Br. (*'Tagar'*) APOCYNACEAE

Shrubs. Leaves elliptic-oblong, acuminate at base, dull green. Flowers white in dichotomous cymes.

Fl. & Fr.: Almost throughout the year

Distrib.: Grown in gardens around home premises and temples. Koyna, Manainagar, Rasati.

Uses:

- Roots chewed for toothache.
- The flowers are crushed and tied over the eyes for the treatment of conjunctivitis. It gives cooling effect for burning eyes.

Tagetes erecta L. (*'Zendu'*) ASTERACEAE

Herbs, stout, erect. Leaves deeply pinnatifid, margins distantly serrate, scabrid above, pubescent beneath. Heads solitary, peduncled, yellow in second racemes. Achenes linear-oblong, blackish. Pappus scales united.

Fl. &Fr.: September–November.

Distrib.: Grown in garden. Avasari, Ker, Navaja-dicholi, Rammala.

Uses: The flower juice two teaspoon full twice a day for 3–4 days is taken orally and the juice along with *Curcuma longa* powder is applied externally for the treatment of bleeding piles.

Additional Information: Yellow colour is obtained from flowers for painting (Jha and Basak, 1994).

Tectona grandis L.f. (*'Sag'*) VERBENACEAE

Trees, branches quadrangular, pubescent. Leaves elliptic ovate, coriaceous, apex acute or acuminate, base cuneate, upper surface glabrous and rough, lower surface stellate grey or towny tomentose. Inflorescence of erect, terminal panicles. Flowers creemish, Drupes subglobose enclosed in a enlarged calyx.

Fl. &Fr.: September.

Distrib.: Avasari, Dicholi, Ghatmatha, Rammala, Shirshinge, Zadoli.

Uses:

- Juice of tender leaves given for the treatment of white discharge as well for menstrual problems.
- The leaves are burned on the flame of the ghee and ash is collected. It is given with honey for the treatment of asthma.

Additional Information:

- Wood is useful for headache, swelling, fuel and house construction (Singh & Sharma, 2002).
- Young apical buds of the plant grounded into paste and applied as Henna / dye for staining palms by Bhils of S. Rajasthan (Sharma, M. 1999). Roots useful as antidote for snakebite (Rakecha, 2008).
- Seed paste applied around naval to treat stomach-ache (Aher & Patil, 2009).
- Leaves are boiled to obtain red colour (Sinha & Ramesh Kumar, 2009).
- Powder of wood is said to use in ailing skin inflammation. Leaves contain 6% tannin & use for dyeing silk. Bark contains betulinic acid (Ingole, 2011).
- Wood paste with milk useful for heart burn, dyspepsia. Fruit oil promotes growth of hairs (Karne, 2011).

Tephrosia purpurea (L.) Pers. (*'Unhali'*) FABACEAE

Herbs. Leaflets oblanceolate, base acute, apex rounded, mucronate, glabrous above, puberulous beneath. Flowers violet in leaf opposed racemes. Pods sparsely hairy.

Fl. &Fr.: April–July.

Distrib.: Goshatwadi, Rammala, Sangamnagar (Dhakka).

Uses:

- Leaf decoction with honey is given to the pregnant women as a tonic.
- One cup root decoction is taken early morning for urinary disorders and burning sensation.

Additional Information:

- Root is tied on the neck of the patient suffering from the fever. The powdered root bark along with the black pepper is given as an antidote for snake bite. Aqueous extract along with *Calotropis procera* is used as an antidote for snake bite. Root bark used for treating impotency (Singh and Prakash, 1994).
- Decoction of dried plant given for cough, diseases of liver and spleen, as a diuretic in gonorrhoea and as a blood purifier in skin diseases. Root decoction is given for bronchitis (Gill and Nyawuame, 1994).
- Root decoction is used in dyspepsia, diarrhoea and urinary disorders (Karne, 2011).

Terminalia bellirica (Gaertn.) Roxb. (*'Hela, Behada'*) COMBRETACEAE (PLATE: IX-6)

Large trees, young parts rusty pubescent. Leaves broadly elliptic or ovate, tomentose on both sides. Flowers yellowish brown in axillary spikes foetid. Drupes subglobose, softly tomentose.

Fl. & Fr.: April–July.

Distrib.: Common. Khudupalewadi, Navaja-dicholi, Rammala, Shirshinge.

Uses: One tea spoon fruit rind powder along with jaggery is given thrice a day for cough.

Additional Information:

- Wood is used for construction agricultural implements. Seeds edible but in excess quantity may causes giddiness.
- The fruits are sold in the local market.
- Gum in water given for urinary disorders. Bark is used as heart stimulant in blood pressure, fever; fruits astringent used in urinary stones, promotes flow of bile (Karne, 2011).

Terminalia chebula Retz. ('*Hirda*') COMBRETACEAE (PLATE IX:-4)

Trees. Leaves elliptic-ovate or elliptic-oblong. Flowers creemish yellow in simple or sparsely branched, terminal spikes. Drupes ellipsoid or ovoid pendulous, green with yellow spots, 5-ribbed when dry.

Fl. & Fr.: May–September.

Distrib.: Common. Avasari, Kiarule, Koyna, Manainagar, Navaja, Sangamnagar (Dhakka), Zadoli ambehar.

Uses:

- One tea spoon fruit powder is taken with warm water for the treatment of stomach disorder due to constipation. It is mild laxative.
- The fruit powder applied gently on tooth for toothache as well as for strengthening the gum and teeth.
- Decoction of powder used for washing wounds.

Additional Information:

- Wood is hard, used for agricultural implements. The seeds are edible and fruits are sold in the local market.
- Fruits are roasted and eaten as a diuretic. Root paste is used for conjunctivitis (Chhetri, 1994).
- Fruit powder is used as dentifrice useful in bleeding and ulceration of gums (Khandekar & Badave, 1998).
- Fruit paste boiled in cow-urine is applied on scabies (Pawar & Patil, 2011).
- Fruits astringent, laxative, stomachic used for diabetes; bark cardiac tonic (Karne, 2011).

Terminalia paniculata Roth (*'Kinjal'*) COMBRETACEAE

Trees, young parts rusty pubescent. Leaves oblong-elliptical, usually with 2 sessile glands at base. Flowers greenish-white, in terminal branched panicled spikes. Drupes brownish-red, sessile with 3 unequal wings.

*Fl. & Fr.:*August–December.

Distrib.: Common Dicholi, Khudupalewadi, Koyna, Manainagar, Maneri, Navaja, Rammala.

Uses: Tender leaves eaten for the treatment of dysentery.

Additional Information:

- Endemic (Singh & al., 2000).
- Wood used for construction of houses, making furniture, agricultural implements and as a fuel.

Thespesia lampas (Cav.) Dalz. & Gibs. (*'Ranbhendi'*) MALVACEAE

Shrubs, young shoots densely stellate-tomentose. Lower leaves orbicular, deeply 3–5 lobed, upper leaves broadly ovate to oblong, cordate at base, 3-lobed. Flowers axillary, solitary or 1–3 together, yellow with dark purple center. Capsules ovoid-globose, rusty pubescent, 4-valved.

Fl. & Fr.: September–December.

Distrib.: Common Ghatmatha, Navaja.

Uses: The root bark is given in gonorrhoea.

Additional Information: Leaves of its allied species *T. populnea* (L.) Soland. Ex Corr. is useful as fodder and medicinally for eczema and arthritis (Singh & Sharma, 2002).

Tinospora cordifolia (Willd.) Miers ex Hook.f. & Thoms. (*'Gulvel', 'Garudvel'*) MENISPERMACEAE

Extensive climbers; bark green, corky. Leaves membranous, cordate. Flowers greenish-yellow in long pendulous racemes. Drupes orange red when ripe.

Fl. & Fr.: April–May.

Distrib.: Ambavane, Ker, Rammala (planted in garden).

Uses:

- Two tea spoon decoction of stem is given twice a day for the treatment of jaundice, fever, urinary problems and excess heat in the body.
- Two tea spoon leaf juice is given twice a day for lactation in mother.

Additional Information:

- Stem used as aphrodisiac; roots, stem and leaves for blood pressure, fever, dysentery, muscular swellings and tonic. Roots useful for snakebite (Kothari

& Moorthy, 1996; Singh & al., 2012).
- Roots used in chronic diarrhoea and dysentery as well as in gonorrhoea (Khandekar & Badave, 1998).
- Plant juice used in fever and jaundice (Deshpande & al., 1993).
- Stem is given in general debility, diabetes, fever, skin diseases, rheumatic ailments, nervous complaints, strengthens natural immunity (Karne, 2011).

Tinospora sinensis (Lour.) Merr. (*'Gulvel', 'Garudvel'*) MENISPERMACEAE

Climbers; bark dirty green, warty. Leaves as broad as long as or broader than long, ovate-cordate, apex acuminate, base truncate or cordate. Flowers greenish yellow in axillary racemes. Drupes ovoid, orange-red when ripe.

Fl. & Fr.: November–January.

Distrib.: Common. Avasari, Dicholi, Helwak, Kondhavale, Koyna, Rammala, Shirshinge, Zadoli.

Uses:

- Two tea spoon decoction of stem is given twice a day for the treatment of jaundice, fever, urinary problems.
- Two tea spoon leaf juice is given twice a day for lactation in mother.

Additional Information:

- Leaves and stem used in rheumatic pains and as tonic (Singh & Sharma, 2002).
- Stems are used for treating piles, ulcerated wounds, liver complaints, chronic rheumatism and as muscle relaxant. It is also used as substitute for *T. cordifolia* (Udayan & al., 2004).

Toddalia asiatica (L.) Lam. var. **asiatica** (*'Ranmirachi'*) RUTACEAE (PLATE IV:-3)

Large shrubs, Scandent, prickles curved. Leaflets elliptic or obovate, sessile, coriaceous, apex acuminate or notched, margins serrate. Flowers yellowish-green. Berries glabrous, depressed, pitted, yellow when ripe.

Fl. & Fr.: January–June.

Distrib.: Avasari, Dicholi, Ghatmatha, Rammala, Shirshinge, Zadoli.

Uses: Decoction of the seeds is given twice a day for the treatment of kidney stone.

Additional Information: Decoction of root bark is administered to cure malarial and other periodic fever (Chhetri, 1994).

Tragia involucrata L. (*'Kolati'*) EUPHORBIACEAE (PLATE: IV-5)

Herbs; perennial, hispid with scattered stinging hairs, stem twining. Leaves oblong lanceolate to broadly ovate, apex acuminate, base rounded or cordate, margins serrate, hairy. Flowers in terminal, axillary and leaf opposed hairy racemes; males yellowish,

in upper part; females few in lower part of the racemes. Capsules 3-lobed, white, more or less hispid.

Fl. & Fr.: November–January.

Distrib.: Ambeghar, Avasari, Ghatmatha, Navaja, Shirshinge, Zadoli.

Uses:

- Leaves are crushed & given for the treatment of stomach ache.
- Two tea spoon leaf juice is given for the treatment of dysentery.
- Roots are crushed and applied on scabies.

Trichodesma indicum (L.) Lehm. (*'Lahan Khalpa'*) BORAGINACEAE

Erect herbs, branches sparsely or densely hairy. Leaves ovate or lanceolate-oblong, hairy on both sides, base auriculate, apex subacute or obtuse, strigose on the nerves beneath. Flowers bluish-white, solitary or in few flowered terminal cymes; calyx hispid. Nutlets 4, ovoid.

Fl. & Fr.: August–October.

Distrib.: Common. Karate. Rammala, Vanzole,

Uses: One tea spoon root decoction frequently is given for 2 days for dysentery.

Additional Information: Used in expulsion of dead fetus (Karne, 2011).

Trichosanthes tricuspidata Lour. (*'Kavandal'*) CUCURBITACEAE

Climbers; stem stout, woody at base, branches sulcate. Leaves variable in size, broadly ovate, sub entire or palmately 3–5 lobed, margins denticulate. Male flowers white in axillary racemes; female flowers solitary, axillary. Fruits globose, red when ripe.

Fl. & Fr.: May–July.

Distrib.: Ghatmatha, Navaja, Rammala, Shirshinge, Zadoli.

Uses:

- Fruits are given for the treatment of diphtheria.
- Leaf juice is dropped in eyes for the treatment of conjunctivitis.
- Roots paste is taken orally as an antidote for snakebite where as in case of cattle the entire plant is used.

Additional Information: Roots useful for inflammation of lungs and seeds for snakebite (Singh & Sharma, 2002).

Chemical Constituents: Methylsterol-cyclotrichosantol isolated from leaves along with cycloeucalenol and a triterpene-trichotetrol isolated from roots (Rastogi & Mehrotra, 1991).

Tridax procumbens L. (*'Kudamuda'*) ASTERACEAE

Herbs, erect or procumbent, hispid. Leaves opposite, ovate-elliptic, base and apex acute, margins serrate to coarsely incised, dentate or tri-lobed. Heads solitary on long, hairy, peduncles. Achenes oblong, silky hairy, black.

Fl. & Fr.: Throughout the year.

Distrib.: Common weed. Kondhavale, Manainagar, Navaja, Navaja dicholi, Rammala.

Uses: Leaves crushed & applied on wounds.

Additional Information:

- Flowers kept in between teeth to reduce tooth ache (Rajendran & Henry, 1994).
- Leaves useful for bruises, cough, cuts, gravel, injuries (Singh & Sharma, 2002).
- Whole plant extract is used in leprosy (Gupta & al., 2010).
- Leaf juice antiseptic, anti-fungal and insect repellent, applied on wounds (Karne, 2011).

Triumfetta rhomboidea Jacq. (*'Chikenkhada'*) TILIACEAE

Perennial herbs. Leaves upper sessile, lower petiolate, irregularly serrate, hairy with simple and stellate hairs. Flowers yellow. Capsules globose, bristles pubescent at base, hooked and transparent at apex.

Fl. & Fr.: October–December.

Distrib.: Common. Donicha wada, Navaja, Rammala, Rasati.

Uses: Leaf juice applied on wound.

Additional Information:

- Capsules were used as nose ring as an ornament.
- Whole plant useful for birth control; roots for ulcer; bark and leaves for dysentery (Kothari & Moorthy, 1996; Singh & Sharma, 2002).

Tylophora dalzellii Hook.f. (*'Lahan Kavali'*) ASCLEPIADACEAE

Twiners, latex milky, stem terete, branched, pubescent when young. Leaves petiolate, ovate-oblong, base rounded, apex mucronate, glabrous above, sparsely hairy beneath. Flowers small, many in lateral, umbellate cymes on zigzag rachis. Follicles lanceolate.

Fl. & Fr.: May–November.

Distrib.: Avasari, Dicholi, Kondhavale, Navaja, Zadoli.

Uses: One tea spoon leaf juice is given twice a day is given for 4–5 days for the treatment of Jaundice.

Additional Information:

- Leaves also useful for asthma. Fruits edible (Singh & Sharma, 2002).
- The powdered leaves and stem is useful for asthma (Bhosle & al., 2009).
- Young leaves are crushed with *Curcuma* powder and salt in *Sesamum* oil and applied on cuts and wounds (Salave, 2012).

Ventilago maderaspatana Gaertn. (*'Khandvel'*) RHAMNACEAE

Lianas. Leaves oblong-lanceolate or elliptic-ovate, subacute at apex, rounded or acute at base, margins entire or slightly crenate. Flowers greenish, in drooping, terminal panicles. Fruits winged; nuts across with persistent calyx, wing linear-oblong.

Fl. & Fr.: February–April.

Distrib.: Ambeghar, Dicholi, Kondhavale, Zadoli.

Uses:

- Root bark is given for stomach ache.
- The powdered root bark mixed with sufficient quantity of coconut oil or sesame oil and applied on scabies and other skin infections.

Additional Information: Roots bark useful for fever. Seeds edible (Kothari & Rao, 1999).

Verbascum chinense (L.) Sant. (*'Kutaki'*) SCROPHULARIACEAE

Herbs. Radical leaves petiolate, lyrately pinnatifid, lower caulina similar, upper smaller, sessile. Flowers yellow in simple or branched terminal racemes. Capsules subglobose, 2-valved.

Fl. & Fr.: March–November.

Distrib.: Common. Ambeghar, Dicholi, Kondhavale, Zadoli.

Uses: One tea spoon whole plants powder twice a day is given for bleeding piles. It is also given for constipation.

Vernonia cinerea (L.) Less. (*'Sahadevi'*) ASTERACEAE

Herbs. Leaves elliptic-lanceolate, base rounded or acute, apex acute pubescent, margins crenate-serrate. Involucral bracts linear-lanceolate, silky on back. Achenes minute, hairy, pappus of white hairs.

Fl. &Fr.: February–November.

Distrib.: Ambeghar, Avasari, Ghatmatha, Kisarule, Shirshinge.

Uses:

- The decoction of the root is used for the treatment of mouth ulcer.
- The root is tied on the head for the treatment of fever.
- The root is tied on the head for the treatment of insomnia.

Additional Information: Fruits also useful for fever (Singh & Sharma, 2002).

Viscum angulatum Heyne ex DC. (*'Jalunder'*) LORANTHACEAE

Shrubs, leafless, woody, parasitic; stems and branches pendulous, jointed. Flowers minute, green, sessile, solitary or whorled at the nodes. Berries minute, globose, yellowish.

Fl. & Fr.: Throughout the year.

Distrib.: Common parasite. Avasari, Ambeghar, Shirshinge.

Uses: Whole plant is crushed, heated and applied as poultice on swellings.

Viscum articulatum Burm f. LORANTHACEAE

Shrubs, dichotomously branched, pendulous; branches articulated, yellowish-green, longitudinally furrowed, narrow at both ends. Flowers minute in axillary clusters. Berries globose, smooth, yellowish-green.

Fl. & Fr.: July–December.

Distrib.: A common parasite. Dicholi, Zadoli.

Uses: Whole plant is crushed, heated and applied as poultice on swellings.

Additional Information:

- Stems used medicinally for headache (Singh & Sharma, 2002).
- In Rajasthan the Bhils use the whole plant for pulmonary inflammation and swelling in chest (Kulkarni & Kumbhojkar, 2002).
- The plant is cooling, alexipharmic, aphrodisiac, alternative used in fever, blood disease, ulcers, epilepsy and biliousness (Shanavaskhan & al., 2012).

Vetiveria zizanioides (L.) Nash (*'Vala'*) POACEAE

Herbs with aromatic roots, perennial. Leaves linear, margins ciliate. Flowers in panicles. Spikes purple, sessile spikelets narrowly linear, lower glumes spinulose, pedicelled spikelets smaller.

Fl. &Fr.: September–October.

Distrib.: Planted for its roots. Avasari, Karate, Rammala.

Uses: Decoction of the root is taken twice a day for excess heat in the body.

Additional Information:

- Roots are useful for making curtains etc. for cooling effect.
- Roots used as antidandruff (Koche & al., 2008).

Vigna vexillata (L.) A. Rich. var. **vexillata** (*'Halunda, Birambula'*) FABACEAE

Herbs, twining or trailing. Leaflets ovate, ovate-rhomboid or lanceolate, apex acute or acuminate, sparsely hairy. Flowers pinkish or bluish purple, few in capitate raceme. Pod linear hairy, beaked. Seeds 10–15, subreniform.

Fl. & Fr.: September–November.

Distrib.: Common. Avasari, Dastan, Dicholi, Gojegaon, Nahimbe, ambeghar, Rammala, Rasati, Zadoli.

Uses: The bulbs are eaten for the treatment of indigestion or gastritis.

Additional Information: Bulb, flowers and seeds are edible. Young pods and seeds used as vegetable.

Vitex negundo L. var. **incisa** (Lam.) C.B. Cl. (*'Katri nigad'*) VERBENACEAE

Shrubs, branches quadrangular, tomentose when young. Leaflets 3–5, elliptic or oblong, bluntly acuminate, serrate margin, lateral leaflets sessile. Flowers bluish-purple, in terminal, compound, pyramidal, paniculate cymes. Drupes ovoid, enclosed by campanulate fruiting calyx.

Fl. & Fr.: Throughout the year.

Distrib.: Ghatmatha, Koyna dam, Navaja, Shirshinge, Zadoli.

Uses:

- Leaves are cooked and applied on the affected part due to joint pain.
- Half tea spoon Black pepper powder (*Piper nigrum*) is mixed with 1 tea spoon leaf juice of *Katri nigad* and is taken every morning with cow ghee for the treatment of joint pain.
- Leaf juice is applied on scorpion sting.
- Stem chewed for toothache.
- Roots of *Katri nigad, Morvel* (*Clematis gouriana*) and Burabi (*Leucas stelligera*) are crushed together and applied on snake bite.

Additional Information:

- In Charak Samhita the plant has been classified as an antidote to poisoning. Methanolic extract of roots has been demonstrated to possess significant antivenom action (Sukh Dev, 2006).
- Leaves are used for fever and irregular menstruation (Sonawane & al., 2012).

Chemical Constituents: Leaves contain monoterpenoid iridoids, triterpenoids (betulinic acid, ursolic acid), flavonoids (e.g. gardenin-A, grdenin-B, Corymbosin, vitexicarpin etc.) phenolic acids (Sukh Dev, 2006).

Vitex negundo L. var. **negundo** (*'Nigad'*) VERBENACEAE

Shrubs or small trees, branches grayish-white with fine tomentum, quadrangular. Leaflets ovate-lanceolate, base acute, margins entire-sinuate with few scattered teeth in middle above. Flowers bluish-purple, in terminal, compound, pyramidal, paniculate cymes. Drupes ovoid, enclosed by campanulate fruiting calyx.

Fl. & Fr.: Throughout the year.

Distrib.: Ghatmatha, Koyna dam, Navaja, Shirshinge, Zadoli.

Uses:

- Leaves are cooked and applied on the affected part due to joint pain.
- Half tea spoon Black pepper powder (*Piper nigrum*) is mixed with 1 tea spoon leaf juice of *Katri nigad* and is taken every morning, with cow ghee for the treatment of joint pain.
- Leaf juice is applied on scorpion sting.
- Stem chewed for toothache.

Additional Information:

- The branches used as broom.
- Leaves for cold, neuralgic pains; roots dysentery, piles; flowers for liver and skin diseases. Smoked leaves relieve headache and rheumatic pains (Kothari & Moorthy, 1996; Kothari, 2008).
- Leaf extract homogenized with butter. 2–3 drops poured into nose as a remedy against migraine (Aher & Patil, 2009).
- Root paste is applied externally on swelling while the root and leaves boiled in sesamum oil is useful for treatment of leprosy and scabies (Pawar & Patil, 2011).
- Plant is useful for planting against the soil erosion and afforestation, also the hedge plant. Leaves used as tonic and insect repellent. Its antibacterial activity with presence of steroids, alkaloids, tannins, and phenols is reported. Plant is stomachic, useful in promoting hair growth, eye diseases and inflammation and is anthelmintic (Ingole, 2011) and also used for paralysis (Thakur & al., 2011).
- Leaves stomachic, leaf powder used in wound healing, inflammation; paste: skin diseases, body swellings; root extract: dyspepsia. Flowers: diarrhoea (Karne, 2011).

Chemical Constituents: Fresh leaves gave 0.05% essential oil and air dried leaves gave an alkaloid nishindine (Chopra & al., 1956). n-Tritriacontane, n-hentriacontane, n-pentatriacontane, n-nonacosane, ß-sitosterol, p-hydroxybenzoic acid and 5-oxyisophthalic acid from seeds. 3, 4-dihydroxybenzoic acid isolated. Vanillic acid and p-hydroxybenzoic acids and luteolin isolated from bark. Two new leucoanthocyanidins 6, 8-di-O-methylleucodelhinidin and 3', 4'-di-O-methylleucocyanidin-7-O -rhamnoglucoside isolated from stem bark (Rastogi and Mehrotra, 1991).

Wattakaka volubilis (L.f.) Stapf (*'Harandodi'*) ASCLEPIADACEAE

Climbers, large; stem cylindrical, softly pubescent. Leaves broadly ovate, sparsely pubescent, base rounded, apex cordate or acuminate. Flowers greenish in lateral umbellate cymes. Follicles in pairs, ovoid, divaricate, tapering to a very blunt point, tomentose when young.

Fl. & Fr.: April–February.

Distrib.: Common. Ambeghar, Dicholi, Manainagar. Shirshinge, Zadoli.

Uses: To release cough the pinch of leaf powder is added in the nostrils.

Additional Information: Leaves also useful medicinally for abscess, boils and skin diseases (Singh & Sharma, 2002).

Woodfordia fruticosa (L.) Kurz (*'Dhayati'*) LYTHRACEAE (PLATE: IV-1)

Shrubs. Leaves sessile, oblong lanceolate, glabrous above, glandular punctuate beneath, base rounded, apex acute. Flowers red in axillary pedunculate cymes, pedicels short glandular. Capsules ellipsoid enclosed by persistent calyx tube.

Fl. & Fr.: February–May.

Distrib.: Common. Avasari, Dicholi, Dastan, Gojegaon, Kisarule. Koyna dam, Nahimbe ambeghar, Rammala, Rasati, Zadoli.

Uses:

- The flower powder mixed with fruit powder of *Ficus racemosa* in equal proportion & 1 tea spoon is given for leucorrhoea (white discharge).
- Flower powder is given for menstrual problems.
- Flower powder applied on burns and wound.

Additional Information:

- The nectar secretion is sucked from the flowers.
- Flower paste useful for injuries, small pox, dysentery, cough. Its decoction with honey given to pregnant women as tonic. Flowers sold in market for dyeing cloths (Kothari & Rao, 1999).
- Decoction of stem bark used to remove worms, skin disease, dysentery. Flowers infusion controls leucorrhoea, toothache (Kothari & al., 2003).
- The flower powder along with rice is given for dysentery (Koche & al., 2008).
- Flowers are sundried and powdered and applied on wounds for quick healing (Pawar & Patil, 2011).
- Bark extract along with bark of *Bauhinia racemosa* and *Mangifera indica* used to cure jaundice (Karne, 2011).

Wrightia tinctoria R.Br. ssp. **tinctoria** (*'Kala kuda'*) APOCYNACEAE

Trees. Leaves elliptic or oblong lanceolate, base acute or rounded, apex acuminate, pubescent along the midrib below. Flowers white in dichotomous cymes. Follicles paired, drooping, cylindric, tapering towards apex, apices connate. Seeds linear, attenuated at apex, coma deciduous.

Fl. & Fr.: April–November.

Distrib.: Common. Avasari, Dicholi, Gojegaon, Nahimbe ambeghar, Rammala, Rasati, Zadoli.

Uses:

- Roots are used as an antidote for the snakebite (saw-scaled viper).
- The leaves crushed and deeped in coconut oil in glass bottle. This bottle is kept in sunlight for 15 days. The colour of the oil slowly becomes violet. It is then filtered and applied externally for psoriasis.
- The bark powder mixed with stem powder of *Tinospora sinensis* in equal proportion and used to control fever.

Additional Information:

- Flowers are used as vegetable.
- Bark powder useful in skin disease, as tonic; tender leaves for jaundice and seeds for stomach disorder (Kothari & Londhe, 1999).

- Bark is useful for intestinal disorders (Koche & al., 2008).
- Seed powder useful for stomach ache (Bhosle & al., 2009).
- Tender leaves used in jaundice; paste in skin diseases; infusion in stomach disorders. Bark and Seeds used in flatulence and cough (Karne, 2011).

Chemical Constituents: Seeds yield 30–49 % fixed oil (Chopra & al., 1956) while bark contains ß-Sitosterol, ß-amyrin and its acetate and lupeol benzonate (Rastogi & Mehrotra, 1991).

Zingiber neesanum (Grah.) Ramam. (*'Nishan'*) ZINGIBERACEAE

Herbs. Leaves sessile, lanceolate, acuminate. Flowers in long cylindric spikes; bracts obovate, acute, red; corolla greenish-white with yellow lip. Capsules red.

Fl. & Fr.: July–September.

Distrib.: Avasari, Dicholi, Goshatwadi, Shirshinge, Vanzole, Zadoli.

Uses: Paste of the tuber applied on wounds.

Additional Information: Endemic (Singh & al., 2000).

Zingiber officinale Rosc. (*'Ale'*) ZINGIBERACEAE

Herbs, stem leafy up to 2 m high, perennial. Leaves lanceolate to linear lanceolate, sessile, narrowed to the base.

Distrib.: Cultivated in some convenient places. Avasari, Helwak, Rammala.

Uses:

- The rhizome is chewed for the treatment of hyperacidity and indigestion.
- The rhizome is one of the important ingredients of the decoction made for the treatment of fever & common cold. The decoction includes the ingredients like *Tinospora cordifoila, Justicia adhatoda, Cymbopogon citratus and Zingiber officinale.*

Additional Information: The rhizome extract is used in leprosy (Gupta & al., 2010).

Zingiber zerumbet (L.) Rosc. ex J. E. Sm. (*'Jangali Ale'*) ZINGIBERACEAE

Herbs. Rootstock large, aromatic. Leaves sessile, lanceolate. Flowers yellow, in spikes, bracts ovate, oblong or obovate, green, turning red in fruits. Seeds oblong, black.

Fl. & Fr.: July–August.

Distrib.: Ambeghar, Dicholi, Zadoli.

Uses:

- The rhizome is crusted and taken orally for indigestion.
- The rhizome paste is applied externally on swellings.

Ziziphus rugosa Lam. var. **rugosa** (*'Toran'*) RHAMNACEAE (PLATE: V-5)

Straggling shrubs, stem and branches armed, young branches fulvous tomentose. Leaves broadly elliptic, acuminate, tomentose beneath, base cordate, apex rounded, mucronate, margins denticulate. Flowers in long peduncled, tomentose paniculate cymes on leafless spinous branches. Drupes whitish when ripe.

Fl. & Fr.: February–May.

Distrib.: Common. Avasari, Dastan, Dicholi, Donichawada, Nahimbe ambeghar, Rammala, Shirshinge, Zadoli.

Uses:

- Leaf juice is dropped in eyes for conjunctivitis and to get relief from burning.
- Root is used as an antidote for snake bite (saw-scaled viper).
- Bark is given in the treatment of dysentery.

Additional Information:

- Fruits edible and sold in the local market.
- Decoction of seeds is useful for jaundice (Khan & al., 2004).
- The fruits shows high concentration of sugar (20.7%) compared to Sapota (21.4%), Grapes (16.2%) and Pomegranate (16.5%) (Mahapatra & al., 2012) and it is the source of macro and micro nutrients (Krishnamurthy & Sarala, 2012).

PLANTS USED IN ETHNOVETERINARY MEDICINE

Atalantia racemosa Wight (*'Makad limbu'*) RUTACEAE

Trees. Leaves ovate or elliptic-oblong, leathery, apex obtuse or retuse. Flowers white in racemes. Berries globose, creamy when ripe.

Fl. & Fr.: November–May.

Distrib.: Ambeghar, Dicholi, Zadoli.

Uses: Leaf juice is used for the treatment of diphtheria.

Breynia retusa (Dennst.) Alston (*'Dolphodi'*) EUPHORBIACEAE

Shrubs. Leaves broadly elliptic, base rounded or subacute, apex obtuse. Flowers greenish yellow. Perianth lobes 6, accrescent in fruiting; male flowers at apex, female at base. Capsules globose with persistent enlarged calyx, orange red when ripe.

Fl. & Fr.: June–September.

Distrib.: Avasari, Goshatwadi, Dastan, Rammala, Rasati.

Uses: Leaves used for lactation in cattle.

Bridelia retusa (L.) Spreng. (*'Asana'*) EUPHORBIACEAE

Trees. Leaves elliptic, base rounded, apex sub acute, margins slightly crenulate or entire, glabrous above, tomentose beneath. Flowers in axillary or subterminal spikes,

greenish yellow or whitish. Drupes subglobose, seated on enlarged perianth, ripens greenish-purplish to black.

Fl. & Fr.: September –April.

Distrib.: Common. Ambeghar, Dicholi, Kamargaon, Manainagar, Navaja, Shirshinge, Zadoli.

Uses: Bark powder is applied on skin infection.

Additional Information:

- Fruits edible, leaves used as fodder and wood for fuel.
- Stem bark along with coconut oil is applied on insect sting (Rajendran & Henry, 1994).
- Bark useful for debility, rheumatic pains, waist pain in women. Plant is astringent (Singh & Sharma, 2002).

Caesalpinia cucullata Roxb. (*'Ragi'*) CAESALPINIACEAE

Scandent shrubs, woody, armed with dark, purplish hooked spines. Leaves 2-pinnate; leaflets 4–5 pairs, elliptic, acuminate at apex. Flowers yellow in racemes. Pods papery, oblong, compressed, winged along upper margins.

Fl. & Fr.: December–June.

Distrib.: Along the ghats, scattered, Ghatmatha, Koyna.

Uses: Seeds given to cattle as vermifuge.

Firmiana colorata (Roxb.) R.Br. (*'Koushi'*) STERCULIACEAE

Trees, bark ash coloured. Leaves crowded at the ends of the branches, broadly ovate, palmately 5–7 lobed, apex obtuse or acute to acuminate, base deeply cordate. Flowers orange-red, in terminal panicles, appearing after the falling of the leaves. Follicles oblong, stipitate, strongly nerved.

Fl. &Fr.: March–June.

Distrib.: Shiral, Zadoli.

Uses:

Leaf juice is given to cattle to control dysentery.

Additional Information:

- Fruits edible (Rajendran and Henry, 1994).
- The seed powder is mixed with wheat flour and taken as a tonic (Kamble & al., 2010).

Maytenus senegalensis (Lam.) Excell. ('*Hekal'*) CELASTRACEAE

Shrubs. Leaves obovate, base tapering, apex entire or emarginate. Flowers white or yellowish. Capsules concave at tip, purple when ripe. Seeds rugose, black.

Fl. & Fr.: November–January.

Distrib.: Avasari, Kondhavale.

Uses: Bark is used to kill the lice in cattle.

Additional Information:

- Leaves used as fodder.
- Extract of leaves mixed with cow milk and used up to 3 days early in the morning for the treatment of jaundice (Parinitha & al., 2004).
- Roots and leaves cooked together and the fluid is used to wash the mouth for the treatment of toothache (Amusa & al., 2010).

Nothapodytes nimmoniana (J. Grah.) Mabberley (*'Naraka'*) ICACINACEAE (PLATE: VII-4)

Trees; stems with lenticels. Leaves ovate-oblong or elliptic oblong, dark green above, pale, pubescent on nerves beneath, base unequal. Flowers whitish-yellow, foetid, in terminal, corymbose, panicles, densely pubescent. Drupes ellipsoid-ovoid, purple when ripe.

Fl. & Fr.: September–November.

Distrib.: Ambeghar, Avasari, Dicholi, Kondhavale, Rammala, Shirshinge, Zadoli.

Uses: Bark powder is applied on wound.

Additional Information:

Bark is anticancerous. The local people collect the bark by cutting trees and sale to local agents for Rs. 70 per gunny bag. Hence over-exploitation is big threat to this plant. Small shrubs are commonly seen, but the tree habit is rare.

Roots medicinally useful for dog poison (Singh & Sharma, 2002).

Phyllanthus reticulatus Poir. (*'Nilumbi'*) EUPHORBIACEAE

Shrubs, Scandent; branchlets drooping, pubescent. Leaves elliptic-obovate or oblong, base acute or rounded, shining above, glaucous beneath, reddish when young. Flowers greenish-yellow, in 2–6 flowered axillary fascicles; female flowers solitary, sepals 5, unequal. Berries globose, smooth, purple-black when ripe.

Fl. & Fr.: July–September.

Distrib.: Ambeghar, Avasari, Dicholi, Kondhavale, Rammala, Shirshinge, Zadoli, Ghatmatha.

Uses: Leaves are given to the cattle for the treatment of dysentery.

Additional Information:

- Fruits edible.
- Fruits used to obtain green colour (Jha and Basak, 1994).
- A cup of bark infusion is given for 3 days for swellings (Upadhye & al., 1994).

- 4. Whole plant is used as an antidote for snakebite while leaves used to cure diarrhoea (Pahani Kumar and Chaturvedi, 2010).

(The list of Plants used in Ethno-veterinary medicines and referred in Medicinal plants is given in Table No. 80).

FOOD PLANTS

During discussions with women for various edible plants in the form of fruits, vegetables etc. cooked vegetables from leaves of *Celosia argentea* (Kuradu), *Clerodendrum serratum* (Bharabgi), *Dioscorea pentaphylla* (Shendavel) *Hygrophila schulli* (Kate kolisna) etc. were tasted and found to be delicious. The value of the fruits of *Embelia drupacea* (Vashingi) was also experienced during thirst and hunger while collection.

Most of the wild edible plants observed have high nutritive value. e.g. *Meyna laxiflora* (Alu) is known to contain proteins. But it is unknown to these people. Few workers like Gopalan & al. (1977), Nilgaonkar & al. (1985), Ghate & al. (1988), Vaidya & al. (2004), Vartak and Ghate (2004) have made efforts for analysis of few edible plants. However the other valuable edible plants should be chemically analysed, nutritionally studied for their actual mode of action on the human system and harmful effects, if any. (Vartak, 1980). If this data is made available to the modern researchers then they will go in search of these wild edible plants. Nowadays modern people are in touch with the costly and chemically polluted food. Therefore, awareness regarding the nutritive value of these wild edibles is needed. If they will include some of these materials in the diet, it will save their expenditure. It also helps the conservation of traditional knowledge, life & culture before its extinction through the aggressive modern civilization.

Out of the 406 plants studied, about 137 plants are used for edible purposes. These plants distributed among 57 families. Out of which, 51 families are of Dicots and 6 families are of Monocots (Ref. Graph 6). Within Dicots, Fabaceae (16 plants) and within Monocots, Dioscoreaceae (4 plants) are important families (Ref. Graph 7). The edible plant parts are Bark (1), Bulbils (2), Bulbs (2), Flowers (7), Fruits (61), Inflorescence (1), Leaves (7), Receptacles (4), Rhizome (5), Seeds (19), Thalamus (1), Tubers (4), Young buds (3), Young fruits (5), Young leaves (29), Young shoots (1) etc. (Ref. Table No. 81 and Graph No. 8).

The Enumeration of food plants is given below.

Alternanthera sessilis (L.) R.Br. ex DC. (*'Gunguna', 'Bhuijambhal'* AMARANTHACEAE

Branches with purple tinge, leaves subsessile, base cuneate, apex acute or obtuse. Flower sessile, white, shining; bracteoles small ovate; perianth lobes 5, ovate, acute 1-nerved. Utricles compressed.

Fl. & Fr.: Throughout the year.

Distrib.: Common near cultivated fields. Avasari, Dhankel, Kondhavale, Rammala, Rasati.

Parts used: Tender leaves used as vegetable.

Amaranthus cruentus L. (*'Rajgira'*) AMARANTHACEAE

Herbs. Leaves ovate-lanceolate. Flowers pinkish in dense spikes; perianth lobes oblong-lanceolate, awned. Capsules ovoid.

Fl. & Fr.: February–September.

Distrib.: Cultivated. Avasari, Dhankel, Kondhavale, Rammala, Rasati.

Parts used:

- Young leaves used as vegetable and sold in the local market.
- Grains roasted and eaten.

Amaranthus spinosus L. (*'Katemat'*) AMARANTHACEAE

Herbs, spines axillary, long straight. Leaves lanceolate, base cuneate, apex acute. Flowers greenish white in dense axillary clusters; bracteoles 2, linear, bristle-pointed. Capsule orbicular, circumscissile. Seeds shining black.

Fl. & Fr.: March–October.

Distrib.: Common in waste places. Avasari, Dhanakel. Karate, Rammala, Rasati.

Parts used: Young leaves used as vegetable and sold in the local market.

Additional Information:

It is abortifacient, antiemetic, blood purifier, laxative and purgative used in cough and cold, eczema, gonorrhea, excess body heat, piles, scorpion sting, snake bite (Pant and Samant, 2010).

Amaranthus viridis L. (*'Tandali , Tandulasa'*) AMARANTHACEAE

Herbs. Leaves deltoid-ovate, base truncate, apex acute. Flowers green in axillary and terminal long spikes; bracteoles 2, ovate-oblong, keeled. Capsules apiculate.

Fl. & Fr.: July–September.

Distrib.: Common in waste places**.** Avasari, Dhankel, Karate, Rammala, Rasati.

Parts used: Young leaves used as vegetable and sold in the local market.

Additional Information:

It is blood purifier also used in the treatment of piles and can be taken as a digestive agent (Koche & al., 2008).

Amorphophallus commutatus (Schott) Engl. (*'Ransuran'*) ARACEAE

Annuals, tubers oblate-spherical, depressed above. Leaves solitary, 3-sect; leaflets 1- terminal, 2-decurrent on each side and 2-below the bifurcation, reducing in size downwards. Spathes thick, brownish purple outside, pinkish purple inside. Spadices sessile.

Fl. & Fr.: April–October.

Distrib.: Rasati, Avasari, Dicholi, Zadoli.

Parts used: Rhizome used as vegetable.

Additional Information:

Ether extract of stem is useful for leprosy (Gupta & al., 2010).

Anacardium occidentale L. (*Kajavi'*) ANCARDIACEAE

Trees. Leaves coriaceous broadly oblong, base and apex rounded, glabrous above, pubescent beneath. Flowers small in terminal panicles. Drupes oblong or subglobose. Orange turning black when ripe.

Fl. & Fr.: June–November.

Distrib.: Rammala (planted in demogarden). Avasari, Rasati.

Parts used:

- Thalamus juicy, edible and sold in local market.
- Nuts roasted and eaten.
- Young buds used as vegetable.

Additional Information:

Medicinally plant used for corns and ulcer (Singh & Sharma, 2002).

Artocarpus heterophyllus Lam. (*'Phanas'*) MORACEAE (PLATE: VIII-3)

Trees. Leaves oblong-elliptic, coriaceous, base acute or rounded, apex subacute. Flowers unisexual in heads. Fruits oblong globose, echinate.

Fl. & Fr.: April–June.

Distrib.: Very common at Avasari, Dhankel, Dicholi. Rammala, Zadoli.

Parts used: Young fruits used as vegetable. Fruits edible and sold in the local market.

Additional Information:

- Wood is used for the construction of houses & furniture preparation.
- The ochre colour and shades of red obtained from root and bark (Jha and Basak, 1994) and the yellow colour is from internal stem bark (Sinha & Ramesh Kumar, 2009).

Basella alba L. (*'Mayalu'*) BASELLACEAE

Herbs, perennial, rhizomatous stems running to the right, slender, succulent, very long. Leaves broadly ovate, base often cordate, narrowing into the petiole, apex acute or acuminate. Flowers white or red, sessile, few in lax, pedunculate spikes. Pseudo-berries red, black or white, globose or lobed.

Fl. & Fr.: October–December.

Distrib.: Grown extensively. Avasari, Dhankel, Dicholi, Kolane, Male, Nav, Zadoli,

Parts used: Leaves used as vegetable.

Additional Information:

- Seeds used for extraction of red colour for painting (Jha & Basak, 1994).
- Leaf juice is given for dysentery, leprosy and Biliousness (Saraf & Gour-Broome, 2012).

Cajanus cajanifolius (Haines) Maesen (*'Rantur'*) FABACEAE

Erect perennial shrubs. Stems minutely pubescent. Leaves sub digitately 3-foliolate; leaflets rhomboidal lanceolate. Flowers dull yellow. Pods deeply grooved between seeds, minutely velvety, 4–6 seeded. Seeds black with strophile.

Fl. & Fr.: December–April.

Distrib.: Planted in Rammala garden (Koyna).

Parts used: Seeds.

Additional Information:

The plant is considered to be the nearest wild relative of the Pigeon Pea Cajanus cajan (van der Maesen 1990).

Canavalia gladiata (Jacq.) DC. (*'Abai-babaicha vel'*) FABACEAE

Twiners, stout, lignose. Leaflets ovate, pubescent, petiolate. Flowers pale lilac, pedicellate, brownish. Seeds oblong-ellipsoid.

Fl. & Fr.: September–December.

Distrib.: Planted near houses. Mhavashi, Nav.

Parts used: Young pods used for vegetable.

Additional Information:

Roots and bark of its wild relative *C. virosa* useful for stomach disorder (Kothari & Moorthy, 1996).

Capparis cleghornii Dunn ex Gamble (*'Puravi'*) CAPPARACEAE

Large woody climbers, young branches fuscous or hoary pubescent. Leaves oblong or obovate, acute or shortly acuminate at apex, narrowed or cuneate at base, shining above, pale beneath. Flowers white, purple on ageing, in 6–10 flowered corymbs, at the end or on short axillary branches. Fruits globose, dark purple, umbonate. Seeds numerous.

Fl. & Fr.: August–October.

Distrib.: Dhankel, Ghatmatha, Mhavashi, Nav.

Parts used: Fruits are edible.

Additional Information:

- Fruits sold in local market for medicinal purposes.

Centella asiatica (L.) Urban (*'Gol Brahmi'*) APIACEAE (PLATE: VI-6)

Herbs; stem slender with elongated intenodes, prostrate, rooting at nodes. Leaves orbicular or reniform, broader than long, cordate at base. Flowers sessile, pink in fascicled, bracteate umbels. Fruits ovoid, rugose with persistent corolla crown, mericarps brown, laterally compressed.

Fl. & Fr.: February–August.

Distrib.: Common near marshy places**.** Avasari, Dicholi, Kondhavale, Navaja, Rammala, Zadoli.

Parts used: Leaves edible as vegetable and sold in local market.

Additional Information:

- Plant paste made into pills; 4–5 pills administered orally 3 times a day for 7 days for jaundice (Rajendran & Henry 1994).
- Whole plants along with *Hemidesmus indicus* roots useful for leucorrhoea (Bhandary & al., 1995).
- Whole plant useful for tuberculosis; leaves for blood dysentery, memory and, mental disorder, skin disease and as a tonic (Kothari & Moorthy, 1993; Singh & Sharma, 2002).
- The methanol extract of the whole plant is used for leprosy (Gupta & al., 2010).
- Leaves used as anti-diarrheal and anti-dysenteric (Karne, 2011).

Ceropegia jainii Ansari & Kulkarni (*'Kharatudi'*) ASCLEPIADACEAE (PLATE: XI-4)

Erect herbs, dwarf; Stems sparsely hairy. Leaves shortly petiolate. Linear-elliptic, hairy above, acute at apex and base. ciliate at margins. Flowers single; pedicels hairy; corolla inflated at base, narrowed in middle, expanding upwards, glabrous inside.

Fl. & Fr.: August–October.

Distrib.: Rare. Among grassy bed at Avasari, Kati plateau.

Parts used: Tuber edible.

Additional Information: Endemic (Singh & al., 2000).

Ceropegia santapaui Wadhwa & Ansari (*'Kharatudi'*) ASCLEPIADACEAE

Climbers; stems puberulous above, glabrous at age. Leaves petiolate, ovate-lanceolate, puberulous above, glabrous below, apex acuminate, base rounded, ciliolate at margins. Flowers greenish-purple in extra-axillary cymes; peduncles and pedicels hairy; corolla inflated at base, glabrous inside.

Fl. & Fr.: August–October.

Distrib.: Rare. Ghatmatha, Kumbarali ghat.

Parts used: Tuber edible.

Additional Information: Endemic (Singh & al., 2000).

Clausena indica (Dalz.) Oliver (*'Aambatgara'*) RUTACEAE (PLATE: V-4)

Shrubs or trees, leaflets alternate, ovate-oblong or lanceolate, alex obtuse, acute or acuminate, base oblique. Flowers white, berries subglobose, cream coloured, pulpy.

Fl. & Fr.: January–April.

Distrib.: Ambeghar, Dicholi, Zadoli.

Parts used: Fruits edible.

Cocculus hirsutus (L.) Theob. (*'Vasanvel'*) MENISPERMACEAE

Climbers, branches striate. Leaves ovate or oblong-ovate, softly pubescent or villosus on both surfaces, apex obtuse and mucronate, base truncate or subcordate. Male flowers: sepals 2-seriate, oblong-ovate; petals emarginated; Female flower's sepals and petals as in the male. Drupes laterally compressed, endocarp horse-shoe shaped.

Fl. & Fr.: November–January.

Distrib.: Common. Ambeghar, Dicholi, Rammala, Zadoli.

Parts used: Tender leaves used as vegetable.

Additional Information:

- Roots and leaves useful for eyes, fever, rheumatism, stomach and skin disorder and venereal diseases (Singh & Sharma, 2002).
- Seeds used to reduce the chances of fertility in women while leaves for conjunctivitis and piles. (Pawar & Patil, 2008).
- Spoonful extract of leaf is taken orally thrice in a day for three days to cure dysentery. About a cup of decoction of roots is mixed in cow milk and given twice a day for three days to cure hepatitis (Biradar & Ghorband 2010).
- The plant extract is given to remove worms in children (Patil & Biradar, 2011).

Commelina benghalensis L. (*'Kena'*) COMMELINACEAE

Herbs, stem dichotomously branched. Leaves sessile or shortly petiolate, ovate-oblong, unequal at base, pubescent, spathes 1–3 together, sessile or shortly peduncled. Flowers blue; sepals oblong, pubescent, petals oblong-orbicular. Capsules pyriform. Seeds oblong, pitted.

Fl. & Fr.: August–September.

Distrib.: Common. Avasari, Dhankel, Dicholi. Zadoli.

Parts used: Leaves used as vegetable.

Additional Information:

- Leaves and roots diarrhoea, fever, irritation by bristles of caterpillar, laxative, liver complaints refrigerant, scorpion bite, snake bite, sores, wounds (Pant & Samant, 2010).

- Leaf juice used in dysentery and paste applied for body swellings (Karne, 2011).

Crotalaria filipes Bth. var. **filipes** (*'Phataphati'*) FABACEAE (PLATE: X-5)

Herbs, prostrate, stem clothed with spreading hairs. Leaves sessile, ovate-oblong or ovate elliptic, obliquely cordate, apex acute or obtuse, silky hairy. Flowers yellow in leaf opposed or extra axillary racemes. Pod oblong, stalked.

Fl. & Fr.: November–February.

Distrib.: Common. Avasari, Dhankel, Dicholi, Ghatmatha, Kisarule, Rammala, Zadoli.

Parts used: Fruits used as a vegetable.

Additional Information: Endemic (Singh & al., 2000).

Crotalaria triquetra Dalz. (*'Ghagari'*) FABACEAE

Herbs, diffuse, branches 3–4 angled. Leaves elliptic-oblong, sparsely hairy. Flowers pale yellow, hairy, 2–3 in lax racemes. Pods oblong, 15–20 seeded.

Fl. & Fr.: October–November.

Distrib.: Occasional. Avasari, Ghatmatha, Koyna, Zadoli.

Parts used: Fruits used as a vegetable.

Cucumis melo L. (*'Meka'*) CUCURBITACEAE

Climber, stem slender, rigid hairy. Leaves as broad as long, shallowly 3–5 lobed, sub hirsute on both the sides, margins dentate. Flowers yellow. Fruits ellipsoid. Seeds oblong, white.

Fl. & Fr.: August–November.

Distrib.: Avasari, Goshatwadi, Kamargaon, Kisarule, Zadoli.

Parts used: Fruits are edible.

Additional Information:

Fruits also useful medicinally for abscess, eczema, as diuretic and refreshing (Singh & Sharma, 2002).

Curcuma zedoaria (Christm.) Rosc. (*'Kachora'*) ZINGIBERACEAE

Rhizomes pale yellowish-white, tubers white. Leaves oblong or narrowly oblong lanceolate, apex lanceolate, petiole shorter than the blade. Flowers yellow.

Fl. & Fr.: July–September.

Distrib.: Avasari, Dicholi, Zadoli.

Parts used: Rhizome used for the preparation of vegetable and chatani.

Additional Information:

- Rhizome also useful for jaundice (Singh & Sharma, 2002) and to obtain the yellow colour (Sinha & Ramesh Kumar, 2009).

Dimocarpus longan Lour. (*'Vamb'*) SAPINDACEAE

Trees. Leaves pinnate, leaflets 2–3 pairs, oblong lanceolate, coriaceous, base oblique, apex acuminate. Flowers dioecious axillary and terminal panicles. Fruits subglobose, reddish when ripe.

Fl. & Fr.: April.

Distrib.: Dicholi, Punavali, Zadoli ambeghar, Zadoli.

Parts used: Fruits edible.

Dioscorea alata L. (*'Ghorkand'*) DIOSCOREACEAE

Tubers large, roundish or oblong, white inside. Stems acutely angled or winged. Climbers. Leaves simple, opposite, subhastate-ovate, acuminate, mucronulate, usually 5-nerved. Flowers in spikes.

Fl. & Fr.: August.

Distrib.: Cultivated. Dicholi, Rammala, Zadoli.

Parts used: Tubers are cooked and eaten.

Dioscorea bulbifera L. ('*Karanda'*) DIOSCOREACEAE (PLATE: VI-1).

Climbers. Leaves broadly ovate-cordate, apex cuspidate, 7–10 nerved. Flowers in spikes. Capsule straw coloured. Seeds winged at base.

Fl. & Fr.: April.

Distrib.: Koyna, Navaja, Punavali, Zadoli, Zadoli ambeghar.

Parts used: Bulbils are cooked and eaten.

Additional Information:

- Juice of bulbils used for stomach ache (Bhosle & al., 2009).
- Tubers are used to extract alkaloid 'diosgenin' which is sex stimulant steroid (Thakur & al., 2011).

Dioscorea oppositifolia L. (*'Kadu Karanda'*) DIOSCOREACEAE

Tubers very long. Cylindrical; climbers. Leaves simple, elliptic-oblong or suborbicular, coriaceous. Inflorescence of axillary spikes. Flowers green.

Fl. & Fr.: May–January.

Distrib.: Navaja, Punavali, Rammala, Zadoli.

Parts used: Bulbils are cooked and eaten.

Additional Information:

- Tubers used medicinally for abdominal pain, boils, bone fracture, dysentery, piles and jaundice (Pant & Samant, 2010).
- Tuber powder applied on swellings, inflammatory, rheumatic arthritis and used as oral contraceptive (Karne, 2011).

Dioscorea pentaphylla L. (*'Shendvel'*) DIOSCOREACEAE

Large climbers. Leaflets variable, elliptic lanceolate, ovate or obovate, apex cuspidate, petiole rusty pubescent. Male flowers greenish-yellow in axillary panicles, female spikes rusty pubescent.

Fl. & Fr.: July–October.

Distrib.: Kisarule, Navaja, Punavali, Rammala, Rasati. Zadoli, Zadoli ambeghar.

Parts used: Bulbs, young shoots, buds, leaves and inflorescence used as vegetable and sold in the local market.

Additional Information:

Tubers used medicinally for asthma, cough, dropsy and rheumatism (Singh & Sharma, 2002). Cooked tubers are blood purifier (Bhosle & al., 2009).

Elaeocarpus glandulosus Wall. ex Merr. (*'Kasav'*) ELAEOCARPACEAE (PLATE: VI-5)

Trees. Leaves elliptic, apex acute-acuminate, base cuneate, margins crenate-serrate. Flowers white in racemes from the axil of the fallen leaves; petals fimbriate. Drupes oblong, narrowed at both ends, 2-seeded.

Fl. & Fr.: March–May.

Distrib.: Occasional. Shirshinge.

Parts used: Fruits edible.

Eleusine coracana (L.) Gaertn. (*'Nachani'*) POACEAE

Herbs. Leaves linear lanceolate, margin scabrous. Spikes 7–10, dense. Seeds globose, brownish red.

Fl. & Fr.: September–January.

Distrib.: Cultivated. Dicholi, Zadoli, Shirshinge, Punavali.

Parts used: Seeds / grains edible and sold in the local market.

Additional Information:

Seeds are used to obtain black colour for painting (Jha & Basak, 1994).

Embelia basaal (R. & S.) A. DC. (*Vavdungi*) MYRSINACEAE

Shrubs. Leaves broadly elliptic, gland dotted. Inflorescence of axillary rusty-puberulous racemes. Flowers greenish yellow. Fruit globose, apiculate with style, ripens red.

Fl. & Fr.: December–May.

Distrib.: Avasari, Dicholi, Katitek, Kondhavale, Punavali, Shirshinge, Zadoli.

Parts used: Fruits edible.

Additional Information:

Fruits are used as substitute for *E. ribes* for intestinal worms and sold in the local market.

Embelia drupacea (Dennst.) M. R. & S. M. Almeida (*'Vashingi'*) MYRSINACEAE (PLATE: V-6).

Extensive climbing shrubs; branches lenticellate, warted. Leaves elliptic oblong, coriaceous, punctuate on both the sides, apex obtuse or subacute. Flowers orange, in axils of fallen leaves. Fruit globose, reddish.

Fl. & Fr.: December–May.

Distrib.: Avasari, Dicholi, Punavali, Shirshinge, Zadoli.

Parts used: Fruits edible.

Flacourtia latifolia (Hook.f. & Thoms.) T. Cooke (*'Tambat'*) FLACOURTIACEAE

Trees deciduous, main stem armed at base, usually unarmed above. Leaves broadly elliptic, ovate or oblanceolate, coriaceous, base tapering apex acute or obtuse, margins coarsely crenate. Flowers greenish white in lax or in clustered racemes. Drupes globose, purplish red when ripe.

Fl. & Fr.: April–July.

Distrib.: Dicholi, Kisarule, Zadoli.

Parts used: Fruits edible.

Additional Information:

Endemic (Singh & al., 2000).

Flacourtia montana Grah. (*'Atak'*) FLACOURTIACEAE

Trees; stem thorny. Leaves ovate or broadly elliptic to oblong-elliptic, base acute or rounded, margins crenate, tomentose along midrib and nerves beneath. Flowers in densely pubescent, bracteate, fascicled racemes, unisexual. Berris globose, obtusely ribbed, reddish purple when ripe.

Fl. & Fr.: February–April.

Distrib.: Dicholi, Zadoli.

Parts used: Fruits edible.

Additional Information:

- Endemic (Singh & al., 2000).
- Leaves used as fodder.

- Medicinally fruits used for jaundice.

Garcinia indica (Du Petit-Thou.) Choisy (‘*Kokam’*) CLUSIACEAE

Trees, branches drooping. Leaves ovate-oblong, elliptic-lanceolate, red when young, acute or abruptly acuminate at apex, narrowed at base. Flowers axillary or terminal, solitary or fascicled. Berris globose, orange-pink when ripe. Seeds 5–8 compressed.

Fl. & Fr.: February–April.

Distrib.: Dicholi, Paytyachawada, Shirshinge, Zadoli.

Parts used: Fruits edible, sold in local market as spices, pickles and as cold drink etc.

Additional Information:

- Endemic (Singh & al., 2000).
- Medicinally plant is useful for cooling, dysentery and skin disease (Kothari & Rao, 1999; Singh & Sharma, 2002).

Garuga pinnata Roxb. (*‘Kakad’*) BURSERACEAE

Trees. Leaflets ovate or ovate lanceolate, apex acuminate, base oblique. Flowers yellow in much branched, axillary, tomentose panicles. Drupes greenish yellow, black when dry, irregularly globular. Seeds 1–5.

Fl. & Fr.: February–August.

Distrib.: Dicholi, Shirshinge, Zadoli.

Parts used: Fruits edible.

Additional Information:

- Leaves used as fodder.
- Fruits for indigestion, stem juice for conjunctivitis and leaf juice used for asthma (Chhetri, 1994). The fruits are also used to obtain black colour (Sinha & Ramesh Kumar, 2009).
- Fruits useful in asthma, leaves for opacity and stem for stomachache (Singh & Sharma, 2002).

Girardinia diversifolia (Link) Friis (*‘Aagya’*) URTICACEAE

Herbs, robust; stems and branches furrowed. Leaves ovate, entire or 3-lobed, margins coarsely serrate, pubescent. Flowers green, males in lower and females in upper axils. Fruiting cymes stout, densely clothed with slender stinging hairs. Achenes obliquely ovate, compressed.

Fl. & Fr.: September–February.

Distrib.: Common in waste places. Donichawada, Kisarule, Shirshinge, Zadoli.

Parts used: Young tender buds edible as vegetable.

Additional Information:

Roots used for Rabies and sexually transmitted diseases (Awas & Demissew, 2009).

Gnetum ula Roxb. Hort. (*'Ombali'*) GNEATECEAE (PLATE VI–4)

A lofty dioecious climber with dichotomous branches, bark thick, young shoots jointed and swollen at the insertion of the leaves. Leaves opposite, ovate-oblong or elliptic, obtusely acuminate, smooth and polished, base obtuse or very shortly cuneate. Flowers in stiff paniculate cymes. Fruit oileve shaped, drupaceous, reddish orange when ripe.

Fl. & Fr.: December–March.

Distrib.: Dastan, Dicholi, Shirshinge, Zadoli.

Parts used: Seeds are roasted and eaten.

Additional Information:

Seed oil used medicinally for rheumatism (Singh & Sharma, 2002).

Grewia nervosa (Lour.) Panigr. (*'Shilan'*) TILIACEAE

Shrubs. Leaves ovate-lanceolate, cordate or rounded at base, acuminate at apex. Flowers whitish, in axillary and terminal panicles. Drupes ripens black, glabrous or subglobose, wrinkled.

Fl. & Fr.: May–September.

Distrib.: Common. Dicholi, Rammala, Rasati, Shirshinge.

Parts used: Fruits edible.

Additional Information: Bark used for making fibers.

Hibiscus cannabinus L. (*'Ambadi'*) MALVACEAE

Shrub with prickly stems. Lower leaves cordate, roundish-ovate, upper leaves palmately 3–5 lobed, lobation up to the middle of the lamina, lobes narrow elliptic-lanceolate, acuminate, serrate. Flowers yellow with purple center, solitary, axillary or in racemes. Capsules ovoid, beaked, densely hairy.

Fl.: January–March.

Distrib.: Occasional. Goshatwadi, Rasati.

Parts used: Leaves edible as vegetable.

Additional Information:

- Bark used for making fibres.
- Leaves are laxative (Bhosle & al., 2009).

Hitchenia caulina (Grah.) Baker (*'Chavar'*) ZINGIBERACEAE

Rhizome with hanging ellipsoid tubers. Tubers white inside. Stem leafy. Leaves oblong lanceolate acuminate, narrowed at base, petioles sheathing at base. Flowers yellow in spikes. Bracts obovate, pinkish.

Fl. & Fr.: July–October.

Distrib.: Dicholi, Kisarule, Shirshinge, Zadoli, Zadoli Ambeghar.

Parts used: Rhizome used as vegetable.

Additional Information: Endemic (Singh & al., 2000).

Indigofera cassioides Rottl. ex DC. (*'Chimati'*) FABACEAE

Shrubs, erect, branches striate, glabrous or more or less hairy. Leaves imparipinnate; leaflets elliptic-oblong, base acute, apex rounded, apiculate, hairy. Flowers bright rosy-purple in axillary racemes. Pods turgid, cylindric. Seeds reddish-brown, ellipsoid.

Fl. & Fr.: November–April.

Distrib.: Common. Dicholi, Helwak, Kisarule, Zadoli.

Parts used: Flowers used as vegetable.

Additional Information:

- Leaves and roots used in stomach swellings (Kothari & Rao, 2002).
- Grounded flowers mixed with cup of goat milk taken for body vigour (Udayan & al., 2006).
- Flowers used as vegetable by Kondha, Poraja and Gadaba tribe of Orissa while bark used in post-partum care by Poraja tribe (Franco & Narasimhan, 2009).
- Seed powder mixed with wheat flour and made into Chapati. Every morning after exercise it is eaten for muscular strength (Salave & al., 2011).

Indigofera linifolia (L.) Retz. (*'Pandharphali'*) FABACEAE

Herbs, prostrate, branches silvery hairy. Leaves appressed hairy, sessile, base and apex acute. Flowers red, axillary, solitary or few in short racemes. Pods paniculate, silky hairy. Seeds globose, brownish-black.

Fl. & Fr.: June–October.

Distrib.: Commonly growing in rainy season on rocky hills. Avasari, Kati .

Parts used: Seeds nutritive edible as vegetable.

Additional Information:

Plants used in febrile eruptions and amenorrhea. Seeds are nutritive. (Qureshi & al., 2010).

Ipomoea aquatica Forssk. (*'Nalichi bhaji'*) CONVOLVULACEAE

Herbs, procumbent or floating rooting at nodes. Leaves elliptic oblong, base cordate or hastate, apex acuminate. Flowers purple in axillary, solitary or few flowered cymes. Capsules ovoid.

Fl. & Fr.: November–April.

Distrib.: Dicholi, Kisarule, Shirshinge.

Parts used: Leaves shoots and roots used as vegetable.

Ipomoea batatas (L.) Lam. (*'Ratali'*) CONVOLVULACEAE

Creeping perennial herbs with elongate, fusiform tuberous roots. Stem rooting at nodes. Leaves broadly ovate to orbicular in outline, angular or more often deeply 3–7 lobed, lobes ovate to linear oblong, glabrous or sparsely pubescent.

Fl. & Fr.: Rare–Irregular.

Distrib.: Cultivated around home. Dicholi, Rasati, Shirshinge.

Parts used: Tubers edible and leaves used as vegetable and sold in the local market.

Additional Information: It is fiber plant and used to tie the bundles of grasses etc.

Ixora brachiata Roxb. (*'Lokhandi'*) RUBIACEAE

Small trees, bark grey, smooth. Leaves opposite, shining, coriaceous, elliptic oblong, base attenuate, apex obtuse. Flowers white in shortly peduncled cymes. Fruits globose, purple black when ripe.

Fl. & Fr.: February–April.

Distrib.: Common. Dicholi, Donichawada, Kisarule, Shirshinge,

Parts used: Fruits edible.

Justicia diffusa Willd. (*'Tharmara'*) ACANHACEAE

Herbs. Leaves subsessile, oblong-lanceolate. Flowers white, blue or pink in terminal spikes, bracteates, calyx deeply divided, puberulous; corolla: upper lip oblong, emarginated, lower 3-lobed, capsule pubescent.

Fl. & Fr.: November–January.

Distrib.: Common. Avasari, Dicholi, Goshatwadi, Rammala, Zadoli.

Uses: Tender leaves are used as vegetables.

Lactuca remotiflora DC. (*'Patri'*) ASTERACEAE

Herbs. Radical leaves obovate, base cuneate, apex obtuse, cauline narrow, semi-amplexicaul. Heads pinkish, cylindrical. Involucral bracts linear, oblong, scarious. Achens oblong, ribbed.

Fl. & Fr.: July–September.

Distrib.: Common, growing as a weed in the field and waste places. Dicholi, Goshatwadi, Kisarule, Rammala, Shirshinge.

Parts used: Leaves used as vegetable.

Lagerstroemia parviflora Roxb. (*'Bondara'*) LYTHRACEAE

Trees. Leaves oblong-lanceolate, glabrous above, base cuneate, apex rounded, grayish-hairy beneath. Flowers white in terminal and axillary panicled cymes. Capsules ellipsoid, 3–4 valved.

Fl. & Fr.: January–April.

Distrib.: Frequent. Dicholi, Goshatwadi, Kisarule, Rammala, Shirshinge, Zadoli.

Parts used: Tender leaves used as vegetable.

Additional Information:

Gum edible; leaves as fodder and stem fibre used as cordage (Singh & Sharma, 2002).

Luffa cylindrica (L.) M. J. Roem. (*'Gosavale'*) CUCURBITACEAE

Climbers, branches 5-angled, twisted. Leaves orbicular, palmately 5-lobed, scabrous, tendrils 4-fid. Flowers yellow, male flowers in axillary racemes, female flowers solitary, axillary. Fruits cylindrical, green, striate.

Fl. & Fr.: October–December.

Distrib.: Cultivated as vegetable in the kitchen garden. Dicholi, Rammala, Shirshinge.

Parts used: Fruits used as vegetable.

Maesa indica (Roxb.) A. DC. (*'Ataki'*) MYRSINACEAE

Shrubs; Bark thin, lenticillate. Leaves elliptic-lanceolate to ovate oblong, pilose to completely glabrous, margin serrate or dentate, apex acute or acuminate. Flowers white in branched axillary raceme. Calyx campanulate, corolla rotate. Fruits globose, whitish.

Fl. & Fr.: November–June.

Distrib.: very common. Avasari, Dicholi, Khudupalewadi, Shirshinge, Vankusavade, Zadoli.

Parts used: Fruits edible.

Additional Information:

- The fruits are collected & sold to the agents as '*Vavdinga'*.
- Fruits used as vermifuge (Chhetri, 1994).
- Fruits also used as fish poison (Singh & Sharma, 2002).

Marsilea minuta L. MARSILEACEAE

Semiaquatic herbs; leaflets 4, entire, crenate-serrate. Sporocarps rounded, ribbed and bordered.

Distrib.: In Ponds and ditches. Nav.

Parts used: Leaves and Sprouts used as vegetable.

Additional Information: Dried stipes used for decorative purposes. Whole plant is medicinally valued (Kothari & Moorthy, 1993).

Morus alba L. (*'Tuti'*) MORACEAE

Trees. Young parts pubescent. Leaves ovate, membranous above, pubescent on nerves beneath, cordate at base, toothed along margins, entire or 3-lobed in upper half. Inflorescence of drooping, axillary catkins.

Fl. & Fr.: July–March.

Distrib.: Rammala, Rasati.

Parts used: Fruits edible.

Additional Information:

The leaves have emollient properties and reported to be good for the cleansing of the throat and as a cooling agent and also used as fodder for cattle. The fruits are used as a laxative and purgative. (Koche & al., 2008).

Murraya koenigii (L.) Spr. (*'Kadipatta'*) RUTACEAE

Trees; branches brownish, lenticelled. Leaflets oblong, lanceolate, base unequal. Flowers white in terminal cymes, fragrant. Berries blackish, apiculate.

Fl. & Fr.: February–April.

Distrib.: Common. Avasari, Dicholi, Khudupalewadi, Shirshinge, Zadoli, Zadoli ambeghar.

Parts used: Leaves used to flavor the curries and sold in the local market.

Additional Information:

Medicinally bark and leaves used for dysentery, stomach disorder and snakebite (Singh & Sharma, 2002).

Mussaenda glabrata (Hook.f.) Hutch. ex Gamble (*'Bhutkes'*) RUBIACEAE

Scandent shrubs; branches appressedly hairy. Leaves broadly elliptic, apex shortly acuminate, base tapering into a petiole. Flowers orange red in terminal and axillary cymes; one calyx lobe is modified into a creamy yellow, elliptic bract, acute at apex, base tapering into a claw. Corolla tube yellow. Berries green, subglobose or ovoid.

Fl. & Fr.: July–October.

Distrib.: Avasari, Dicholi, Ghatmatha, Kamargaon, Khudupalewadi, Navaja, Shirshinge, Zadoli.

Parts used: Leaves used as vegetable.

Additional Information: The plant is used medicinally for cold (Singh & Sharma, 2002).

Neolamarckia cadamba (Roxb.) Bosser (*'Kadamba'*) RUBIACEAE

Trees, young branches pubescent. Leaves elliptic-oblong, coriaceous, glabrous above, pubescent beneath. Flowers fragrant in solitary, terminal heads, pubescent. Fruits globose, yellow when ripe.

Fl. & Fr.: November–February.

Distrib.: Gokul, Zadoli.

Parts used: Fruits edible.

Additional Information:

- Stem bark boiled in water and bath is taken for body pain (Rajendran & Henry, 1994).
- Fruits useful for the dyspepsia (Draxe, 1997).
- Bark is astringent and used as tonic and leaves for stomatitis (Singh & Sharma, 2002).

Nothopegia castaneifolia (Roth) Ding Hou (*'Ambari'*) ANACARDIACEAE

Trees. Leaves elliptic oblong, coriaceous, apex acute or acuminate, base rounded, decurrent into the petiole. Inflorescence of axillary panicles. Flowers yellowish, calyx persistent. Drupes seated on enlarged torus, longitudinally striate, depressed-globose, dark purple, pulpy.

Fl. & Fr.: February–April.

Distrib.: Dicholi, Zadoli.

Parts used: Fruits edible.

Additional Information:

Latex used against muscle pains especially in rheumatism and arthritis (Yadav & Sardesai, 2002).

Oryza sativa L. (*'Bhat'*) POACEAE

Herbs, annual, erect, culms fistular. Leaves linear-lanceolate, minutely scaberulous on nerves above and along margins, glabrous below. Flowers in panicles, spikelets lanceolate, laterally compressed, cuneatly oblong, pale green. Caryopsis oblong red or dirty white.

Fl. & Fr.: August–November.

Distrib.: Common cereal, throughout the area.

Parts used: Seeds used as daily food and also sold in the local market.

Additional Information: White colour is obtained for painting (Jha & Basak, 1994).

Ougeinia oojeinensis (Roxb.) Hochr. (*'Tivas'*) FABACEAE

Trees. Terminal leaflet broadly elliptic or roundish, laterals obliquely ovate, cordate. Flowers many in fascicled racemes. Pods reticulately veined.

Fl. & Fr.: March–June.

Distrib.: Ambeghar, Dicholi, Zadoli.

Parts used: Flowers and pods edible and used as vegetable.

Additional Information:

- Aqueous extract of the root is given for menstrual disorder. Juice of the stem bark is dropped in the eyes for cataract. Stem bark juice along with butter milk is given for diarrhoea (Singh & Prakash, 1994).
- Bark used as fish poison (Singh & Sharma, 2002).

Oxalis corniculata var. **corniculata** L. (*'Ambavat, Ambushi'*) OXALIDACEAE

Perennial hairy herbs. Stem creeping and rooting at nodes. Branches erect or ascending. Leaves digitately 3-foliolate, leaflets sessile or subsessile, obcordate, membranous. Umbels 2–4 flowered on axillary peduncles. Flowers yellow. Capsules pubescent, oblong, narrowed at apex, 5-angled and beaked. Seeds ovoid transversely striate.

Fl. & Fr.: April–July.

Distrib.: Common weed on roadside and in moist places. Avasari, Ghatmatha Kisarule, Koyna, Rammala.

Parts used: Tender leaves are used as vegetable.

Additional Information:

- Leaves useful for dysentery and fever; leaves and seeds for scurvy (Singh & Sharma, 2002).
- Whole plant is astringent, vermifuge and antiseptic used in piles, anemia; leaves used in fever, dysentery, scurvy (Karne, 2011).

Panicum miliaceum L. (*'Vari'*) POACEAE

Annuals, tufted. Leaves linear. Panicles narrowly oblong or pyramidal. Spikelets ovoid or ovoid-lanceolate, acute or shortly acuminate. Grains white, ellipsoid to oblong.

Fl. & Fr.: October–December.

Distrib.: Cultivated. Avasari, Dicholi, Ghatmatha, Nav, Punavali, Zadoli.

Parts used: The grains are edible and sold in the local market.

Pimpinella adscendens Dalz. (*'Gajari'*) APIACEAE

Herbs, stems many, terete, smooth. Leaves radical, pinnate, leaflets 4–8 pairs, ovate or obovate, cuneate at base, serrate, the terminal leaflet is larger than lateral. Flowers white in terminal compound umbels. Fruits brown, ovoid, laterally compressed.

Fl. & Fr.: January–December.

Distrib.: Common in open grasslands, bank of the Koyna river and cultivated fields. Dhakka, Donichawada, Ghatmatha, Nav, Rammala, Vanzole.

Parts used: Leaves edible as vegetable.

Additional Information: Endemic (Singh & al., 2000).

Pueraria montana (Lour.) Merr. var. **montana** (*'Bhuikohala'*) FABACEAE

Herbs, twining, branches densely hairy. Leaflets broadly ovate, base oblique, apex mucronate, glabrous above, hairy beneath. Flowers reddish in dense axillary racemes. Pods compressed.

Fl. & Fr.: November.

Distrib.: Khudupalewadi.

Parts used: Tubers edible.

Seshagiria sahyadrica Ansari & Hemadri (*'Khobardoda'*) ASCLEPIADACEAE (PLATE: XI-5)

Twiners. Leaves ovate, acuminate or ovate-oblong, glandular on midrib on upper surface, 6–8 nerved, calyx lobes ovate, acute, ciliate on margins; corolla rotate, deeply divided, outer corona copular, fleshy, 5-lobed, inner corona of 5, dilated, fleshy, subglobose masses. Follicles ovate-lanceolate, warty. Seeds many ovoid, with white coma.

Fl. & Fr.: May–October.

Distrib.: Rare. Dicholi, Zadoli.

Parts used: Young Follicles are edible.

Additional Information:

- Endemic and rare (Singh & al., 2000; Gaikwad & Yadav, 2004).
- Dried stem emetic. Infusion of roots given to person bitten by rabid dogs. The twig stems and branches provide a strong fibre. (Kambale, 2007).

Smithia bigemina Dalz. (*'Nal'*) FABACEAE (PLATE: X-6)

Herbs; diffuse. Leaves abruptly pinnate, leaflets subsessile, oblanceolate, obtuse at apex, cuneate at base. Flowers yellow, 2–8 in copious axillary racemes, crowded towards tip. Pod jointed, tubercled.

Fl. & Fr.: August–February.

Distrib.: Common. Dicholi, Ghatmatha, Kondhavale, Manainagar, Navaja, Rammala, Zadoli.

Parts used: Tender leaves used as vegetable.

Additional Information: Endemic (Singh & al., 2000).

Solanum surattense Burm.f. (*'Kateringani'*) SOLANACEAE

Herbs, branches diffuse; spines yellow, glabrous, shining. Leaves elliptic, margins deeply lobed, spiny on the midrib and nerves. Flowers blue, calyx spiny. Berries yellow, blotched with green.

Fl. & Fr.: November–April.

Distrib.: Common. Kondhavale, Ghatmatha, Navaja, Rammala, Sangamnagar (Dhakka).

Parts used: Fruits are used as vegetable.

Additional Information:

Medicinally plant is useful for asthma, bronchitis, fever and toothache (Singh & Sharma, 2002).

Solena amplexicaulis (Lam.) Gandhi (*'Gomati'*) CUCURBITACEAE

Climbers; perennial; branches grooved. Leaves variable ovate-deltoid, ovate-oblong, cordate or hastate, apex acute or acuminate, base deeply cordate or sagittate. Flowers yellowish in axillary fascicles. Berries ellipsoid broadly ovoid, ribbed, red when ripe. Seeds 3–4 , turgid, marginate.

Fl. & Fr.: August–October.

Distrib.: Common. Dhankel, Dicholi, Ghatmatha, Kondhavale, Manainagar, Navaja, Rammala, Zadoli.

Parts used: Fruits edible.

Additional Information:

Tubers useful for spermatorrhoea, Decoction of rhizomes is used to treat diarrhoea (Khan & al., 2004).

Sonchus oleraceus L. (*'Mhatara'*) ASTERACEAE

Annual herbs, erect. Leaves oblanceolate, pinnatifid, base semi-amplexicaul, sessile. Heads yellow in terminal umbellate cymes. Achens ovoid.

Fl. & Fr.: January–November.

Distrib.: Common weed. Dicholi, Ghatmatha, Kondhavale, Manainagar, Navaja, Rammala.

Parts used: Tender shoots are edible.

Additional Information:

- Milky latex pounded with roots is applied on boils for Suppuration (Chhetri, 1994).
- Whole plant useful as vegetable (Singh & Sharma, 2002).
- Whole plant is used for cough, bronchitis, asthma. (Koche & al., 2008).
- Whole plant used for jaundice (Pant & Samant, 2010).

Vigna radiata (L.) R. Wilczek ('*Ranmug'*) FABACEAE

Climbers, hirsute. Leaflets ovate-rhomboid, appressed pubescent, apex acute, membranous hairy. Flowers yellow in racemes. Pods subcylindric, slightly curved, green, many seeded.

Fl. & Fr.: September–October.

Distrib: Ghanabi, Rasati, Vatole.

Parts used: Seeds edible.

Vigna sublobata (Roxb.) Babu and Sharma (*'Ran-udid'*) FABACEAE

Climbers. Stem clothed with reddish brown hairs. Leaflets ovate or ovate-rhomboid, terminal larger, appressed pubescent or setulose, apex acute, base rounded. Flowers yellow, 2–6 in axillary racemes. Pods cylindric, grey, hairy.

Fl. & Fr.: September–October.

Distrib.: Dhankel, Dicholi, Kondhavale, Manainagar, Navaja.

Parts used: Pods and seeds edible as vegetable.

Additional Information: Leaves used as fodder.

Vigna trilobata (L.) Verdc. var. **trilobata** (*'Mukani'*) FABACEAE

Herbs, pubescent, suberect or trailing. Leaflets middle lobes largest, spathulate, laterals spathulate with subacute or obtuse apex, hairy on both sides' Flowers yellow in sbucapitate racemes. Pod slightly curved, seeds brownish black.

Fl. & Fr.: July.

Distrib.: Dhankel, Kondhavale, Navaja, Zadoli.

Parts used: Seeds are edible.

Additional Information:

The plant used as fodder, medicines and soil amelioration (Kapoor & Mitra, 1994).

Zanthoxylum rhesta (Roxb.) DC. (*'Tisal'*) RUTACEAE

Trees; stems and branches prickly. Leaflets elliptic-oblong or ovate, apex acuminate. Flowers greenish yellow in terminal cymes. Cocci globose 1-seeded.

Fl. & Fr.: January–March.

Distrib.: Common. Avasari, Dastan, Nahimbe ambeghar, Rammala.

Uses: Fruits are used as spices.

Additional Information: Fruits are used for fishing.

(The list of Plants used for Food and referred in Medicinal plants etc. is given in Table No. 81.)

PLANTS USED FOR MISCELLANEOUS PURPOSES

Out of 406 plants studied, plants used for shelter (19), religious functions (18), agricultural implements (11), fodder (17), fibre (17) and other uses e.g. cosmetic purposes (4), preparation of dye (1), fish poison (9), preparation of household implements (3), as an insecticide (4), human decoration or ornaments (1), tonic to birds (1), restrict the snakes from entering the house (2), for earning income (46) and poisonous plants (7) are included in the category of miscellaneous use.

Plants used for shelter: The natives use 19 local plants belonging to 14 families for shelter. Out of the 13 Dicot families, Moraceae predominates with 3 plants, Combretaceae and Myrtaceae with 2 plants and other 10 families with 1 plant each. The only monocot family for shelter use is Poaceae with 2 plants (Ref. Table No. 82; Graph 9).

The walls of the huts are constructed with stems of *Carvia callosa* (PLATE XII–2). The wood of *Terminalia elliptica, Xylia xylocarpa, Gmelina arborea, Syzygium cumini, Artocarpus heterophyllus* is used in the construction of houses. Whereas 90% doorframes are prepared from the wood of *Heterophragma quadriloculare.* The grass *Setaria pumila* is used for thatching their huts.

Plants used in religious functions: For religious functions 18 plants from 14 Dicot and 2 Monocot families are used. Within Dicots Acanthaceae and Apocynaceae predominates with 2 species and other 12 families with 1 species each. Within Monocots Amaryllidaceae and Cannaceae represent 1 species each (Ref. Table No. 83; Graph 11).

Most of the flowers including *Canna indica*, *Thunbergia fragrans* and *Barleria cristata* are used to worship God, whereas flowers of *Tabernaemontana alternifolia* are used for decoration during the festival of Lord Ganesh. Leaves of *Crinum asiaticum* is used to remove the effect of an evil eye, whereas leaves of *Piper trichostachyon* are used to worship the Goddess after 5th day of child birth. Flowers of *Senecio dalzellii* offered to God for protection of their stored grains, while the flowers of *Erinocarpus nimmonii* are used in funeral procession. The root fibres of *Butea monosperma* (locally called *Chavar*) are tied on the horns of the bullocks, doors of the houses as well as on the traditional storage tanks of the grain during the festival of bullock *'Bailapola'* in the month of July to avoid evil spirit (Ref. Plate XII–6).

The tree of *Ficus racemosa* is worshiped on the occasion of marriage ceremony, while the garland during the marriage (*Mandavali*) is prepared of flowers of *Calotropis gigantea* (Rui) *and Plumeria rubra* (Chapha).

Plants used for preparation of agricultural implements: 11 Plants used for preparation of agricultural implements are covered within 9 Dicot families within which Combretaceae is dominant with 3 species and others with 1 species each (Ref. Table No. 84; Graph 10).

The wood of *Careya arborea, Cassia fistula, Dalbergia sissoo, Gmelina arborea, Grewia tiliaefolia, Holarrhena pubescens* etc. is used for the preparation of various agricultural implements.

Plants used as fodder: 17 plants used as fodder. These plants are distributed among 11 Dicot and 2 Monocot families. Within Dicots, Sterculiaceae and Tiliaceae predominates with 2 species and other 9 families with 1 species each. Within Monocots Poaceae predominates with 3 species and Smilacaceae with 1 species (Ref. Table No. 85; Graph 13).

Leaves of *Eriolaena, Xantolis tomentosa, Cynarospermum asperrimum, Ficus exasperata, Helicteres isora* etc. and grasses like *Cynodon dactylon, Eleusine indica* and *Themeda quadrivalvis* are used as fodder for cattle.

Plants used as fibre: 17 plants used for preparation of fibers. These plants are distributed among 8 Dicot & 1 monocot families. Within Dicots Malvaceae predominates with 4 species followed by Convolvulaceae, and Sterculiaceae with 3 species; Moraceae with 2 species; Thymelaceae, Tiliaceae and Ulmaceae with 1 species each. Whereas Agavaceae from Monocot represents 1 species (Ref. Table No. 86; Graph-12).

Plants used for other purposes: 78 plants used for other purposes *viz.* cosmetics (4), preparation of dye (1), fish poison (9), household instruments (3), insecticide (4), as an ornament (1), tonic to birds (1), poisonous plants (7), to restrict the snakes from entering the house (2) and for earning income (46). (Ref. Table No. 87–96; Graph 14).

PLANTS USED FOR SHELTER

Carvia callosa (Wall.) Bremek. (*'Karvi'*) ACANTHACEAE (PLATE: X-1)

Shrubs, stem warted, rigid. Leaves elliptic lanceolate, base rounded or tapering, apex acuminate, margins crenate, ciliate, sparsely hairy, bracts imbricate, green with pinkish tinge. Flowers bluish-purple in axillary, simple or branched spikes.

Fl. & Fr.: September–January.

Distrib.: Rasati, Avasari, Dhankel, Dicholi, Kondhavale, Zadoli.

Parts used: Stem is used for construction of hut as well as for fencing.

Additional Information:

- Endemic (Singh & al., 2000).
- The leaves are crushed and the juice is used to cure stomach ailments (Sonawane & al., 2012).

Setaria pumila (Poir.) R. & S. (*'Kolam'*) POACEAE

Herbs, tufted, culms many, spreading, ascending. Leaves linear. Spikelets ovoid or ellipsoid, suacute; lower glume less than half the length of the spikelets, orbicular; upper lemma rugose. Grains plano-convex.

Fl. & Fr.: August – September.

Distrib.: Cultivated. Dicholi, Shirshinge, Zadoli.

Uses: The grass is used for thatching the roof of huts.

Swietenia mahagoni (L.) Jacq. ('M*ahogani'*) MELIACEAE

Trees, bark rugose, grey-black. Leaves paripinate; leaflets 2 pairs, opposite, base very oblique, often subfalcate, lanceolate or ovate. Flowers greenish-yellow, in axillary, pendulous, panicles shorter than leaves. Capsules ovoid or ellipsoid. Seeds many, flat, winged.

Fls. & Fr.: March–May.

Distrib.: Koyna, Rasati.

Uses: Wood is used for the preparation of furniture.

Terminalia elliptica willd. (‘*Ain*’) COMBRETACEAE

Trees. Bark rough, deeply cracked. Leaves elliptic to elliptic lanceolate or elliptic oblong, ovate or obovate; Flowers yellowish brown or greenish yellow, in pubescent panicles. drupes obovoid-oblong or globose, dark brown or reddish.

Fl. & Fr.: May–September.

Distrib.: Common on road side from Rammala to Koyna. Ambavane, Ambeghar, Avasari, Dicholi, Kisarule, Zadoli.

Uses:

- Wood is used as fuel.
- Wood is also used for house construction & for the preparation of agricultural implements.

Additional Information: The bark used medicinally as diuretic and fruits for dyeing and tanning (Singh & Sharma, 2002). The bark is also used to obtain black colour (Sinha & Ramesh Kumar, 2009).

Xylia xylocarpa (Roxb.) Taub. (‘*Jambha’*) MIMOSACEAE

Trees; young branches tomentose. Leaves pinnately compound, pinnae 2; leaflets 3–5 pairs, oblong-elliptic or lanceolate, subcoriaceous, apex acute. Flowers creamy white; calyx and corolla pubescent. Pods oblong, falcate, flat, woody, and rusty tomentose, dehiscent. Seeds oblong, brown, smooth.

Fl. & Fr.: April–June.

Distrib.: Rare. Avasari, Katitek.

Uses: Wood used for construction of houses.

Additional Information: Fruits have oxytoxic effect on isolated rat uterus (Kapoor & Mitra, 1994).

(The list of Plants used for Shelter and referred in Medicinal, Food plants etc. is given in Table No. 82.)

PLANTS USED FOR RELIGIOUS PURPOSES

Canna indica L. (*‘Dev-kel’*) CANNACEAE

Root stock tuberous with many fibers. Leaves oblong or elliptic lanceolate, caudate, acuminate. Flaowers scarlet or yellow. Fruit erect, subspherical, obscurely 3-lobed.

Fl. & Fr.: Throught the year.

Distrib.: Planted near temple and houses. Ambeghar, Avasari, Dicholi.

Uses: Flowers are used to worship the god.

Crinum asiaticum L. (*'Nagdouna'*) AMARYLLIDACEAE

Bulbs narrowed in to a neck. Leaves thin, linear lanceolate, shortly acuminate, with a sheathing base. Margins smooth. Flowers white, fragrant, in umbels.

Fl. &Fr.: May–August.

Distrib.: Monsoon herb along hill slopes. Avasari, Kondhavale, Dicholi, Zadoli.

Uses: Leaves are used to remove the effect of an evil eye.

Piper trichostachyon (Miq.) C. B. Cl. (*'Pachvel'*) PIPERACEAE

Woody climbers, rotting at nodes. Leaves elliptic-lanceolate, shining and dark green above, pale beneath, apex acuminate. Flowers pale green, in pubescent or downy spikes. Berries globose, yellow when ripe.

Fl. &Fr.: April–September.

Distrib.: Common. Climbing on tree trunks. Dicholi, Shirshinge, Zadoli.

Uses: The leaves are worshiped to the God, on the 5th day of the child birth & on the occasion of festivals.

Additional Information:

- Endemic (Singh & al., 2000).
- Fruits used for cough, febrifuge and as spices (Singh & Sharma, 2002).

Senecio dalzellii C. B. Cl. (*'Sonaki'*) ASTERACEAE

Herbs. Leaves sessile or lower shortly petioled, coriaceous, scabrid above, wooly beneath, margins recurved, linear oblong or linear lanceolate. Heads yellow in dichotomously branched corymbs. Pappus biseriate. Achens scabrid with short hairs.

Fl. &Fr.: November–December.

Distrib.: Avasari, Dicholi, Ghanabi, Kondhavale, Zadoli.

Uses: Flowers are worshiped to god before storing of harvested grains.

Additional Information: Endemic (Singh & al., 2000).

Tabernaemontana alternifolia (Roxb.) Nicols. & Suresh (*'Aatavada, Nagkuda'*) APOCYNACEAE

Shrubs or small trees. Leaves oblong to oblong-lanceolate, base acute, apex acuminate. Flowers white, in many flowered, peduncled cymes. Follicles twin, subsessile, boat shaped with curved beak, yellow when ripe. Seeds embedded in red pulp.

Fl. & Fr.: February–September.

Distrib.: Avasari, Dicholi, Goshatwadi, Khudupalewadi, Rammala.

Uses: Yellow fruits are very beautiful used by to worship the god as well as for ornamental purposes on the festival of 'Gouri- Ganapati'.

Additional Information:

- Endemic (Singh & al., 2000).
- Milky juice used for diseases of eye, Wood refrigerant, Root acrid, bitter, used as local anodyne & chewed for relief on tooth ache (Chopra & al., 1956).

Thunbergia fragrans Roxb. (*'Daheli'*) THUNBERGIACEAE

Twiners, slender, herbaceous. Leaves opposite, ovate-lanceolate to oblong, deltoid ovate, base subcordate, hastate or truncate, apex obtuse or subacute, margins subentire-sinuate. Flowers white, solitary or paired, bracts 2, leafy; bracteoles ovate-lanceolate, acute. Capsules with long beak, 2-valved, Seeds ovoid, rugose.

Fl. & Fr.: August–December.

Distrib.: Common. Avasari, Katitek, Rammala, Navaja, Shirshinge.

Uses: Flowers used to worship the god.

(The list of Plants used for Religious purposes and referred in Medicinal, food plants etc. is given in Table No. 83.)

PLANTS USED FOR AGRICULTURAL IMPLEMENTS

The list of Plants used for preparation of Agricultural implements and referred in Medicinal, Food plants etc. is given in Table No. 84.

PLANTS USED AS FODDER

Eleusine indica (L.) Gaertn. (*'Mahar nachani'*) POACEAE

Herbs, erect, tufted. Leaves linear, flat. Culms compressed; spikes 2–7 or more, spikelets ovoid or oblong, green. Grains ovoid, oblong, globose, brown, rugose.

Fl. & Fr.: July–February.

Distrib.: Common in cultivated fields and waste places. Goshatwadi, Rammala, Vajegaon.

Additional Information: Root juice used for jaundice (Chhetri, 1994).

Eriolaena quinquelocularis (Wight & Arn.) Wight (*'Bothi'*) STERCULIACEAE

Small trees, bark grey-white. Leaves orbicular, stellate hairy above, softly tomentose beneath, apex acuminate, base cordate. Flowers yellow, axillary, solitary or 1–3 together in short racemes. Capsules woody, pointed, 5–10 valved.

Fl. & Fr.: May–July.

Distrib.: Kolane, Kusavade, Male, Shirshinge, Zadoli.

Additional Information:

- Stem bark used as fibre.
- Endemic (Singh & al., 2000).

Indigofera dalzellii T. Cooke FABACEAE (PLATE: XI-6)

Herbs, prostrate. Leaves elliptic-oblong, base acute, apex mucronate, glabrous above, hairy beneath. Flowers pink in axillary racemes. Pods linear, tetragonous, scabrous, beaked.

Fl. &Fr.: August–December.

Distrib.: Frequent on rocky hills. Avasari, Kati.

Additional Information: Endemic (Singh et al., 2000).

Ipomoea cairica (L.) Sweet (*'Garvel'*) CONVOLVULACEAE

Twining herbs, stems terete, smooth, glabrous. Leaves ovate or orbicular, cordate at base, palmately divided into 5–7 lobes. Lobes ovate, lanceolate or elliptic, acuminate or mucronate. Flowers axillary, 1-few flowered cymes; purple or pale pink. Capsule subglobose, 2-celled, 4-valved.

Fl. & Fr.: May–July.

Distrib.: Common. Growing on hedges, walls. Dastan, Koyna, Rammala, Rasati.

Themeda quadrivalvis (L.) O. Ktze. (*'Bhatya'*) POACEAE

Herbs, erect or ascending. Leaves linear acute, margins scabrid, panicles dense, spathes linear, sparsely hairy, involucral spikelets linear-lanceolate, pedicelled spikelts narrow, sessile spikelets brown.

Fl. & Fr.: October–November.

Distrib.: Common annual near cultivated field. Avasari, Dicholi, Navaja, Shirshinge, Zadoli.

Xantolis tomentosa (Roxb.) Raf. (*'Kumbhal'*) SAPOTACEAE

Trees; young branches tomentose, twigs spiny. Leaves elliptic or elliptic-obovate, subcoriaceous, base acute, apex rounded or subacute, tomentose when young. Flowers white, small in axillary clusters. Berries ovoid, yellowish-green, pubescent when young.

Fl. & Fr.: September–December.

Distrib.: Avasari, Dicholi. Shirshinge.

(The list of Plants used as Fodder and which are referred in Medicinal, Food plants etc. is given in Table No. 85.)

PLANTS USED AS FIBRE

Argyreia hookeri C.B. Cl. (*'Ranratale'*) CONVOLVULACEAE

Twiners robust; stem strigose. Leaves broadly ovate to orbicular, shortly acuminate or mucronate, base shallowly cordate to truncate, glabrous, scarcely hair above, sparsely hairy beneath, densely on the nerves. Inflorescence of many flowered cymes;

flowers pinkish-purple with deep purple throat with bands hairy outside. Berries succulent, 4-celled, globose. Seeds brown.

Fl. &Fr.: July–February.

Distrib.: Avasari, Dicholi, Ghatmatha, Rammala, Shirshinge, Zadoli.

Parts used: Stem used to tie the bundles of grasses, fire woods etc.

Ficus amplissima J.E. Sm. (*'Piparan'*) MORACEAE

Well branched tree, main trunk gregarious, often marked with vertical clefts, bark smooth, light coloured, pale green, whitish or greyish. Leaves ovate or ovate-lanceolate, bright green shining above, base rounded, apex acute or cuspidate, entire along margins, 3-nerved, membranous. Figs axillary, sessile, globose, in pairs.

Receptacles: April–September.

Distrib.: Dicholi, Shirshinge, Zadoli.

Parts used: Bark.

Kydia calycina Roxb. (*'Varang'*) MALVACEAE

Moderate sized trees, young branches tomentose. Leaves 3-lobed, palminerved. Flowers white in panicles, polygamous, epicalyx segments 4–6, connate below, persistent, stellate pubescent. Capsules 3-lobed, globose.

Fl. &Fr.: September–November.

Distrib.: Avasari, Zadoli.

Parts used: Bark.

Additional Information: Leaves useful for inflammation, increases saliva secretion, lumbago and rheumatic pains (Singh & Sharma, 2002).

Sterculia guttata Roxb. ex DC. (*'Goldada'*) STERCULIACEAE

Trees; bark slightly cracked, Leaves ovate-oblong, base truncate, apex acuminate, glabrous above, stellate pubescent on nerves beneath. Flowers reddish in terminal racemes. Follicles bright red or orange when ripe, obovoid.

Fl. & Fr.: December–February.

Distrib.: Dicholi, Shirshinge tower, Zadoli.

Parts used: Bark used for the preparation of fibre.

Additional Information: Seeds are edible (Binu, 2010).

Trema orientalis (L.) Bl. (*'Ghol'*) ULMACEAE

Trees, bark ash coloured, Leaves ovate, base unequally cordate, apex acuminate, margins serrulate, canescent beneath, scabrid above. Flowers greenish yellow, unisexual in axillary, pubescent cymes. Drupes ovoid, orange yellow when young, blackish when ripe.

Fl. &Fr.: April–August.

Distrib.: Common. Goshatwadi, Rammala, Rasati, Shirshinge.

Parts used: Bark yield fibre, which is used for tying bundles of grasses.

Additional Information: Bark yield strong fibres used for tightening the fences of agricultural field. Wood is light and used in construction of platformin local houses (Tag and Das, 2004).

Urena lobata L. ssp. **lobata** (*'Jangali bhendi'*) MALVACEAE

Undershrubs. Leaves ovate to orbicular, entire, angular or shallowly lobed, stellate hairy with a gland at the base of the midrib beneath. Flowers pink in axillary clusters. Capsules pubescent, spiny, spines with two curved bristles.

Fl. &Fr.: November–December.

Distrib: Kisarule, Zadoli.

Parts used: Bark is used as fibre.

Additional Information:

- Roots are diuretic and also useful for rheumatic pains (Kothari & Rao, 1999).
- Whole plant boiled in sesame oil and applied on rheumatic pains (Upadhye et al., 1994).

Urena lobata L. ssp. **sinuata** (L.) Bors. (*'Jangali bhendi'*) MALVACEAE

Undershrubs. Leaves ovate to orbicular, entire, deeply lobed, stellate hairy with a gland at the base of the midrib beneath. Flowers pink in axillary clusters. Capsules globose pubescent covered with hooked spines.

Fl. &Fr.: October–February.

Distrib.: Kisarule, Rammala, Zadoli.

Parts used: Bark.

(The list of Plants used for Fibre and which are referred in Medicinal, Food plants etc. is given in Table No. 86.)

PLANTS WITH OTHER USES

Ammannia baccifera L. ssp. **baccifera** (*'Bharjambul, Aagya'*) LYTHRACEAE

Erect annual herbs; branches quadrangular. Leaves opposite, sessile, linear-oblong or lanceolate, base attenuate-cuneate. Flowers reddish, in axillary clusters forming whorls. Capsules globose, red.

Fl. & Fr.: January–March.

Distrib.: In moist places and rice fields. Kondhavale, Kusavade, Male.

Uses: Whole plant used as fish poison.

Anamirta cocculus (L.) Wight and Arn. (*'Vatoliyel'*) MENISPERMACEAE

Dioecious climber, bark glabrous, ash coloured, vertically furrowed. Leaves broadly ovate, dark green above, pale beneath, apex obtuse, base subacute; petioles swollen at base and apex. Flowers pale greenish yellow on old branches. Drupes white turning black at maturity.

Fl. & Fr.: December–March.

Distrib.: Dicholi, Shirshinge, Ghanabi.

Uses: Fruits poisonous used for fishing.

Scutia myrtina (Burm.f.) Kurz var. **myrtina** (*'Chimati'*) RHAMNACEAE

Shrubs, straggling or occasionally Scandent. Leaves sub-opposite, obovate – orbicular, base cuneate, apex obtuse, margins entire. Flowers green in axillary fascicles. Drupes globose.

Fl. & Fr.: February–April.

Distrib.: Ambeghar, Dicholi, Shirshinge, Zadoli.

Uses: Leaves and fruits used as fish poison.

Additional Information:

- Roots used for backache and chest pain (Phanuel & al., 2010).
- Fruits rarely eaten; wood used for making tools, handles (Kadavul & Dixit, 2009).
- Among islanders of Indian Ocean leaves used for fish poison; Roots for diarrhoea, dysentery and as tonic (Jain & Srivastava, 2005).

Duabanga grandiflora (Roxb. ex DC.) Walp. SONNERATIACEAE

Trees, branches pendent. Leaves oblong, acute. Flowers white in large, terminal panicles. Capsules globose, 4-valved.

Fl. &Fr.: January–April.

Distrib.: On the way to Koyna dam. Koynanagar.

Uses: Wood used as timber

Additional Information:

- An attractive plant grown as an ornamental tree; also found as an escape.
- In Nepal, the bark is used for fishing (Joshi and Joshi, 2006).
- In Bangladesh, stem and root juice is used for stomach ache (Biswas et al., 2010).

(The list of Plants with other uses and which are already referred in Medicinal, Food plants etc. is given in Table No. 87 to 96.)

DISCUSSIONS AND CONCLUSIONS

The Ethnobotanical studies of Koyna area including Ghats, Valley, Sanctuary and surrounding 50 villages has been done from 1997–2012.

This study has lead to 1. Some taxonomic conclusions; 2. Comparative study with similar area has revealed some ethnobotanical conclusions and 3. Ultimately it has open up some new vistas (distant or extensive views) in front of us.

Ethno-taxonomy: In this thesis *c.* 406 plants have been studied. Out of which for human medicines (300), veterinary medicines (23), food (137), Shelter (19), agricultural implements (11), religious functions (18), fodder (17), fibre (17) and miscellaneous purposes (78) plants are used (Refer Graph 1 and following table).

Sl. No.	Plants Used for (Number of Plants)	Dominant families	
		Monocot (Number of Plants)	Dicot (Number of Plants)
1	Medicine (300)	Liliaceae (6) Poaceae (6) Zingiberaceae (6)	Fabaceae (21) Euphorbiaceae (18)
2	Veterinary medicine (23)	Araceae (1) Musaceae (1) Smilacaceae (1)	Euphorbiaceae (4)
3	Food (137)	Dioscoreaceae (4) Poaceae (3) Zingiberaceae (3)	Fabaceae (16)
4	Shelter (19)	Poaceae (2)	Moraceae (3)
5	Agricultural implements (11)	---	Combretaceae (3)
6	Religious functions (18)	Amaryllidaceae (1) Cannaceae (1)	Acanthaceae (2) Apocynaceae (2)
7	Fodder (17)	Poaceae (3)	Sterculiaceae (2) Tiliaceae (2)
8	Fibre (17)	Agavaceae (1)	Malvaceae (4)

The 300 medicinal plants are distributed among 92 families. Among them Dicot ones are 81 and monocot ones are 11 (Ref. Graph 2). In these 92 families, Fabaceae (21 plants) and Euphorbiaceae (18 plants) of dicots while Liliaceae, Poaceae and Zingiberaceae

of monocots are dominant with maximum 6 plants each. (Ref. Graph_3). These 300 medicinal plants are used medicinally for various ailments (Ref. Table_No. 1–79; Graph 4) like Abortion (1), Abscess (15), Acidity (3), Antidote for alcohol (1), Ascites (1), Asthma (11), Bone fracture (11), Bronchitis (2), Bright's disease (inflammation of kidneys) (2), Burns (9), Chicken pox (3), Common cold (5), Conjunctivitis (5), Constipation (12), Contusion (6), Corn (4), Cracks in feet (1), Diphtheria (4), Cough (20), Dandruff (2), Diabetes (4), Excess body heat (16), Dysentery (34), Dyslexia (1), Dyspepsia (5), Epilepsy (2), Fever (30), Fever in infants (1), Dhobi feet disease ((Fungal infection in between fingers) (2), Gonorrhoea (2), Guinea worm (2), Hair problems (4), Headache (8), Herpes zoster (2), Induce vomiting (2), Indigestion (7), Insomnia (1), Internal bleeding (1), Jaundice (10), Intestinal worms (13), kidney stone (7), Joint pain (36), Lactation (4), leprosy (1), Leucoderma (3), liver disease (1), Measles (5), Menstrual problem (7), Migraine (2), Mouth ulcer (10), As a nerve tonic (1), obesity (1), Opacity (6), Otitis (2), Psoriasis (2), Piles (20), Pneumonia (7), for pregnant women (9), Prolapsed uterus (1), Pyorrhea (1), Red discharge (3), Rickets (3), Ringworms (5), Scabies (18), Antidote for Scorpion sting (10), Sexual strength (6), Skin infections (51), Antidote for Snake bite (16), Stomach ache (19), Swelling (23), Throat infection (2), Toothache (16), Tuberculosis (2), Urinary problems (11), Vomiting (5), Weakness (2), White discharge (28), Women specific diseases (43), Wounds (48) etc.

The veterinary medicines are covered with 23 plants belonging to 18 families. Out of which, 15 families belong to dicots and 3 families from monocots. Within dicots Euphorbiaceae is dominant with 4 plants and in monocot families Araceae, Musaceae and Smilacaceae with 1 plant each (Ref. Table No. 80; Graph 5).

There are 137 food plants covering 57 families. Out of which, 51 families are of dicots and 6 families are of monocots (Ref. Graph 6). Within dicots again Fabaceae (16 plants) and within monocots Dioscoreaceae (4 plants) are important families (Ref. Graph 7). The edible plant parts includes Bark (1), Bulbils (2), Bulbs (2), Flowers (7), Fruits (61), Inflorescence (1), Leaves (7), Receptacles (4), Rhizome (5), Seeds (19) Thalamus (1), Tubers (4), Young buds (3), Young fruits (5), Young leaves (29), Young shoots (1) etc. (Ref. Table No. 81 and Graph No. 8).

Shelter plants (19) are covered within 14 families. Out of the 13 Dicot families, Moraceae predominates with 3 plants. The only monocot family used for shelter is Poaceae with 2 plants (Ref. Table No. 82; Graph 9).

Plants used for Agricultural implements are 11 covered within 9 Dicot families where Combretaceae is dominant with 3 plants (Ref. Table No. 84; Graph 10).

For religious use of plants, 14 Dicots and 2 Monocots families are used. Within Dicot families Acanthaceae and Apocynaceae predominates with 2 plants while within Monocot families Amaryllidaceae and Cannaceae are equally important with 1 plant each (Ref. Table No. 83; Graph 11).

For fibre yielding plants 8 Dicots and 1 Monocot family members are used. Within Dicots, Malvaceae predominates with 4 plants and Agavaceae is the only monocot family with 1 plant (Ref. Table No. 86; Graph 12).

For fodder plants, 11 Dicot and 2 Monocot families are useful. Within Dicots, Sterculiaceae and Tiliaceae with 2 plants each and within Monocots, Poaceae predominates with 3 plants (Ref. Table No. 85; Graph 13).

For other purposes 78 plants used. Out of these for cosmetics (4), preparation of dye (1), fish poison (9), household instruments (3), insecticide (4), as an ornament (1), tonic to birds (1), poisonous plants (7), to restrict the snakes in entering into the house (2) and for income generation (46) etc. (Ref. Table No. 87–96; Graph 14).

The above study therefore reveals that most economical protection needing plants are of family Fabaceae, Euphorbiaceae, Malvaceae, Moraceae, Combretaceae, Acanthaceae, Apocynaceae and Sterculiaceae within Dicots. Whereas within Monocots Poaceae, Zingiberaceae, Dioscoreaceae, Araceae, Musaceae, Smilacaceae Amaryllidaceae, Cannaceae and Agavaceae are important.

Survey comparisons: For comparison with limited number of medicinal plants reported from Dhom Balakawadi catchment area of this Satara district (Kothari & Shirodkar, 2006) are taken for consideration.

Botanical Name	**Uses in Dhom Balakawadi catchment area**	**Uses in Koyna area**
Bombax ceiba	Floral buds-Colitis. Fruits-Painkiller, snakebite.	Young buds edible as vegetable. Roots- aphrodisiac. Bark powder- leucorrhoea. Paste of spines- pimples.
Butea monosperma	Leaves, Flowers & Seeds extract-contraceptive. Stem bark-astringent used in piles. Flowers-Menstrual disorders.	Root fibre in religious purposes. Leaves used as food plates. Flowers in urination & burning during urination.
Memecylon umbellatum	Roots-Excessive menstrual discharge. Leaves-cooling, astringent used in leucorrhoea & gonorhoea.	Leaves-as antidote for snakebite, skin disease. Wood- for house construction & agricultural implements. Fruits- edible.
Semecarpus anacardium	Fruits skin disease, dysentery, loss of appetite, urinary discharge. Fruit oil-rheumatism.	Fruit oil- joint pain.
Lobelia nicotianaefolia	Whole plant as an antiseptic and insecticide.	Roots- opacity Whole plant- poisonous used as an insecticide. In veterinary medicines for foot rot disease and to control the lice in cattle.

Colebrookea oppositifolia	Leaves- wounds and bruises Roots- epilepsy	Leaves- wound, abscess and piles. Root bark-antidote for snakebite, Roots- epilepsy.

The comparison of same plants in similar area shows differences as under:

- Different parts are used by Vaidus at different localities. This is possibly because of specialized heritage of given area. It also indicates lack of communication and secrecy within nearby tribes.
- Different parts used for different ailments. This indicates that original spectrum of the plants or medicinal ingredients are wide and have therefore large coverage for disease.

New Vistas: It can be summarized from the work of this thesis that several new fields can be opened up for ethnobotany in some areas.

- There are some closed pockets still available in Sahyadri range (Western Ghats) which have possible sources of untapped virgin areas with potential ethnic uses.
- These areas form a vast field for future ethnic research in medicine, food, fibre, shelter needs. For medicine purpose even sponsorships from pharmaceutical companies can be tapped with proper approach.
- Some endemic plants like *Carvia, Erinocarpus* (Deshpande & al., 1993) in these area are being affected by some biotic (illicit cuttings, plant collectors) and abiotic (fire, dam construction) factors. These plants no doubt need strict protection, conscious appraisal trainings for domestication, cultivation. It must be done without inducing any changes in their original virtues say by tissue culture etc.

Environmental impact: The Koyna region is affected environmentally by biotic and abiotic factors as under-

i) Biotic factors: Construction of Dam and windmill, grazing, illicit cuttings, over exploitation of valuable medicinal plants for commercial purposes, tourists and tourist development etc. are the major biotic factors in the area.

In 1962, a dam is constructed on the Koyna River which is one of the largest dams in the Western Ghats. However, unlike other dams it has been constructed mainly for hydro-electric purposes. Due to the construction of dam, 98 villages submerged in the Koyna valley from Mahabaleshwar to the dam site at Koynanagar (about 86 km.). The displacement caused due to Koyna dam was the biggest of its kind in Maharashtra.

ii) Abiotic factors: earthquake, high rainfall and landslides are the major abiotic factors in the area. Koynanager was the center of a massive earthquake in 1967. It is very high rainfall area (around 6000 mm & above), which brings out flood and causes landslides in the area and its vicinity.

Conservation (*In-situ* and *Ex-situ*)

Conservation is a landscape level phenomenon, where mosaics of use patterns enable biodiversity to be maintained over a wide regional space. According to Alcorn (1996) the term conservation to mean maintenance of viable populations of native

species representing wide genetic diversity, local habitats and ecosystems. India harbours over 45,000 species of plants including 17, 500 Angiosperms. Based on uses Indian flora comprises about 4000 medicinal plants, 3000 fruit plants, 700 cultural & religious plants, 500 fibrous species, 400 fodder, 300 insecticides, 300 species for Gums & resins & 100 Aromatic plants (Karthikeyan & Mudgal, 1995).

To save the plants from all above cited threats, Govt. of India has taken a number of steps such as ban over export of commercial plants like *Nothapodytes nimmoniana* (J. Grah.) Mabb., *Rauvolfia serpentina* Bth. ex Kurz and beautiful orchids under Convention on International Trade in Endangered Species of Wild Fauna & Flora (CITES). Certain areas in India are declared as Biosphere reserves (14), National parks (89) and Sanctuaries (489) to protect plants & animals from adverse biotic effects. In Maharashtra there are 5 National parks (Area 1955.83 sq. km.) and 35 Wildlife Sanctuaries (Area 14747.84 sq. km. including 423.55 sq. km. area of Koyna Wildlife Sanctuary) (Singh & Singh, 2002; Badave & Kothari, 2004).

For conservation of Medicinal Plants in Koyna region following methodology is adopted by self through NGO Shramjivi Janata Sahayyak Mandal, Rammala (Koyna) (Plate XV).

Documentation: The medicinal plants in the form of herbarium sheets, slides & the manual and the knowledge of 60 traditional practitioners (Vaidu) are documented at Rammala (Koyna).

Organization of awareness camps & village programmes: For awareness regarding conservation, cultivation, propagation and use of medicinal plants & traditional knowledge the camps and exhibitions of medicinal plants were organized at Rammala (Koyna) as well as in the meetings of community based organizations. The women as village health workers (VHWs) were selected and trained and supplied with herbal first-aid kits for providing health service at village level. The villagers were provided with trainings and seedlings for promotion and establishment of kitchen herbal gardens (KHGs) at village level.

***Ex-situ* conservation:** The major facilities for *ex-situ* conservation are botanical gardens, field gene banks, cryobanks, tissue culture, repositories etc.

In India, there are 150 organized botanic gardens, of which Central or State Governments manage 33 gardens; 70 gardens are in public domains and 40 gardens run by Universities (Chakraverty & Mukhopadhyay, 1990).

In present study for *ex-situ* conservation, the activities like Seed collection, nursery preparation and establishment of demonstrative garden at Rammala (Koyna) are carried out. Along with this, a few endemic and medicinal plants e.g. *Cajanus lineatus, Moullava spicata* introduced in botanical garden of BSI, WC, Pune and some medicinal plants like *Acorus calamus, Abrus precatorius, Bacopa monnieri, Centella asiatica, Cymbopogon citratus, Spilanthus calva* etc. are introduced in the botanical garden of University of Pune.

Organization of training programme: Trainings programmes for eco-friendly collection of raw materials and sustainable harvesting of medicinal plants, primary

processing and preparation of simple home remedies were organized for village health workers, traditional healers and raw material collectors.

Preparation of awareness material: The awareness material in the form of pamphlets containing information on medicinal plants and uses in simple local language (60 units), Home remedies on primary health conditions (13 Units) and manual for use of Kitchen Herbal Garden plants were prepared for awareness generation among local people for conservation of medicinal plants.

Enterprise development (Co-operative Herbal Processing unit): The raw material in the form of fruits, flowers, leaves, roots etc. is collected through the trained Women Self Help Groups (SHG), traditional practitioners and Co-operative members. It is dried and primarily processed at village level and then brought into the processing unit. 25 different types of fresh and pure herbal products in the form of powder, oil, granules ('*Kalpa*') are manufactured (Ref. Table No. 98; Plate XIII) under the brand name 'Koyna Herbals' by obtaining FDA (Food & Drug Administration) license Number PD/Ayu-109. The marketing of the products is made at local level through self-outlets, supply to Ayurvedic practitioners, Ayurved College & hospitals, organization and participation in exhibitions, retail shops & bazzars, appointing distributors etc. Thus Ethnobotany is useful to generate employment (See Plate XVI).

CONCLUSIONS: It is estimated that nearly 25 genera and 694 taxa of plants which are endemic to India are occurring in Maharashtra (Singh & al., 2000). Out of which *c.* 47 endemic taxa are found in Koyna region (Ref. Table No. 97). Among them a few (5) taxa *viz. Ceropegia jainii, Ceropegia santapaui, Chlorophytum glaucoides, Frerea indica, Hitchenia caulina* occur only in Maharashtra including Koyna.

In India out of the 17000 species of higher plants near 1256 species are threatened. Nearly 251 species are under varying degrees of threat in Maharashtra (Singh & al., 2000). Out of the 408 plants studied from Koyna 22 plants are under various threats. Of which *c.* 3 plants *viz. Ceropegia jainii, Ceropegia santapaui* and *Frerea indica* are Critically endangered (CR), *c.* 4 plants *viz. Crotalaria filipes* Bth. *var. filipes, Entada rheedei, Nothapodytes nimmoniana* and *Seshagiria sahyadrica* are Endangered (EN), *c.* 9 plants *viz. Arisaema murrayi, Chlorophytum glaucoides, Curcuma pseudomontana, Dendrobium barbatulum, Hitchenia caulina, Lobelia nicotianaefolia, Paracaryopsis malabarica, Piper trichostachyon* and *Zingiber neesanum* are Vulnerable (VU) and *c.* 6 plants *Argyreia cuneata, Carvia callosa, Cynarospermum asperrimum, Ensete superbum, Erinocarpus nimmonii* and *Senecio dalzellii* are under the category of Lower Risk (LR). These species needs protection. There are a few (11) botanically interested plants *viz. Abrus precatorius* with its red seed like eye ball; *Mimosa pudica* with sensitive leaves; *Oroxylum indicum* with fruit resembling large swords and 2 lianas *viz. Entada rheedei* for its large woody fruits and seeds, *Gnetum ula* - a huge gymnosperms; parasites (2) like *Cuscuta reflexa*, *Sopubia delphinifolia*, Insectivorous plant like *Drosera indica.* Orchids (2) like *Eulophia nuda, Malaxis rheedi* etc.

As discussed in previous para, there are *c.* 408 plants used for various purpose e.g. medicines (300 spp.), Veterinary (23 spp.), food (137 spp.), miscellaneous uses like shelter (19 spp.), religious festivals (18 spp.), agriculture implements (11 spp.), fodder (17 spp.), fibre (17 spp.), and other uses like cosmetics (4 spp.), preparation of dye (1 spp.), fish poison (9 spp.), preparation of household instruments (3 spp.), insecticide (4 spp.), as ornament (1 spp.), as tonic to birds (1 spp.), to restrict the snakes (2 spp.), earning income through sale in the local market (46 spp.) and poisonous plants (7

spp.). The results obtained are depicted in *c.* 98 tables for ready references and supported by 16 coloured photographic plates, 2 maps and 14 graphs.

As mentioned earlier after extensive and intensive study of the area for *c.* 15 years, it can be concluded that to protect our natural plant wealth, tribals and tribal culture of Koyna valley consisting the hidden, untapped knowledge regarding utility of plants should be conserved. The Koyna Wildlife Sanctuary includes number of endemic and noteworthy economic and medicinal plants. Not only this plant wealth but also many birds like *Columba elphinstonii* (Nilgiri wood pigeon), *Cyornis pallipes* (White bellied blue flycatcher), *Nectarinia minima* (Crimson backed sunbird), *Pycnonotus jocosus* (Red whiskered) etc. Animals like *Bos gaurus* (Gava), *Canis aureus* (Kolha), *Cervus unicolor niger* (Sambar), *Cuon alpines* (Kolsinda), *Felis chaus* (Ranmanjar), *Herpestes edwardasi* (Mongoos), *Hyaena hyeana* (Taras), *Hystrix indica* (Salinder), *Lepus negricolis* (Sasa), *Manis crassicaudata* (Khavalya manjar), *Melursus ursinus* (Asval), *Muntiacus muntjack* (Bhekar), *Panthera pardus* (Bibtya), *Panthera tigris* (Wagh), *Paradoxurus hermaphrodites* (Udmanjar), *Ratufa indica* (Shekaru), *Susscrofa cristatus* (Randukkar), *Tragulus meminna* (Pisori), etc. Reptiles like *Amphiesma beddomei* (Beddome's keelback, Beddome's Naneti), *Bungarus caeruleas* (Manyar), *Calotes rouxi* (Sarada), *Echis carinatus* (Phoorsa), *Geckoella spp.* (Ground Geeko), *Naja naja* (Nag), *Ptyas mucusus* (Dhaman), *Python molurus* (Ajgar), *Trimeresurus gramineus* (Bamboopit Viper, Chapada), *Varanus indicus* (Ghorpad), *Vipera russelli* (Ghonas), etc. Butterflies like *Pantoporia hordonia hordonia* (Common Lascar), *Abisara echerius* (Plum Judy), *Phalantha phalantha* (Common Leopard), *Dophla evelina compta* (Red spot Duke), *Graphium agamemnon* (Tailed Jay), *Rathinda amor* (Monkey Puzzle) etc. found in Koyna Wildlife Sanctuary. An endemic amphibian *Xanthophryne koynayensis* (Koyna yellow toad) is first described from Koyna Wildlife Sanctuary._

Since the population of tigers in country as well as Koyna region is reducing, the Government of India is planning to declare this Wildlife Sanctuary as Reserved Tiger Project (*Sahyadri Vyaghra Prakalpa*).

Therefore to protect this plant as well as animal wealth, not only traditional culture but also biodiversity of the forest which nourishes the tribals and forest people should also be protected (Rao, 1996; Badave & Kothari, 2006). Thus the present study will help to naturalists, conservationist, teachers, students, foresters etc. concerned with the flora and ethnobotanically useful plants of the above mentioned areas.

TABLES

Table 1. Plants used for abortion

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Entada rheedei* Spreng.	*Gaidhad, Kapa*	Seeds	Mimosaceae	69

Table 2. Plants used for the treatment of abscess

Sr. No	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Allophylus cobbe* (L.) Raeusch.	*Tipan/ Tipani*	Leaves	Sapindaceae	29
2	*Celastrus paniculatus* Willd.	*Malkanguni, Karadkanguni*	Root	Celastraceae	50
3	*Clerodendrum viscosum* Vent.	*Kadavi*	Leaves	Verbenaceae	55
4	*Colebrookea oppositifolia* Sm.	*Baman*	Leaves	Lamiaceae	56
5	*Colocasia esculenta* (L.) Schott	*Alu*	Leaves	Araceae	56
6	*Cuscuta reflexa* Roxb.	*Aakashvel*	Whole plant	Cuscutaceae	60
7	*Crotalaria retusa* L.	*Dingal*	Leaves	Fabaceae	58
8	*Dalbergia horrida* (Dennst.) Mabb. var. *horrida*	*Vavi*	Leaves	Fabaceae	62
9	*Entada rheedei* Spreng.	*Gaidhad, Kapa*	seeds	Mimosaceae	69
10	*Euphorbia geniculata* Orteg.	*Dudhani*	Latex	Euphorbiaceae	71
11	*Hoya wightii* Hook.f.	*Dudhyel*	Latex	Asclepiadaceae	85
12	*Leea indica* (Burm.f.) Merr.	*Dinda*	Roots	Leeaceae	90
13	*Michelia champaca* L.	*Sonchapha*	Bark	Magnoliaceae	96
14	*Moullava spicata* (Dalz.) Nicols.	*Waghati*	Seeds	Caesalpiniaceae	98
15	*Plumeria rubra* L.	*Pandhara Chapha*	Leaves	Apocynaceae	107

Table 3. Plants used for acidity

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Emblica officinalis* Gaertn.	*Awala*	Fruits	Euphorbiaceae	68
2	*Rostellularia procumbens* (L.) Nees	*Kalmashi*	Whole plant	Acanthaceae	113
3	*Zingiber officinale* Rosc.	*Ale*	Rhizome	Zingiberaceae	133

Table 4. Plants used as an antidote for alcohol

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Psidium guajava* L.	*Peravi, peru*	Leaves	Myrtaceae	110

Table 5. Plants used for the treatment of ascites

Sr. No	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Pavetta crassicaulis* Bremek.	*Phapat*	Roots	Rubiaceae	103

Table 6. Plants used for Asthma

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ailanthus excelsa* Roxb.	*Maharukh*	Bark	Simaroubaceae	28
2	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Leaves	Asclepiadaceae	41
3	*Calotropis procera* (Ait.) R.Br.	*Rui, Ravi*	Leaves	Asclepiadaceae	42
4	*Clerodendrum serratum* (L.) Moon.	*Bharangi*	Roots	Verbenaceae	54
5	*Desmodium gangeticum* (L.) DC.	*Salvan*	Roots	Fabaceae	64
6	*Euphorbia hirta* L.	*Dudhi*	Whole plant	Euphorbiaceae	72
7	*Maytenus rothiana* (Walp.) Lobreau-Collen	*Yenkli, Ikari*	Seeds and Bark	Celastraceae	94
8	*Physalis minima* L.	*Ranpopati, Thanmodi*	Leaves	Solanaceae	105
9	*Pittosporum dasycaulon* Miq.	*Gapsundi, Ikari*	Bark	Pittosporaceae	106

10	*Scilla hyacinthina* (Roth) Macbride.	*Rankanda*	Bulb	Liliaceae	115
11	*Tectona grandis* L.f.	*Sag*	Leaves	Verbenaceae	122

Table 7. Plants used for the plaster on bone fracture

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ampelocissus latifolia* (Roxb.) Planch	*Nandenavel*	Bark	Vitaceae	30
2	*Careya arborea* Roxb.	*Kumbha*	Bark	Lecythidaceae	45
3	*Cyclea peltata* (Lam.) Hook.f. & Thoms.	*Chorati*	Leaves	Menispermaceae	61
4	*Dendrocalamus strictus* (Roxb.) Nees	*Managa*	Leaves	Poaceae	65
5	*Erinocarpus nimmonii* Grah. ex Dalz.	*Cher*	Bark	Tiliaceae	70
6	*Litsea deccanensis* Gamble	*Kala pisa*	Bark	Lauraceae	91
7	*Macaranga peltata* (Roxb.) Muell.-Arg.	*Chandada*	Latex	Euphorbiaceae	93
8	*Paracaryopsis malabarica* (C.B. Cl.) R. Mill.	*Nechardi*	Rhizome	Boraginaceae	103
9	*Pterocarpus marsupium* Roxb.	*Bivala*	Bark	Fabaceae	110
10	*Sapium insigne* Bth. var. *malabaricum* (Wight) Hook.f.	*Hurya*	Latex	Euphorbiaceae	115
11	*Sida acuta* Burm.f.	*Lahan Chikana*	Whole plant	Malvaceae	116

Table 8. Plants used for bronchitis

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ailanthus excelsa* Roxb.	*Maharukh*	Bark	Simaroubaceae	28
2	*Pittosporum wightii* A.K. Mukherjee	*Yekadi*	Bark	Pittosporaceae	106

Table 9. Plants used for Bright's disease (*Nalgud*) – Inflammation of the Kidney

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Leaves	Asclepiadaceae	41

2	*Gnidia glauca* (Fresen.) Gilg.	*Rameta*	Stem	Thymelaeceae	78

Table 10. Plants used for the application on burns

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Achyranthes aspera* L. var. aspera	*Aghada*	Whole plant	Amaranthaceae	26
2	*Aloe vera* (L.) Burm.f.	*Kavar*	Leaves	Liliaceae	29
3	*Biophytum sensitivum* (L.) DC.	*Pavasali lajalu*	Leaves	Oxalidaceae	37
4	*Bixa orellana* L.	*Shendri*	Seed powder	Bixaceae	37
5	*Cassia occidentalis* L.	*Kasvinda*	Leaves	Caesalpiniaceae	48
6	*Heliotropium indicum* L.	*Ranbibba*		Boraginaceae	81
7	*Mangifera indica* L.	*Amba*	Leaves	Anacardiaceae	94
8	*Pogostemon benghalensis* (Burm.f.) O. Ktze.	*Pangala*	Leaves	Lamiaceae	108
9	*Woodfordia fruticosa* (L.) Kurz	*Dhayati*	Flowers	Lythraceae	132

Table 11. Plants used for the treatment of chicken pox

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ficus racemosa* L.	*Umber*	Exudates form roots	Moraceae	74
2	*Hedyotis herbacea* L.	*Paripath*	Whole plant	Rubiaceae	80
3	*Hiptage benghalensis* (L.) Kurz	*Haladvel*	Leaves	Malpighiaceae	83

Table 12. Plants used for common cold

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Acorus calamus* L.	*Yekand*	Leaves	Araceae	27
2	*Costus speciosus* (Koen.) J.E. Sm.	*Pev*	Rhizome	Zingiberaceae	57
3	*Cymbopogon citratus* (DC.) Stapf	*Gavatichaha*	Leaves	Poaceae	61

4	*Eucalyptus globulus* Labill.	*Nilgiri*	Leaves	Myrtaceae	71
5	*Zingiber officinale* Rosc.	*Ale*	Rhizome	Zingiberaceae	133

Table 13. Plants used for the treatment of conjunctivitis

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Cyclea peltata* (Lam.) Hook.f. & Thoms.	*Chorati*	Fruits	Menispermaceae	61
2	*Rosa indica* L.	*Gulab*	Flowers	Rosaceae	113
3	*Tabernaemontana divaricata* (L.) R.Br.	*Tagar*	Flowers	Apocynaceae	122
4	*Trichosanthes tricuspidata* Lour.	*Kavandal*	Leaves	Cucurbitaceae	127
5	*Ziziphus rugosa* Lam. var. *rugosa*	*Toran*	Leaves	Rhamnaceae	133

Table 14. Plants used for the treatment of constipation

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Aloe vera* (L.) Burm.f.	*Kavar*	Leaves	Liliaceae	29
2	*Amorphophallus paeoniifolius* (Dennst.) Nicols. var. *campanulatus* (Decne.) Shivadasan	*Ransuran*	Rhizome	Araceae	30
3	*Carica papaya* L.	*Papai*	*Fruits*	Caricaceae	46
4	*Caryota urens* L.	*Mad*	Sap	Arecaceae	47
5	*Cassia fistula* L.	*Bhava*	Fruit pulp	Caesalpiniaceae	48
6	*Cinnamomum verum* J.S. Presl.	*Dalchini*	Root	Lauraceae	51
7	*Costus speciosus* (Koen.) J.E. Sm.	*Pev*	Rhizome	Zingiberaceae	57
8	*Mallotus philippensis* (Lam.) Muell.-Arg.	*Rohini*	Loam on the fruits	Euphorbiaceae	93
9	*Raphanus sativus* L. var. *sativus*	*Mula*	Root	Brassicaceae	111

10	*Sterculia foetida* L.	*Jangali Badam*	Leaves	Sterculiaceae	120
11	*Terminalia chebula* Retz.	*Hirda*	Fruits	Combretaceae	124
12	*Verbascum chinense* (L.) Sant.	*Kutaki*	Whole plant	Scrophulariaceae	128

Table 15. Plants used for contusion

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Canscora diffusa* (Vahl) R.Br. ex R. & S.	*Shankhapushpi*	Leaves	Gentianaceae	43
2	*Curcuma aromatica* Salisb.	*Ranhalad, Amba halad*	Rhizomes	Zingiberaceae	60
3	*Holoptelea integrifolia* (Roxb.) Planch.	*Vavala*	Bark	Ulmaceae	84
4	*Kalanchoe pinnata* (Lam.) Pres.	*Panphuti*	Leaves	Crassulaceae	88
5	*Nerium indicum* Mill.	*Kaner*	Flower	Apocynaceae	100
6	*Pavetta crassicaulis* Bremek.	*Phapat*	Roots	Rubiaceae	103

Table 16. Plants used for corn

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Carica papaya* L.	*Papai*	Leaves	Caricaceae	46
2	*Ficus exasperata* Vahl	*Kharavat*	Latex	Moraceae	74
3	*Holoptelea integrifolia* (Roxb.) Planch.	*Vavala*	Root Bark	Ulmaceae	84
4	*Drosera indica* L.	*Chikati*	Whole plant	Droseraceae	66

Table 17. Plants used for cracks in feet

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Diospyros montana* Roxb.	*Gavanda*	Leaves	Ebenaceae	66

Table 18. Plants used for diphtheria

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Helicteres isora* L.	*Murudshenga, Kivan*	Fruits	Sterculiaceae	81

2	*Meyna laxiflora* Robyns	*Aalu*	Fruits	Rubiaceae	95
3	*Smilax zeylanica* L.	*Aakar*	Fruits	Smilacaceae	117
4	*Trichosanthes tricuspidata* Lour.	*Kavandal*	Fruits	Cucurbitaceae	127

Table 19. Plants used for the treatment of cough

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Abrus precatorius* L.	*Gunj*	Leaves	Fabaceae	24
2	*Achyranthes aspera* L. var. *aspera*	*Aghada*	Whole plant	Amaranthaceae	26
3	*Aloe vera* (L.) Burm.f.	*Kavar*	Leaves	Liliaceae	29
4	*Cinnamomum verum* J.S. Presl.	*Dalchini*	Bark	Lauraceae	51
5	*Clerodendrum serratum* (L.) Moon.	*Bharangi*	Roots	Verbenaceae	54
6	*Desmodium triflorum* (L.) DC.	*Ranmethi*	Leaves	Fabaceae	65
7	*Ensete superbum* (Roxb.) Cheesm.	*Chavan*	Seeds	Musaceae	69
8	*Euphorbia hirta* L.	*Dudhi*	Whole plant	Euphorbiaceae	72
9	*Ficus racemosa* L.	*Umber*	Galls on the leaves	Moraceae	74
10	*Justicia adhatoda* L.	*Adulasa*	Yellow leaves	Acanthaceae	87
11	*Kalanchoe pinnata* (Lam.) Pres.	*Panphuti*	Leaves	Crassulaceae	88
12	*Mucuna monosperma* DC. ex Wight		Seeds	Fabaceae	99
13	*Ocimum basilicum* L.	*Tulas*	Leaves	Lamiaceae	101
14	*Sansevieria roxburghiana* Schult. & Schult.f.	Sirpin, Sarpin	Leaves	Liliaceae	114

15	*Scilla hyacinthina* (Roth) Macbride.	*Rankanda*	Bulb	Liliaceae	115
16	*Solanum anguivi* Lam.	*Ringaniwangi*	Stem	Solanaceae	117
17	*Solanum virginianum* L.	*Kateringani*	Roots	Solanaceae	118
18	*Sterculia urens* Roxb.	*Kad, Pandhrukha*	Gum	Sterculiaceae	120
19	*Terminalia bellirica* (Gaertn.) Roxb.	*Hela, Behada*	Fruits	Combretaceae	123
20	*Wattakaka volubilis* (L.f.) Stapf	*Harandodi*	Leaves	Asclepiadaceae	131

Table 20. Plants used for dandruff

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Aloe vera* (L.) Burm.f.	*Kavar*	Leaves	Liliaceae	29
2	*Ocimum gratissimum* L.	*Ran tulas*	Leaves	Lamiaceae	101

Table 21. Plants used for diabetes

Sr. No.	Botanical name	*Local Name*	Parts used	Family	Ref. Page
1	*Acalypha indica* L.	*Khokali*	Leaves	Euphorbiaceae	26
2	*Curcuma pseudomontana* Grah.	*Ranhalad*	Rhizomes	Zingiberaceae	60
3	*Gymnema sylvestre* (Retz.) R.Br. ex Schultes	*Bedaki*	Leaves	Asclepiadaceae	79
4	*Syzygium cumini* (L.) Skeels	*Jambhal, Hadaki*	Seeds	Myrtaceae	121

Table 22. Plants used for the treatment of Excess body heat

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Bauhinia purpurea* L.	*Kanchan*	Bark	Caesalpiniaceae	35
2	*Cassia tora* L.	*Takala*	Leaves	Caesalpiniaceae	49
3	*Coriandrum sativum* L.	*Kothmir*	Leaves	Apiaceae	57

4	*Cynodon dactylon* (L.) Pers.	*Harali*	Whole plant	Poaceae	62
5	*Cyperus rotundus* L. ssp. *rotundus*	*Nagarmotha*	Rhizome	Cyperaceae	62
6	*Hedyotis corymbosa* (L.) Lam.	*Pittapapada*	Whole plant	Rubiaceae	80
7	*Hemidesmus indicus* (L.) Schult. var. *indicus*	*Dudhi, Anantmul*	Leaves	Asclepiadaceae	82
8	*Jatropha curcas* L.	*Malya erand*	Leaves	Euphorbiaceae	87
9	*Lawsonia inermis* L.	*Mendi*	Leaves	Lythraceae	89
10	*Moullava spicata* (Dalz.) Nicols	*Waghati*	Leaves	Caesalpiniaceae	98
11	*Ricinus communis* L.	*Erandi*	Leaves	Euphorbiaceae	112
12	*Rosa indica* L.	*Gulab*	Flowers	Rosaceae	113
13	*Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms.	*Gulvel, Garudvel*	Stem	Menispermaceae	125
14	*Tinospora sinensis* (Lour.) Merr.	*Gulvel, Garudvel*	Stem	Menispermaceae	125
15	*Vetiveria zizanioides* (L.) Nash	*Vala*	Roots	Poaceae	129
16	*Ziziphus rugosa* Lam.	*Toran*	Leaves	Rhamnaceae	133

Table 23. Plants used for the treatment of dysentery

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Allophylus cobbe* (L.) Raeusch.	*Tipan, Tipani*	Root	Sapindaceae	29

2	*Anogeissus latifolia* (Roxb. ex DC.) Wall. ex Guill. & Perr.	*Dhavada*	Seeds	Combretaceae	31
3	*Asparagus racemosus* Willd. var. *javanica* (Kunth) Baker	*Shatavari*	Roots	Liliaceae	33
4	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Stem bark	Asclepiadaceae	41
5	*Calotropis procera* (Ait.) R.Br.	*Rui, Ravi*	Stem bark	Asclepiadaceae	42
6	*Calycopteris floribunda* (Roxb.) Poir.	*Baguli, Ukshi*	Tender leaves	Combretaceae	43
7	*Careya arborea* Roxb.	*Kumbha*	Bark	Lecythidaceae	45
8	*Cassia tora* L.	*Takala*	Leaves	Caesalpiniaceae	49
9	*Cissampelos pareira* L. var. *hirsuta* (Buch.-Ham. ex DC.)	*Pahadvel*	Roots	Menispermaceae	52
10	*Cocos nucifera* L.	*Naral*	Fruits	Arecaceae	55
11	*Cordia macleodii* (Griff.) Hook.f. & Thoms.	*Dhaivan*	Bark	Boraginaceae	57
12	*Dalbergia sissoo* Roxb.	*Sisam*	Tender leaves	Fabaceae	63
13	*Elephantopus scaber* L.	*Hastipad*	Roots	Asteraceae	67
14	*Emblica officinalis* Gaertn.	*Awala*	Bark	Euphorbiaceae	68
15	*Erinocarpus nimmonii* Grah. ex Dalz.	*Cher*	Bark	Tiliaceae	70
16	*Gmelina arborea* Roxb.	*Shivan*	Bark	Verbenaceae	78

17	*Grewia tiliifolia* Vahl	*Dhaman*	Bark	Tiliaceae	79
18	*Helicteres isora* L.	*Murudshenga, Kivan*	Fruits and Bark	Sterculiaceae	81
19	*Heterophragma quadriloculare* (Roxb.) K. Schum.	*Varas*	Bark	Bignoniaceae	82
20	*Holarrhena pubescens* (Buch.-Ham.) Wall ex G. Don.	*Pandhari Kuda*	Bark	Apocynaceae	83
21	*Ixora nigricans* R.Br. ex Wight & Arn.	*Katkuda*	Tender	Rubiaceae	86
22	*Jasminum officinale* L. var. *officinale*	*Jai*	Roots	Oleaceae	87
23	*Litsea deccanensis* Gamble	*Kala pisa*	Bark	Lauraceae	91
24	*Mangifera indica* L.	*Amba*	Bark	Anacardiaceae	94
25	*Moullava spicata* (Dalz.) Nicols.	*Waghati*	Leaves	Caesalpiniaceae	98
26	*Musa paradisiaca* L.	*Keli*	Stem pith & floral buds	Musaceae	100
27	*Myristica dactyloides* Gaertn.	*Jayphal*	Fruits	Myristicaceae	100
28	*Paracalyx scariosus* (Roxb.) Ali	*Ran Ghevada, Kanphuti*	Roots	Fabaceae	102
29	*Psidium guajava* L.	*Peravi, peru*	Leaves	Myrtaceae	110
30	*Syzygium cumini* (L.) Skeels	*Jambhal, Hadaki*	Bark	Myrtaceae	121
31	*Terminalia paniculata* Roth	*Kinjal*	Tender leaves	Combretaceae	124
32	*Tragia involucrata* L.	*Kolati*	Leaves	Euphorbiaceae	126

33	*Trichodesma indicum* (L.) Lehm.	*Lahan Khalpa*	Roots	Boraginaceae	126
34	*Ziziphus rugosa* Lam.	*Toran*	Bark	Rhamnaceae	133

Table 24. Plants used for the treatment of dyslexia

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Spilanthus calva* DC.	*Akkalkara*	Inflorescence	Asteraceae	119

Table 25. Plants used for dyspepsia

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ailanthus excelsa* Roxb.	*Maharukh*	Bark	Simaroubaceae	28
2	*Carica papaya* L.	*Papai*	Fruits	Caricaceae	46
3	*Glochidion ellipticum* Wight	*Bhoma*	Bark	Euphorbiaceae	77
4	*Hedyotis corymbosa* (L.) Lam.	*Pittapapada*	Whole plant	Rubiaceae	80
5	*Musa paradisiaca* L.	*Keli*	Stem pith & floral buds	Musaceae	100

Table 26. Plants used for the treatment of epilepsy

Sr. No.	Botanical Name	Local Name	Parts used	Family	Ref. Page
1	*Colebrookea oppositifolia* Sm.	*Baman*	Roots	Lamiaceae	56
2	*Flemingia strobilifera* (L.) Ait. & Ait.f.	*Kanphuti*	Roots	Fabaceae	76

Table 27. Plants used for the treatment of fever

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Alstonia scholaris* (L.) R.Br.	*Satavin*	Root	Apocynaceae	29
2	*Calamus pseudo-tenuis* Becc. & Hook.f.	*Vet*	Leaves	Arecaceae	40

3	*Canthium dicoccum* (Gaertn.) Teijsm. & Binn.	*Tupa*	Bark	Rubiaceae	44
4	*Clerodendrum serratum* (L.) Moon.	*Bharangi*	Leaves & Flowers	Verbenaceae	54
5	*Clitoria ternatea* L.	*Gokarna*	Whole plant	Fabaceae	55
6	*Costus speciosus* (Koen.) J.E. Sm.	*Pev*	Rhizome	Zingiberaceae	57
7	*Crateva magna* (Lour.) DC.	*Vayavarna*	Bark	Capparaceae	58
8	*Cuscuta reflexa* Roxb.	*Aakashvel*	Whole plant	Cuscutaceae	60
9	*Cyathocline purpurea* (Buch.-Ham. ex D.Don.) O. Ktze. var. *purpurea*	*Gangutra*	Leaves	Asteraceae	61
10	*Cyperus rotundus* L. ssp. *rotundus*	*Nagarmotha*	Rhizome	Cyperaceae	62
11	*Desmodium triangulare* (Retz.) Merr.	*Ranchikati*	Whole plant	Fabaceae	65
12	*Hedyotis corymbosa* (L.) Lam.	*Pittapapada*	Whole plant	Rubiaceae	80
13	*Hedyotis herbacea* L.	*Paripath*	Whole plant	Rubiaceae	80
14	*Holarrhena pubescens* (Buch.-Ham.) Wall ex G. Don.	*Pandhari Kuda*	Bark	Apocynaceae	83
15	*Michelia champaca* L.	*Sonchapha*	Bark	Magnoliaceae	96
16	*Mitragyna parvifolia* (Roxb.) Korth.	*Kalamb*	Bark	Rubiaceae	97
17	*Nyctanthes arbor-tristis* L.	*Parijatak*	Leaves	Oleaceae	101
18	*Olea dioica* Roxb.	*Parjambhal*	Bark	Oleaceae	102

19	*Pavetta crassicaulis* Bremek.	*Phapat*	Root	Rubiaceae	103
20	*Polygonum glabrum* Willd.	*Marvel*	Whole plant	Polygonaceae	109
21	*Pongamia pinnata* (L.) Pierre	*Karanj*	Root Bark	Fabaceae	109
22	*Pinda concanense* (Dalz.) P.K. Mukh. & Constance	*Pand*	Whole plant	Apiaceae	105
23	*Ricinus communis* L.	*Erandi*	Leaves	Euphorbiaceae	112
24	*Rungia repens* (L.) Nees	*Ghatipitta-papada*	Whole plant	Acanthaceae	114
25	*Sansevieria roxburghiana* Schult. & Schult.f.	*Sirpin, Sarpin*	Leaves	Liliaceae	114
26	*Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms.	*Gulvel, Garudvel*	Stem	Menispermaceae	125
27	*Tinospora sinensis* (Lour.) Merr.	*Gulvel, Garudvel*	Stem	Menispermaceae	125
28	*Vernonia cinerea* (L.) Less.	*Sahadevi*	Roots	Asteraceae	129
29	*Wrightia tinctoria* R.Br. ssp. Tinctoria	*Kala kuda*	Bark	Apocynaceae	132
30	*Zingiber officinale* Rosc.	*Ale*	Rhizome	Zingiberaceae	133

Table 28. Plants used for fever in infants

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ricinus communis* L.	*Erandi*	Leaves	Euphorbiaceae	112

Table 29. Plant used on Dhobi feet disease (Fungal infection in between fingers)

Sr. No.	Botanical name of the plant	Local Name	Parts used	Family	Ref. Page
1	*Begonia crenata* Dryand.	*Pavasali bedaki*	Whole plant	Begoniaceae	36
2	*Lawsonia inermis* L.	*Mendi*	Leaves	Lythraceae	89

Table 30. Plants used for the treatment of gonorrhoea

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Agave americana* L. var. *americana*	*Ghayapat*	Leaves	Agavaceae	28
2	*Thespesia lampas* (Cav.) Dalz. & Gibs.	Ranbhendi	Root bark	Malvaceae	125

Table 31. Plants used on guinea worm

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Leea indica* (Burm.f.) Merr.	*Dinda*	Roots	Leeaceae	90
2	*Paracaryopsis malabarica* (C.B. Cl.) R. Mill.	*Nechardi*	Rhizome	Boraginaceae	103

Table 32. Plants used for the treatment of hair problems

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Acacia concinna* (Willd.) DC.	*Shikekai*	Fruits	Mimosaceae	25
2	*Aloe vera* (L.) Burm.f.	*Kavar*	Leaves	Liliaceae	29
3	*Frerea indica* Dalz.	*Shindal Makadi*	Whole plant	Asclepiadaceae	76
4	*Hibiscus rosa-sinensis* L.	*Jasvand*	Flowers	Malvaceae	83

Table 33. Plants used for headache

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Abrus precatorius* L.	*Gunj*	Seeds	Fabaceae	24
2	*Acorus calamus* L.	*Vekhand, Yekand*	Rhizome	Araceae	27
3	*Carissa congesta* Wight var. *congesta* (Wight) Bedd.	*Karavand*	Roots	Apocynaceae	46
4	*Carissa inermis* Vahl	*Karavand*	Roots	Apocynaceae	47
5	*Caryota urens* L.	*Mad*	Fruits	Arecaceae	47

6	*Lawsonia inermis* L.	*Mendi*	Leaves	Lythraceae	89
7	*Passiflora foetida* L.	*Ghanvel*	Leaves	Passifloraceae	103
8	*Piper longum* L.	*Pimpali*	Fruits	Piperaceae	105

Table 34. Plants used for the treatment of herpes zoster

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Celastrus paniculatus* Willd.	*Malkanguni, Karadkanguni*	Roots	Celastraceae	50
2	*Jasminum malabaricum* Wight	*Kusar*	Leaves	Oleaceae	86

Table 35. Plants used to induce vomiting

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Catunaregam spinosa* (Thunb.) Tirveng.	*Gela*	Fruit	Rubiaceae	49
2	*Gymnema sylvestre* (Retz.) R.Br. ex Schultes	*Bedaki*	Leaves	Asclepiadaceae	79

Table 36. Plants used for the treatment of indigestion

Sr. No.	Botanical name	*Local Name*	Parts used	Family	Ref. Page
1	*Citrus aurantifolia* (Christm. & Panz.) Swingle	*Limbu*	Fruits	Rutaceae	52
2	*Piper longum* L.	*Pimpali*	Fruits	Piperaceae	105
3	*Piper nigrum* L.	*Miri*	Fruits	Piperaceae	106
4	*Plumbago zeylanica* L.	*Pandhara Chitrak*	Roots	Plumbaginaceae	107
5	*Vigna vexillata* (L.) A.Rich. var. *vexillata*	*Halunda, Birambula*	Bulbs	Fabaceae	130
6	*Zingiber officinale* Rosc.	*Ale*	Rhizome	Zingiberaceae	133
7	*Zingiber zerumbet* (L.) Rosc. ex J.E. Sm.	*Jangali Ale*	Rhizome	Zingiberaceae	133

Table 37. Plants used for insomnia

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Vernonia cinerea* (L.) Less.	*Sahadevi*	Roots	Asteraceae	129

Table 38. Plants used for internal bleeding

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Moullava spicata* (Dalz.) Nicols.	*Waghati*	Root	Caesalpiniaceae	98

Table 39. Plants used for jaundice

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Cordia macleodii* (Griff.) Hook.f. & Thoms	*Dhaivan*	Bark	Boraginaceae	57
2	*Ficus hispida* L.	*Bhuiumbar*	Root	Moraceae	74
3	*Lygodium flexuosum* (L.) Sw.	*Vel-vakchouda*	Leaves	Lygodiaceae	92
4	*Mitragyna parvifolia* (Roxb.) Korth.	*Kalamb*	Leaves and Bark	Rubiaceae	97
5	*Phyllanthus amarus* Schum & Thonn.	*Bhui-avali*	Leaves	Euphorbiaceae	104
6	*Ricinus communis* Linn.	*Erandi*	Leaves	Euphorbiaceae	112
7	*Solanum nigrum* L.	*Kangoni*	Roots	Solanaceae	118
8	*Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms.	*Gulvel, Garudvel*	Stem	Menispermaceae	125
9	*Tinospora sinensis* (Lour.) Merr.	*Gulvel, Garudvel*	Leaves	Menispermaceae	125
10	*Tylophora dalzellii* Hook.f.	*Lahan Kavali*	Leaves	Asclepiadaceae	128

Table 40. Plants used for the treatment of intestinal worms

Sr. No.	Botanical name	*Local Name*	Parts used	Family	Ref. Page
1	*Canthium angustifolium* Roxb.	*Shengali*	Root	Rubiaceae	43
2	*Embelia ribes* Burm.f.	*Vavdinga*	Fruits	Myrsinaceae	68
3	*Erythrina variegata* L.	*Pangara*	Seeds	Fabaceae	70
4	*Holarrhena pubescens* (Buch.-Ham.) Wall ex G. Don.	*Pandhari Kuda*	Seeds	Apocynaceae	83
5	*Justicia trinervia* Vahl	*Suta*	Roots	Acanthaceae	88
6	*Mallotus philippensis* (Lam.) Muell.-Arg.	*Rohini*	Loam on the fruit	Euphorbiaceae	93
7	*Musa paradisiaca* L.	*Keli*	Stem pith & floral buds	Musaceae	100
8	*Polyalthia longifolia* (Sonn.) Thw.	*Ashok*	Bark	Annonaceae	108
9	*Radermachera xylocarpa* (Roxb.) K. Schum.	*Kharshing*	Leaves	Bignoniaceae	111
10	*Rungia repens* (L.) Nees.	*Ghatipitta papada*	Whole plant	Acanthaceae	114
11	*Securinega virosa* (Roxb. ex Willd.) Baill.	*Pandhaphali*	Leaves	Euphorbiaceae	115
12	*Smilax zeylanica* L.	*Aakar*	Fruits	Smilacaceae	117
13	*Sphaeranthus indicus* L.	*Gorakhamundi*	Fruits	Asteraceae	119

Table 41. Plants used for the treatment of kidney stone

Sr. No.	Botanical name	*Local Name*	Parts used	Family	Ref. Page
1	*Celosia argentea* L.	*Kuradu*	Seeds	Amaranthaceae	51
2	*Ensete superbum* (Roxb.) Cheesm.	*Chavan*	Seeds	Musaceae	69
3	*Helicanthes elastica* (Desr.) Danser	*Bandgul*	Whole plant	Loranthaceae	80
4	*Kalanchoe pinnata* (Lam.) Pres.	*Panphuti*	Leaves	Crassulaceae	88
5	*Moringa oleifera* Lam.	*Shevaga*	Bark	Moringaceae	98
6	*Pogostemon benghalensis* (Burm.f.) O. Ktze.	*Pangala*	Leaves	Lamiaceae	108
7	*Toddalia asiatica* (L.) Lam. var. *asiatica*	*Ranmirachi*	Seeds	Rutaceae	126

Table 42. Plants used for treatment of joint pain

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Acacia pennata* (L.) Willd.	*Shembarti*	Seed	Mimosaceae	25
2	*Argyreia cuneata* (Willd.) Ker Gawl.	*Mahalungi*	Roots	Convolvulaceae	32
3	*Arundo donax* L.	*Chiva*	Stem	Poaceae	33
4	*Bacopa monnieri* (L.) Penn.	*Bramhi*	Whole plant	Scrophulariaceae	34
5	*Bambusa arundinacea* (Retz.) Willd.	*Kalak*	Leaves	Poaceae	34
6	*Brassica juncea* (L.) Czern. & Coss.	*Mohari*	Seeds	Brassiceae	39
7	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Leaves	Asclepiadaceae	41
8	*Calotropis procera* (Ait.) R.Br.	*Rui, Ravi*	Leaves	Asclepiadaceae	42

9	*Canthium dicoccum* (Gaertn.) Teijsm. & Binn.	*Tupa*	Bark	Rubiaceae	44
10	*Capparis rotundifolia* Rottl.	*Kolisna*	Leaves	Capparaceae	44
11	*Cardiospermum halicacabum* L.	*Kapalphodi*	Whole plant	Sapindaceae	45
12	*Cinnamomum verum* J.S. Presl	*Dalchini*	Bark	Lauraceae	51
13	*Clerodendrum inerme* (L.) Gaertn.	*Koynel*	Leaves	Verbenaceae	53
14	*Clerodendrum multiflorum* (Burm.f.) O. Ktze.	*Airan*	Roots and Leaves	Verbenaceae	54
15	*Clerodendrum viscosum* Vent.	*Kadavi*	Leaves	Verbenaceae	55
16	*Crateva magna* (Lour.) DC.	*Vayavarna*	Leaves	Capparaceae	58
17	*Cryptolepis buchanani* Roem. & Schult.	*Mothi Kavali*	Leaves	Periplocaceae	59
18	*Datura metel* L.	*Kala Dhotara*	Leaves	Solanaceae	63
19	*Desmodium laxiflorum* DC.	*Ranganja*		Fabaceae	64
20	*Entada rheedei* Spreng.	*Gaidhad, Kapa*	seeds	Mimosaceae	69
21	*Euphorbia fusiformis* Buch.-Ham. ex D. Don.	*Khirkand*	Tuber	Euphorbiaceae	71
22	*Euphorbia pulcherrima* Willd. ex Klotzsch	*Dudhi*	Whole plant	Euphorbiaceae	72
23	*Euphorbia thymifolia* L.	*Dhakati dudhi, Sher*	Whole plant	Euphorbiaceae	72
24	*Ficus arnottiana* (Miq.) Miq.	*Pair*	Latex	Moraceae	73
25	*Ficus rumphii* Bl.	*Aashit*	Latex	Moraceae	76
26	*Ficus hispida* L.	*Bhuiumber*	Root bark	*Moraceae*	74
27	*Holigarna grahamii* (Wight) Kurz	*Hulgeri*	Fruits	Anacardiaceae	84

28	*Holoptelea integrifolia* (Roxb.) Planch.	*Vavala*	Bark	Ulmaceae	84
29	*Mitragyna parvifolia* (Roxb.) Korth.	*Kalamb*	Bark	Rubiaceae	97
30	*Nerium indicum* Mill.	*Kaner*	Flower	Apocynaceae	100
31	*Oroxylum indicum* (L.) Vent.	*Tetav, Tetu*	Root	Bignoniaceae	102
32	*Pittosporum wightii* A.K. Mukherjee	*Yekadi*	Bark	Pittosporaceae	106
33	*Semecarpus anacardium* L.f var. *anacardium*	*Bibava. Bibba*	Seeds	Anacardiaceae	115
34	*Stereospermum chelenoides* (L.f.) DC.	*Padal*	Roots	Bignoniaceae	120
35	*Vitex negundo* L. var. *incisa* (Lam.) C.B. Cl.	*Katri nigad*	Leaves	Verbenaceae	130
36	*Vitex negundo* L. var. *negundo*	*Nigad*	Leaves	Verbenaceae	130

Table 43. Plants used for lactation in pregnant women

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Asparagus racemosus* Willd. var. *javanica* (Kunth) Baker.	*Shatavari*	Roots	Liliaceae	33
2	*Colocasia esculenta* (L.) Schott	*Alu*	Leaves	Araceae	56
3	*Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms.	*Gulvel, Garudvel*	Leaves	Menispermaceae	125
4	*Tinospora sinensis* (Lour.) Merr.	*Gulvel, Garudvel*	Leaves	Menispermaceae	125

Table 44. Plants used for leprosy

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ageratum conyzoides* L.	*Osadi*	Leaves	Asteraceae	28

Table 45. Plants used for leucoderma

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Eranthemum roseum* (Vahl) R.Br.	*Dasmuli*	Roots	Acanthaceae	70
2	*Paracalyx scariosus* (Roxb.) Ali	*Ran Ghevada, Kanphuti*	Roots	Fabaceae	102
3	*Syzygium cumini* (L.) Skeels	*Jambhal, Hadaki*	Bark	Myrtaceae	121

Table 46. Plants used for liver disease

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Eclipta prostrata* (L.) L. Mant.	*Maka*	Leaves	Asteraceae	67

Table 47. Plants used for measles

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ancistrocladus heyneanus* Wall. ex Grah.	*Kardal*	Leaves	Ancistrocladaceae	31
2	*Curcuma aromatica* Salisb.	*Amba halad*	Rhizomes	Zingiberaceae	60
3	*Ficus racemosa* L.	*Umber*	Exudates form roots	Moraceae	74
4	*Hiptage benghalensis* (L.) Kurz	*Haladvel*	Leaves	Malpighiaceae	83
5	*Swertia densifolia* (Griseb.) Kashyapa	*Kadavi*	Leaves	Gentianaceae	120

Table 48. Plants used for menstrual problem

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Aloe vera* (L.) Burm.f.	*Kavar*	Leaves	Liliaceae	29

2	*Capsella bursa-pastoris* (L.) Medik.	*Dhaman*	Whole plant	Brassicaceae	44
3	*Dendrophthoe falcata* (L.f) Etting var. *falcata*	*Bandgul*	Bark	Loranthaceae	64
4	*Michelia champaca* L.	*Sonchapha*	Bark	Magnoliaceae	96
5	*Moringa oleifera* Lam.	*Shevaga*	Leaves	Moringaceae	98
6	*Rubia cordifolia* L.	*Vitali*	Roots	Rubiaceae	113
7	*Woodfordia fruticosa* (L.) Kurz	*Dhayati*	Flowers	Lythraceae	132

Table 49. Plants used for migraine

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ficus exasperata* Vahl	*Kharavat*	Latex	Moraceae	74
2	*Ocimum basilicum* L.	*Tulas*	Leaves	Lamiaceae	101

Table 50. Plants used for the treatment of mouth ulcer

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Acacia chundra* (Roxb. ex Rottl.) Willd.	*Khair*	Leaves	Mimosaceae	25
2	*Dalbergia horrida* (Dennst.) Mabb. var. *horrida*	*Vavi*	Bark	Fabaceae	62
3	*Ficus benghalensis* L.	*Vad*	Latex	Moraceae	73
4	*Glochidion ellipticum* Wight	*Bhoma*	Bark	Euphorbiaceae	77
5	*Gymnema sylvestre* (Retz.) R.Br. ex Schultes	*Bedaki*	Leaves	Asclepiadaceae	79
6	*Hemidesmus indicus* (L.) Schult. var. *indicus*	*Dudhi, Anantmul*	Leaves	Asclepiadaceae	82
7	*Jasminum officinale* L. var. *officinale*	*Jai*	Leaves	Oleaceae	87
8	*Rosa indica* L.	*Gulab*	Flowers	Rosaceae	113

10	*Vernonia cinerea* (L.) Less.	*Sahadevi*	Roots	Asteraceae	129

Table 51. Plants used as nerve tonic

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Bacopa monnieri* (L.) Penn.	*Bramhi*	Whole plant	Scrophulariaceae	34

Table 52. Plants used for obesity

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Careya arborea* Roxb.	*Kumbha*	Fruit	Lecythidaceae	45

Table 53. Plants used for opacity

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Cynarospermum asperrimum* (Nees) Vollesen	*Dikana*	Root	Acanthaceae	61
2	*Hemidesmus indicus* (L.) Schult. var. *indicus*	*Dudhi, Anantmul*	Leaves	Asclepiadaceae	82
3	*Holarrhena pubescens* (Buch.-Ham.) Wall ex G. Don.	*Pandhari Kuda*	Leaves	Apocynaceae	83
4	*Lobelia nicotianaefolia* Roth ex R. & S.	*Devnal*	Root	Lobeliaceae	91
5	*Leucas aspera* (Willd.) Link	*Kumbha*	Leaves	Lamiaceae	90
6	*Persicaria auriculata* (Meissn.) Dixit, Datt & Roy	*Pharol, Gilumbi*	Tender leaves	Polygonaceae	104

Table 54. Plants used for the treatment of otitis (Inflammation of the ear)

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Dendrobium barbatulum* Lindl.	*Kankidani*	Whole plant	Orchidaceae	63

2	*Dendrocalamus strictus* (Roxb.) Nees	*Managa*	Leaves	Poaceae	65

Table 55. Plants used for psoriasis

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Leucas aspera* (Willd.) Link	*Kumbha*	Leaves	Lamiaceae	90
2	*Wrightia tinctoria* R.Br. ssp. *tinctoria*	*Kalakuda*	Leaves	Apocynaceae	132

Table 56. Plants used for the treatment of piles

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Amorphophallus paeoniifolius* (Dennst.) Nicols. var. *campanulatus* (Decne.) Shivadasan	*Ransuran*	Rhizome	Araceae	30
2	*Asparagus racemosus* Willd. var. *javanica* (Kunth) Baker	*Shatavari*	Root	Liliaceae	33
3	*Arisaema murrayi* (Grah.) Hook.	*Sapkanda*	Bulb	Araceae	32
4	*Colebrookea oppositifolia* Sm.	*Baman*	Leaves	Lamiaceae	56
5	*Catunaregam spinosa* (Thunb.) Tirveng.	*Gela*	Fruit	Rubiaceae	49
6	*Curculigo orchioides* Gaertn.	*Kalimusali*	Rhizome	Hypoxidaceae	59
7	*Dillenia pentagyna* Roxb.	*Karmel*	Inner bark	Dillenaiceae	66
8	*Eulophia nuda* Lindl.	*Amarkanda*	Bulb	Orchidaceae	71
9	*Ficus racemosa* L.	*Umber*	Galls on the leaves	Moraceae	74
10	*Mimosa pudica* L.	*Lajalu*	Leaves	Mimosaceae	96
11	*Plumbago zeylanica* L.	*Pandhara Chitrak*	Roots	Plumbaginaceae	107

12	*Polygonum glabrum* Willd.	*Marvel*	Roots	Polygonaceae	109
13	*Pogostemon benghalensis* (Burm.f.) O. Ktze.	*Pangala*	Leaves	Lamiaceae	108
14	*Psidium guajava* L.	*Peravi, peru*	Leaves	Myrtaceae	110
15	*Raphanus sativus* L. var. *sativus*	*Mula*	Root	Brassicaceae	111
16	*Remusatia vivipara* (Roxb.) Schott. & Endl.	*Sukhalu*	Bulb	Araceae	112
17	*Tagetes erecta* L.	*Zendu*	Flowers	Asteraceae	122
20	*Verbascum chinense* (L.) Sant.	*Kutaki*	Whole plant	Scrophulariaceae	128

Table 57. Plants used for pneumonia

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Catunaregam spinosa* (Thunb.) Tirveng.	*Gela*	Fruit	Rubiaceae	49
2	*Citrullus coclocynthis* (L.) Schrad.	*Kadu indrayan*	Fruits	Cucurbitaceae	52
3	*Diospyros montana* Roxb.	*Gavanda*	Fruits and leaves	Ebenaceae	66
4	*Eclipta prostrata* (L.) L. Mant.	*Maka*	Leaves	Asteraceae	67
5	*Justicia adhatoda* L.	*Adulasa*	Yellow leaves	Acanthaceae	87
6	*Lantana camera* L. var. *aculeata* (L.) Moldenke	*Ghaneri*	Flower	Verbenaceae	89
7	*Pavetta crassicaulis* Bremek.	*Phapat*	Leaves	Rubiaceae	103

Table 58. Plants used for pregnant women

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ailanthus excelsa* Roxb.	*Maharukh*	Bark	Simaroubaceae	28

2	*Anogeissus latifolia* (Roxb. ex DC.) Wall. ex Guill. & Perr.	Dhavada	Gum	Combretaceae	31
3	*Asparagus racemosus* Willd. var. *javanica* (Kunth) Baker.	*Shatavari*	Roots	Liliaceae	33
4	*Biophytum sensitivum* (L.) DC.	Pavasali lajalu	Leaves	Oxalidaceae	37
5	*Careya arborea* Roxb.	Kumbha	Bark	Lecythidaceae	45
6	*Gloriosa superba* L.	*Kal-lavi*	Bulb	Liliaceae	77
7	*Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms.	*Gulvel, Garudvel*	Leaves	Menispermaceae	125
8	*Tinospora sinensis* (Lour.) Merr.	*Gulvel, Garudvel*	Leaves	Menispermaceae	125
9	*Tephrosia purpurea* (L.) Pers.	*Unhali*	Leaves	Fabaceae	123

Table 59. Plants used for prolapsed uterus

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Mimosa pudica* L.	*Lajalu*	Leaves	Mimosaceae	96

Table 60. Plants used for pyorrhea

Sr. No	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Mangifera indica* L.	*Amba*	Leaves	Anacardiaceae	94

Table 61. Plants used for red discharge

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Bacopa monnieri* (L.) Penn.	*Bramhi*	Whole plant	Scrophulariaceae	34
2	*Rubia cordifolia* L.	*Vitali*	Roots	Rubiaceae	113
3	*Moullava spicata* (Dalz.) Nicols	*Waghati*	Roots	Caesalpiniaceae	98

Table 62. Plants used for rickets

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Celastrus paniculatus* Willd.	*Malkanguni, Karad-kanguni*	Leaves	Celastraceae	50
2	*Cryptolepis buchanani* Roem. & Schult.	*Mothi Kavali*	Leaves	Periplocaceae	59
3	*Solanum nigrum* L.	*Kangoni*	Leaves	Solanaceae	118

Table 63. Plants used of ringworms

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ageratum conyzoides* L.	*Osadi*	Leaves	Asteraceae	28
2	*Cassia fistula* L.	*Bhava*	Leaves	Caesalpiniaceae	48
3	*Cassia tora* L.	*Takala*	Leaves	Caesalpiniaceae	49
4	*Reinwardtia indica* Dum.	*Abai*		Linaceae	112
5	*Syzygium cumini* (L.) Skeels	*Jambhal, Hadaki*	Seeds	Myrtaceae	121

Table 64. Plants used for scabies

Sr. No	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Actinodaphne angustifolia* Nees	*Pisa*	Fruits	Lauraceae	27
2	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Latex	Asclepiadaceae	41
3	*Calotropis procera* (Ait.) R.Br.	*Rui, Ravi*	Latex	Asclepiadaceae	42
4	*Carissa congesta* Wight var. *congesta*	*Karavand*	Roots	Apocynaceae	46

5	*Carissa inermis* Vahl	*Karavand*	Roots	Apocynaceae	47
6	*Cassia fistula* L.	*Bhava*	Leaves	Caesalpiniaceae	48
7	*Clematis gouriana* Roxb. ex DC.	*Morvel*	Leaves	Ranunculaceae	53
8	*Clematis hedysarifolia* DC.	*Morvel*	Leaves	Ranunculaceae	53
9	*Cocos nucifera* L.	*Naral*	Fruits (Pericarp)	Arecaceae	55
10	*Hiptage benghalensis* (L.) Kurz	*Haladvel*	Leaves	Malpighiaceae	83
11	*Leucas ciliata* Bth.	*Burambi*	Leaves	Lamiaceae	90
12	*Leucas stelligera* Wall.	*Burambi*	Leaves	Lamiaceae	90
13	*Plumbago zeylanica* L.	*Pandhara Chitrak*	Leaves and Roots	Plumbaginaceae	107
14	*Pongamia pinnata* (L.) Pierre	*Karanj*	Seeds and Leaves	Fabaceae	109
15	*Radermachera xylocarpa* (Roxb.) K. Schum.	*Kharshing*	Inner bark	Bignoniaceae	111
16	*Securinega virosa* (Roxb. ex Willd.) Baill.	*Pandharphali*	Leaves	Euphorbiaceae	115
17	*Tragia involucrata* L.	*Kolati*	Roots	Euphorbiaceae	126
18	*Ventilago maderaspatana* Gaertn.	*Khandvel*	Root bark	Rhamnaceae	128

Table 65. Plants used for scorpion sting

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Achyranthes aspera* L. var. *aspera*	*Aghada*	Root	Amaranthaceae	26

2	*Argemone mexicana* L.	*Pivala dhotara*	Root	Papaveraceae	31
3	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Latex	Asclepiadaceae	41
4	*Calotropis procera* (Ait.) R.Br.	*Rui, Ravi*	Latex	Asclepiadaceae	42
5	*Carissa congesta* Wight. var. *congesta*	*Karavand*	Roots	Apocynaceae	46
6	*Clematis gouriana* Roxb. ex DC.	*Morvel*	Leaves	Ranunculaceae	53
7	*Hygrophila schulli* (Buch.-Ham.) M.R. & S.M. Almeida	*Kate Kolisna, Kolasinda*	Leaves	Acanthaceae	85
8	*Rauvolfia serpentina* (L.) Bth. ex Kurz	*Hadaki*	Roots	Apocynaceae	111
9	*Vitex negundo* L. var. *incisa* (Lam.) C.B. Cl.	*Katri nigad*	Leaves	Verbenaceae	130
10	*Vitex negundo* L. var. *negundo*	*Nigad*	Leaves	Verbenaceae	130

Table 66. Plants used for sexual strength

Sr. No	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Asparagus racemosus* Willd. var. *javanica* (Kunth) Baker.	*Shatavari*	Roots	Liliaceae	33
2	*Bombax ceiba* L.	Savar, *Katesavar, Lalsavar*	Roots	Bombacaceae	38
3	*Celastrus paniculatus* Willd.	*Malkanguni, Karad kanguni*	seeds	Celastraceae	50
4	*Chlorophytum glaucoides* Blatt.	*Musali*	Roots	Liliaceae	51
5	*Hygrophila schulli* (Buch.-Ham.) M.R. & S.M. Almeida	*Kate Kolisna, Kolasinda*	seeds	Acanthaceae	85
6	*Mucuna pruriens* (L.) DC.	*Khaj khujali, Kavaskuli*	Seeds	Fabaceae	99

Table 67. Plants used for skin infection

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Abelmoschus manihot* (L.) Medik. ssp. *tetraphyllus* (Roxb. ex Horn) Borss. var. *tetraphyllus*	*Ran bhendi*	Root	Malvaceae	24
2	*Achyranthes aspera* L. var. *aspera*	*Aghada*	Whole plant	Amaranthaceae	26
3	*Acacia chundra* (Roxb. ex Rottl.) Willd.	*Khair*	Leaves	Mimosaceae	25
4	*Actinodaphne angustifolia* Nees	*Pisa*	Fruits	Lauraceae	27
5	*Ageratum conyzoides* L.	*Osadi*	Leaves	Asteraceae	28
6	*Allophylus cobbe* (L.) Raeusch.	*Tipan, Tipani*	Leaves	Sapindaceae	29
7	*Aloe vera* (L.) Burm.f.	*Kavar*	Leaves	Liliaceae	29
8	*Argyreia sericea* Dalz. & Gibs.	*Gavel*	Leaves	Convolvulaceae	32
9	*Begonia crenata* Dryand.	*Pavasali bedaki*	Whole plant	Begoniaceae	36
10	*Callicarpa tomentosa* (L.) Murr.	*Aisar*	Bark and Leaves	Verbenaceae	41
11	*Calotropis gigantea* (L.) Ait.	*Latex*	*Rui, Ravi*	Asclepiadaceae	41

12	*Calotropis procera* (Ait.) R.Br.	*Latex*	*Rui, Ravi*	Asclepiadaceae	42
13	*Carica papaya* L.	*Latex*	*Papai*	Caricaceae	46
14	*Carissa congesta* Wight var. *congesta*	*Karavand*	Roots	Apocynaceae	46
15	*Carissa inermis* Vahl	*Karavand*	Roots	Apocynaceae	47
16	*Cassia fistula* L.	*Bhava*	Leaves	Caesalpiniaceae	48
17	*Cassia tora* L.	*Takala*	Leaves	Caesalpiniaceae	49
18	*Cissampelos pareira* L. var. *hirsuta* (Buch.-Ham. ex DC.)	*Pahadvel*	Roots	Menispermaceae	52
19	*Clematis gouriana* Roxb. ex DC.	*Morvel*	Leaves	Ranunculaceae	53
20	*Clematis hedysarifolia* DC.	*Morvel*	Leaves	Ranunculaceae	53
21	*Cocos nucifera* L.	*Naral*	Fruits (Pericarp)	Arecaceae	55
22	*Cuscuta reflexa* Roxb.	*Aakashvel*	Whole plant	Cuscutaceae	60
23	*Curculigo orchioides* Gaertn.	*Kalimusali*	Rhizome	Hypoxidaceae	59
24	*Entada rheedei* Spreng.	*Gaidhad, Kapa*	Seeds	Mimosaceae	69
25	*Euphorbia hirta* L.	*Dudhi*	Whole plant	Euphorbiaceae	72
26	*Euphorbia laeta* Heyne ex Roth	*Dudhi*	Whole plant	Euphorbiaceae	72
27	*Hiptage benghalensis* (L.) Kurz	*Haladvel*	Leaves	Malpighiaceae	83

28	*Holoptelea integrifolia* (Roxb.) Planch.	*Vavala*	Bark	Ulmaceae	84
29	*Homonoia riparia* Lour.	*Sherani*	Leaves	Euphorbiaceae	85
30	*Lawsonia inermis* L.	*Mendi*	Leaves	Lythraceae	89
31	*Leea indica* (Burm.f.) Merr.	*Dinda*	Roots	Leeaceae	90
32	*Leucas aspera* (Willd.) Link	*Kumbha*	Leaves	Lamiaceae	90
33	*Leucas ciliata* Bth.	*Burambi*	Leaves	Lamiaceae	90
34	*Leucas stelligera* Wall.	*Burambi*	Leaves	Lamiaceae	90
35	*Ludwigia octovalvis* (Jacq.) Raven ssp. *octovalvis*	*Panlavang*	Whole plant	Onagraceae	92
36	*Memecylon umbellatum* Burm.f. var. *umbellatum*	*Anjan*	Leaves	Melastomataceae	95
37	*Michelia champaca* L.	*Sonchapha*	Bark	Magnoliaceae	96
38	*Moullava spicata* (Dalz.) Nicols	*Waghati*	Seeds	Caesalpiniaceae	98
39	*Musa paradisiaca* L.	*Keli*	Stem pith	Musaceae	100
40	*Ocimum basilicum* L.	*Tulas*	Leaves	Lamiaceae	101
41	*Plumbago zeylanica* L.	*Pandhara Chitrak*	Roots	Plumbaginaceae	107
42	*Plumeria rubra* L.	*Pandhara Chapha*	Leaves	Apocynaceae	107
43	*Pongamia pinnata* (L.) Pierre	*Karanj*	Seeds and Leaves	Fabaceae	109
44	*Pterocarpus marsupium* Roxb.	*Bivala*	Bark	Fabaceae	110

45	*Radermachera xylocarpa* (Roxb.) K. Schum.	*Kharshing*	Inner Bark and Pith	Bignoniaceae	111
46	*Reinwardtia indica* Dum.	*Abai*	Leaves	Linaceae	112
47	*Rubia cordifolia* L.	*Vitali*	Roots	Rubiaceae	113
48	*Securinega virosa* (Roxb. ex Willd.) Baill.	*Pandhaphali*	Leaves	Euphorbiaceae	115
49	*Sphaeranthus indicus* L.	*Gorakhamundi*	Whole plant	Asteraceae	119
50	*Spilanthus calva* DC.	*Akkalkara*	Whole plant	Asteraceae	119
51	*Ventilago maderaspatana* Gaertn.	*Khandvel*	Root bark	Rhamnaceae	128

Table 68. Plants used as antidote for snakebite

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Achyranthes aspera* L. var. *aspera*	*Aghada*	Root	Amaranthaceae	26
2	*Argemone mexicana* L.	*Pivala dhotara*	Roots and Seeds	Papaveraceae	31
3	*Bauhinia racemosa* Lam.	*Apata*	Bark	Caesalpiniaceae	35
4	*Carissa congesta* Wight var. *congesta*	*Karavand*	Root	Apocynaceae	46
5	*Celastrus paniculatus* Willd.	*Malkanguni, Karad kanguni*	Leaves	Celastraceae	50
6	*Clerodendrum serratum* (L.) Moon.	*Bharangi*	Roots	Verbenaceae	54
7	*Colocasia esculenta* (L.) Schott	*Alu*	Leaves	Araceae	56

8	*Gloriosa superba* L.	*Kal-lavi*	Bulb	Liliaceae	77
9	*Luffa acutangula* (L.) Roxb.	*Ran dodaka*	fruits	Cucurbitaceae	92
10	*Memecylon umbellatum* Burm.f. var. *umbellatum*	*Anjan*	Leaves	Melastomataceae	95
11	*Oroxylum indicum* (L.) Vent.	*Tetav, Tetu*	Bark	Bignoniaceae	102
12	*Rauvolfia serpentina* (L.) Bth. ex Kurz	*Hadaki*	Roots	Apocynaceae	111
13	*Trichosanthes tricuspidata* Lour.	*Kavandal*	Roots	Cucurbitaceae	127
14	*Vitex negundo* L. var. *incisa* (Lam.) C.B. Cl.	*Katri nigad*	Roots	Verbenaceae	130
15	*Vitex negundo* L. var. *negundo*	*Nigad*	Roots	Verbenaceae	130
16	*Wrightia tinctoria* R.Br. ssp. *tinctoria*	*Kala kuda*	Roots	Apocynaceae	132

Table 69. Plants used for the treatment of stomachache

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Alstonia scholaris* (L.) R.Br.	*Satavin*	Stem Bark	Apocynaceae	29
2	*Caesalpinia bonduc* (L.) Roxb.	*Gajaga*	seeds	Caesalpiniaceae	40
3	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Stem bark	Asclepiadaceae	41
4	*Calotropis procera* (Ait.) R.Br.	*Rui, Ravi*	Stem bark	Asclepiadaceae	42
5	*Elephantopus scaber* L.	*Hastipad*	Roots	Asteraceae	67
6	*Ensete superbum* (Roxb.) Cheesm.	*Chavan*	Seeds	Musaceae	69

7	*Gnidia glauca* (Fresen.) Gilg.	*Rametha*	Leaves	Thymelaeaceae	78
8	*Helicteres isora* Linn.	*Murudshenga, Kivan*	Fruits	Sterculiaceae	81
9	*Holarrhena pubescens* (Buch.-Ham.) Wall. ex G.Don.	*Pandhari Kuda*	Bark & Seed	Apocynaceae	83
10	*Lagerstroemia microcarpa* Wight	*Nanya*	Bark	Lythraceae	89
11	*Malaxis rheedi* Swartz.	*Patharkudi*	Stem	Orchidaceae	93
12	*Meyna laxiflora* Robyns	*Aalu*	Seeds	Rubiaceae	95
13	*Mimusops elengi* L.	*Bakul, Haval*	Seeds	Sapotaceae	96
14	*Mitragyna parvifolia* (Roxb.) Korth.	*Kalamb*	Bark	Rubiaceae	97
15	*Radermachera xylocarpa* (Roxb.) K. Schum.	*Kharshing*	Leaves	Bignoniaceae	111
16	*Securinega virosa* (Roxb. ex Willd.) Baill.	*Pandhaphali*	Leaves	Euphorbiaceae	115
17	*Syzygium cumini* (L.) Skeels	*Jambhal, Hadaki*	Leaves	Myrtaceae	121
18	*Tragia involucrata* L.	*Kolati*	Leaves	Euphorbiaceae	126
19	*Ventilago maderaspatana* Gaertn.	*Khandvel*	Root bark	Rhamnaceae	128

Table 70. Plants used for the treatment of swelling

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Brassica juncea* (L.) Czern. & Coss.	*Mohari*	Seeds	Brassicaeae	39
2	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Leaves	Asclepiadaceae	41

3	*Canscora diffusa* (Vahl) R.Br. ex R. & S.	*Shankha-pushpi*	Leaves	Gentianaceae	43
4	*Casearia championii* Thwaites.	*Modi*	Leaves	Flacourtiaceae	47
5	*Cinnamomum verum* J.S. Presl.	*Dalchini*	Roots	Lauraceae	51
6	*Curcuma aromatica* Salisb.	*Amba halad*	Rhizomes	Zingiberaceae	60
7	*Datura metel* L.	*Kala Dhotara*	Leaves	Solanaceae	64
8	Diplocyclos palmatus (L.) C. Jeffrey	*Shivalingi*	Leaves	Cucurbitaceae	66
9	*Emblica officinalis* Gaertn.	*Awala*	Bark	Euphorbiaceae	68
10	*Entada rheedei* Spreng.	*Gaidhad, Kapa*	seeds	Mimosaceae	69
11	*Euphorbia thymifolia* L.	*Dhakati dudhi, Sher*	Whole plant	Euphorbiaceae	72
12	*Ficus arnottiana* (Miq.) Miq.	*Pair*	Latex	Moraceae	73
13	*Holoptelea integrifolia* (Roxb.) Planch.	*Vavala*	Bark	Ulmaceae	84
14	*Hypoxis aurea* Lour.	-	Tuber	Hypoxidaceae	86
15	*Kalanchoe pinnata* (Lam.) Pres.	*Panphuti*	Leaves	Crassulaceae	88
16	*Michelia champaca* L.	*Sonchapha*	Roots	Magnoliaceae	96
17	*Mirabilis jalapa* L.	*Gulbakshi*	Leaves	Nyctaginaceae	97
18	*Mucuna pruriens* (L.) DC.	*Khaj khujali, Kavaskuli*	Roots	Fabaceae	99
19	*Polycarpon prostratum* (Forssk.) Aschers. & Schweinf.	-	Whole plant	Caryophyllaceae	109

20	*Portulaca oleracea* L.	*Ghol*	Leaves	Portulacaceae	110
21	*Viscum angulatum* Heyne ex DC.	*Jalunder*	Whole plant	Loranthaceae	129
22	*Viscum articulatum* Burm f.	-	Whole plant	Loranthaceae	129
23	*Zingiber zerumbet* (L.) Rosc. ex J.E. Sm.	*Jangali Ale*	Rhizome	Zingiberaceae	133

Table 71. Plants used for Throat infection

Sr. No.	Botanical name of the plant	Local Name	Parts used	Family	Ref. Page
1	*Abrus precatorius* L.	*Gunj*	Roots	Fabaceae	24
2	*Sterculia urens* Roxb.	*Kad, Pandhrukha*	Gum	Sterculiaceae	120

Table 72. Plants used for the treatment of Toothache

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Achyranthes aspera* L. var. *aspera*	*Aghada*	Stems	Amaranthaceae	26
2	*Allophylus cobbe* (L.) Raeusch.	*Tipan, Tipani*	Leaves	Sapindaceae	29
3	*Barleria cristata* L. var. *cristata*	*Nili Koranti*	Stem & leaves	Acanthaceae	34
4	*Barleria cristata* L. var. *dichotoma* (Roxb.) Prain.	*Pandhari Koranti*	Stem & leaves	Acanthaceae	35
5	*Cajanus lineatus* (Wight & Arn.) van der Maesen	*Turati, Rantur*	Stem	Fabaceae	40
6	*Haldina cordifolia* (Roxb.) Ridsd.	*Hedu*	Young branches	Rubiaceae	79
7	*Jatropha curcas* L.	*Malya erand*	Stem	Euphorbiaceae	87
8	*Mimusops elengi* L.	*Bakul, Haval*	Bark	Sapotaceae	96
9	*Smilax zeylanica* L.	*Aakar*	Stem	Smilacaceae	117
10	*Solanum anguivi* Lam.	*Ringaniwangi*	Stem	Solanaceae	117

11	*Solanum virginianum* L.	*Kateringani*	Root powder	Solanaceae	118
12	*Symplocos racemosa* Roxb.	*Lodh*	Bark	Symplocaceae	121
13	*Tabernaemontana divaricata* (L.) R.Br.	*Tagar*	Roots	Apocynaceae	122
14	*Terminalia chebula* Retz.	*Hirda*	Fruits	Combretaceae	124
15	*Vitex negundo* L. var. *incisa* (Lam.) C.B. Cl.	*Katri nigad*	Stem	Verbenaceae	130
16	*Vitex negundo* L. var. *negundo*	*Nigad*	Stem	Verbenaceae	130

Table 73. Plants used for treatment of Tuberculosis

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Capparis moonii* Wight	*Waghati*	Fruits	Capparaceae	44
2	*Pavetta crassicaulis* Bremek.	*Phapat*	Leaves	Rubiaceae	103

Table 74. Plants used for urinary problems

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Butea monosperma* (Lam.) Taub. var. *monosperma*	*Palas*	Flowers	Fabaceae	39
2	*Cassia tora* L.	*Takala*	Seeds	Caesalpiniaceae	49
3	*Desmodium triquetrum* (L.) DC.	*Kakganga*	Leaves	Fabaceae	65
4	*Erinocarpus nimmonii* Grah. ex Dalz.	*Cher*	Flowers	Tiliaceae	70
5	*Gymnema sylvestre* (Retz.) R.Br. ex Schultes	*Bedaki*	Leaves	Asclepiadaceae	79

6	*Hygrophila schulli* (Buch.-Ham.) M.R. & S.M. Almeida	*Kate Kolisna, Kolasinda*	Leaves and roots	Acanthaceae	85
7	*Sida rhombifolia* L. ssp. *rhombifolia*	*Chikankhada*	Root	Malvaceae	116
8	*Sida rhombifolia* L. ssp. *retusa* (L.) Borss.	*Chikankhada*	Root	Malvaceae	117
9	*Tephrosia purpurea* (L.) Pers.	*Unhali*	Leaves	Fabaceae	123
10	*Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms.	*Gulvel*	Stem	Menispermaceae	125
11	*Tinospora sinensis* (Lour.) Merr.	*Gulvel, Garudvel*	Leaves	Menispermaceae	125

Table 75. Plants used for the treatment of vomiting

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Cinnamomum verum* J.S. Presl.	*Dalchini*	Bark	Lauraceae	51
2	*Cuscuta reflexa* Roxb.	*Aakashvel*	Whole plant	Cuscutaceae	60
3	*Hedyotis herbacea* L.	*Paripath*	Whole plant	Rubiaceae	80
4	*Jasminum malabaricum* Wight	*Kusar*	Leaves	Oleaceae	86
5	*Rostellularia procumbens* (L.) Nees	*Kalmashi*	Whole plant	Acanthaceae	113

Table 76. Plants used for the weakness

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Anogeissus latifolia* (Roxb. ex DC.) Wall. ex Guill. & Perr.	*Dhavada*	Gum	Combretaceae	31
2	*Careya arborea* Roxb.	*Kumbha*	Bark	Lecythidaceae	45

Table 77. Plants used for the treatment of white discharge

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Abrus precatorius* L.	*Gunj*	Roots	Fabaceae	24
2	*Actinodaphne angustifolia* Nees	*Pisa*	Tender leaves	Lauraceae	27
3	*Acacia chundra* (Roxb. ex Rottl.) Willd.	*Khair*	Bark	Mimosaceae	25
4	*Agave americana* L. var. *americana*	*Ghayapat*	Leaves	Agavaceae	28
5	*Asparagus racemosus* Willd. var. *javanica* (Kunth) Baker	*Aswali*	Roots	Liliaceae	33
6	*Bacopa monnieri* (L.) Penn.	*Bramhi*	Whole plant	Scrophulariaceae	34
7	*Bauhinia racemosa* Lam.	*Apata*	Bark	Caesalpiniaceae	35
8	*Bidens biternata* (Lour.) Merr. & Sherff.	*Murshenda*	Tender leaves	Asteraceae	36
9	*Bombax ceiba* L.	*Katesavar*	Bark	Bombacaceae	38
10	*Celastrus paniculatus* Willd.	*Malkanguni, Karad kanguni*	Roots	Celastraceae	50
11	*Cordia dichotoma* Forst.f.	*Bhokar*	Seeds	Boraginaceae	57
12	*Crossandra infundibuliformis* (L.) Nees	*Aboli*	Roots	Acanthaceae	58
13	*Cynodon dactylon* (L.) Pers.	*Harali*	Whole plant	Poaceae	62
14	*Erythrina variegata* L.	*Pangara*	Bark	Fabaceae	70
15	*Ficus benghalensis* L.	*Vad*	Aerial roots	Moraceae	73
16	*Ficus racemosa* L.	*Umber*	Fruits	Moraceae	74

17	*Ficus religiosa* L.	*Pimpal*	Bark	Moraceae	75
18	*Hemidesmus indicus* (L.) Schult. var. *indicus*	*Dudhi, Anantmul*	Leaves	Asclepiadaceae	82
19	*Hibiscus rosa-sinensis* L.	*Jasvand*	Flowers	Malvaceae	83
20	*Holarrhena pubescens* (Buch.-Ham.) Wall ex G. Don.	*Pandhari Kuda*	Bark	Apocynaceae	83
21	*Lantana camera* L. var. *aculeata* (L.) Moldenke	*Ghaneri*	Leaves	Verbenaceae	89
22	*Mimusops elengi* L.	*Bakul, Haval*	Bark	Sapotaceae	96
23	*Mucuna pruriens* (L.) DC.	*Khaj khujali, Kavaskuli*	Seeds	Fabaceae	99
24	*Musa paradisiaca* L.	*Keli*	Stem pith	Musaceae	100
25	*Paracalyx scariosus* (Roxb.) Ali	*Kanphuti*	Roots	Fabaceae	102
26	*Symplocos racemosa* Roxb.	*Lodh*	Bark	Symplocaceae	121
27	*Tectona grandis* L.f.	*Sag*	Tender leaves	Verbenaceae	122
28	*Woodfordia fruticosa* (L.) Kurz	*Dhayati*	Flowers	Lythraceae	132

Table 78. Plants used for women specific diseases

Sr. No.	Botanical Name	Local Name	Parts used	Family	Ref. Page
1	*Abrus precatorius* L.	*Gunj*	Roots	Fabaceae	24
2	*Acacia chundra* (Roxb. ex Rottl.) Willd.	*Khair*	Bark	Mimosaceae	25
3	*Actinodaphne angustifolia* Nees	*Pisa*	Tender leaves	Lauraceae	27

4	*Agave americana* L. var. *americana*	*Ghayapat*	Leaves	Agavaceae	28
5	*Ailanthus excelsa* Roxb.	*Maharukh*	Bark	Simaroubaceae	28
6	*Aloe vera* (L.) Burm.f.	*Kavar*	Leaves	Liliaceae	29
7	*Anogeissus latifolia* (Roxb. ex DC.) Wall. ex Guill. & Perr.	*Dhavada*	Gum	Combretaceae	31
8	*Asparagus racemosus* Willd. var. *javanica* (Kunth) Baker	*Shatavari*	Roots	Liliaceae	33
9	*Bacopa monnieri* (L.) Penn.	*Bramhi*	Whole plant	Scrophulariaceae	34
10	*Bauhinia racemosa* Lam.	*Apata*	Bark	Caesalpiniaceae	35
11	*Biophytum sensitivum* (L.) DC.	*Pavasali lajalu*	Leaves	Oxalidaceae	37
12	*Bombax ceiba* L.	*Savar, Katesavar*	Bark	Bombacaceae	38
13	*Capsella bursa-pastoris* (L.) Medik.	*Dhaman*	Whole plant	Brassicaceae	44
14	*Careya arborea* Roxb.	*Kumbha*	Bark	Lecythidaceae	45
15	*Celastrus paniculatus* Willd.	*Malkanguni, Karadkanguni*	Roots	Celastraceae	50
16	*Colocasia esculenta* (L.) Schott	*Alu*	Leaves	Araceae	56
17	*Cordia dichotoma* Forst.f.	*Bhokar*	Seeds	Boraginaceae	57
18	*Cynodon dactylon* (L.) Pers.	*Harali*	Whole plant	Poaceae	62
19	*Dendrophthoe falcata* (L.f) Etting var. *falcata*	*Bandgul*	Bark	Loranthaceae	64

20	*Entada rheedei* Spreng.	*Gaidhad, Kapa*	Seeds	Mimosaceae	69
21	*Erythrina variegata* L.	*Pangara*	Bark	Fabaceae	70
22	*Ficus benghalensis* L.	*Vad*	Aerial roots	Moraceae	73
23	*Ficus racemosa* L.	*Umber*	Fruits	Moraceae	74
24	*Ficus religiosa* L.	*Pimpal*	Bark	Moraceae	75
25	*Gloriosa superba* L.	*Kal-lavi*	Bulb	Liliaceae	77
26	*Hemidesmus indicus* (L.) Schult. var. *indicus*	*Dudhi, Anantmul*	Leaves	Asclepiadaceae	82
27	*Hibiscus rosa-sinensis* L.	*Jasvand*	Flowers	Malvaceae	83
28	*Holarrhena pubescens* (Buch.-Ham.) Wall ex G. Don.	*Pandhari Kuda*	Bark	Apocynaceae	83
29	*Lantana camera* L. var. *aculeata* (L.) Moldenke	*Ghaneri*	Leaves	Verbenaceae	89
30	*Michelia champaca* L.	*Sonchapha*	Bark	Magnoliaceae	96
31	*Mimosa pudica* L.	*Lajalu*	Leaves	Mimosaceae	96
32	*Mimusops elengi* L.	*Bakul, Haval*	Bark	Sapotaceae	96
33	*Moringa oleifera* Lam.	*Shevaga*	Leaves and Fruits	Moringaceae	98
34	*Moullava spicata* (Dalz.) Nicols.	*Waghati*	Root	Caesalpiniaceae	98
35	*Mucuna pruriens* (L.) DC.	*Khaj khujali, Kavaskuli*	Seeds	Fabaceae	99
36	*Musa paradisiaca* L.	*Keli*	Stem pith	Musaceae	100
37	*Paracalyx scariosus* (Roxb.) Ali	*Kanphuti*	Roots	Fabaceae	102
38	*Rubia cordifolia* L.	*Vitali*	Roots	Rubiaceae	113

39	*Symplocos racemosa* Roxb.	*Lodh*	Bark	Symplocaceae	121
40	*Tectona grandis* L.f.	*Sag*	Tender leaves	Verbenaceae	122
41	*Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms.	*Gulvel, Garudvel*	Leaves	Menispermaceae	125
42	*Tinospora sinensis* (Lour.) Merr.	*Gulvel, Garudvel*	Leaves	Menispermaceae	125
43	*Woodfordia fruticosa* (L.) Kurz	*Dhayati*	Flowers	Lythraceae	132

Table 79. Plants used for wounds

Sr. No	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Actinodaphne angustifolia* Nees	*Pisa*	Tender leaves	Lauraceae	27
2	*Ageratum conyzoides* L.	*Osadi*	Leaves	Asteraceae	28
3	*Allophylus cobbe* (L.) Raeusch.	*Tipan, Tipani*	Root	Sapindaceae	29
4	*Anogeissus latifolia* (Roxb. ex DC.) Wall. ex Guill. & Perr.	*Dhavada*	Gum	Combretaceae	31
5	*Biophytum sensitivum* (L.) DC.	*Pavasali lajalu*	Leaves	Oxalidaceae	37
6	*Blumea lacera* (Burm.f.) DC.	*Bhambarat*	Leaves	Asteraceae	37
7	*Blumea malcolmii* (C.B. Cl.) Hook.f.	*Burandi*	leaves	Asteraceae	38
8	*Calotropis gigantea* (L.) Ait.	*Rui, Ravi*	Latex	Asclepiadaceae	41

9	*Calotropis procera* (Ait.) R.Br.	*Rui, Ravi*	Latex	Asclepiadaceae	42
10	*Capsella bursa-pastoris* (L.) Medik.	*Dhaman*	Leaves	Brassicaceae	44
11	*Careya arborea* Roxb.	*Kumbha*	Bark	Lecythidaceae	45
12	*Carica papaya* L.	*Papai*	Raw fruits	Caricaceae	46
13	*Cassia occidentalis* L.	*Kasvinda*	Leaves	Caesalpiniaceae	48
14	*Casearia graveolens* Dalz.	*Bokada*	Stem bark	Flacourtiaceae	47
15	*Celastrus paniculatus* Willd.	*Malkanguni, Karadkanguni*	Roots	Celastraceae	50
16	*Colebrookea oppositifolia* Sm.	*Baman*	Leaves	Lamiaceae	56
17	*Datura metel* L.	*Kala Dhotara*	Flowers	Solanaceae	64
18	*Dillenia pentagyna* Roxb.	*Karmel*	Inner bark	Dillenaiceae	66
19	*Elaeagnus conferta* Roxb.	*Dombal*	Leaves	Elaeagnaceae	67
20	*Hypoxis aurea* Lour.	-	Tuber	Hypoxidaceae	86
21	*Kalanchoe pinnata* (Lam.) Pres.	*Panphuti*	Leaves	Crassulaceae	88
22	*Litsea deccanensis* Gamble	*Kala pisa*	Leaves	Lauraceae	91
23	*Macaranga peltata* (Roxb.) Muell.-Arg.	*Chandada*	Latex	Euphorbiaceae	93
24	*Malaxis rheedi* Swartz.	*Patharkudi*	Stem	Orchidaceae	93
25	*Mimosa pudica* L.	*Lajalu*	Leaves	Mimosaceae	96

26	*Mirabilis jalapa* L.	*Gulbakshi*	Leaves	Nyctaginaceae	97
27	*Momordica dioica* Roxb. ex Willd.	*Karatoli*	Leaves	Cucurbitaceae	98
28	*Musa paradisiaca* L.	*Keli*	Stem pith	Musaceae	100
29	*Pavetta crassicaulis* Bremek.	*Phapat*	Leaves	Rubiaceae	103
30	*Plectranthus mollis* (Ait.) Spr.	*Lal aghada*	Leaves	Lamiaceae	106
31	Pongamia *pinnata* (L.) Pierre	*Karanj*	Bark and leaves	Fabaceae	109
32	*Pogostemon benghalensis* (Burm.f.) O. Ktze.	*Pangala*	Leaves	Lamiaceae	108
33	*Pogostemon deccanensis* (Panigr.) Press	-	Leaves	Lamiaceae	108
34	*Polygonum glabrum* Willd.	*Marvel*	Whole plant	Polygonaceae	109
35	*Pongamia pinnata* (L.) Pierre	*Karanj*	Leaves, Bark	Fabaceae	109
36	*Pterocarpus marsupium* Roxb.	*Bivala*	Leaves	Fabaceae	110
37	*Rubia cordifolia* L.	*Vitali*	Roots	Rubiaceae	113
38	*Spermadictyon suaveolens* Roxb.	*Jitasaya*	Pith	Rubiaceae	119
39	*Securinega virosa* (Roxb. ex Willd.) Baill.	*Pandhaphali*	Leaves	Euphorbiaceae	115
40	*Sida cordifolia* L.	*Chikana*	Leaves	Malvaceae	116

41	*Sopubia delphinifolia* (L.) G.Don. var. *delphinifolia*	*Dudhli*	Leaves	Scrophulariaceae	118
42	*Spermacoce pusilla* Wall.	-	Tender leaves	Rubiaceae	119
43	*Spermadictyon suaveolens* Roxb.	*Jitasaya*	Stem	Rubiaceae	119
44	*Terminalia chebula* Retz.	*Hirda*	Fruits	Combretaceae	124
45	*Triumfetta rhomboidea* Jacq.	*Chikenkhada*	Leaves	Tiliaceae	127
46	*Tridax procumbens* L.	*Kudamuda*	Leaves	Asteraceae	127
47	*Woodfordia fruticosa* (L.) Kurz	*Dhayati*	Flowers	Lythraceae	132
48	*Zingiber neesanum* (Grah.) Ramam.	*Nishan*	Rhizome	Zingiberaceae	133

Table 80. Plants used in Veterinary medicines

Sr. No.	Botanical Name	Local Name	Parts used	Family	Ref. Page
1	*Arisaema murrayi* (Grah.) Hook.	*Sapkanda*	Tuber	Araceae	32
2	*Atalantia racemosa* Wight	*Makad limbu*	Leaves	Rutaceae	135
3	*Breynia retusa* (Dennst.) Alston	*Dolphodi, Kangali*	Leaves	Euphorbiaceae	135
4	*Bridelia retus*a (L.) Spreng.	*Asana*	Bark	Euphorbiaceae	135
5	*Caesalpinia cucullata* Roxb.	*Ragi*	Seeds	Caesalpiniaceae	135
6	*Clematis gouriana* Roxb. ex DC.	*Morvel*	Leaves	Ranunculaceae	53
7	*Dalbergia sissoo* Roxb.	*Sisam*	Leaves	Fabaceae	63

8	*Ensete superbum* (Roxb.) Cheesm.	*Chavan*	Tuber	Musaceae	69
9	*Eranthemum roseum* (Vahl) R.Br.	*Dasmuli*	Roots	Acanthaceae	70
10	*Euphorbia laeta Heyne* ex Roth	*Dudhi*	Leaves	Euphorbiaceae	72
11	*Ficus arnottiana* (Miq.) Miq.	*Pair*	Bark	Moraceae	73
12	*Ficus rumphii* Bl.	*Aashit*	Latex	Moraceae	76
13	*Firmiana colorata* (Roxb.) R.Br.	*Koush*	Leaves	Sterculiaceae	136
14	*Hemidesmus indicus* (L.) Schult. var. *indicus*	*Dudhi*	Leaves	Asclepiadaceae	82
15	*Leucas stelligera* Wall.	*Burambi*	Leaves	Lamiaceae	90
16	*Lobelia nicotianaefolia* Roth ex R. & S.	*Devnal*	Leaves	Lobeliaceae	91
17	*Maytenus senegalensis* (Lam.) Excell.	*Hekal*	Bark	Celastraceae	136
18	*Nothapodytes nimmoniana* (J. Grah.) Mabberley	*Naraka*	Bark	Icacinaceae	136
19	*Phyllanthus reticulatus* Poir.	*Nilumbi*	Leaves	Euphorbiaceae	137
20	*Plumbago zeylanica* L.	*Pandhara Chitrak*	Leaves	Plumbaginaceae	107
21	*Pogostemon benghalensis* (Burm.f.) O. Ktze.	*Pangala*	Roots and Leaves	Lamiaceae	108
22	*Rubia cordifolia* L.	*Vitali*	Root	Rubiaceae	113
23	*Smilax zeylanica* L.	*Aakar*	Fruits	Smilacaceae	117

Table 81. Plants used for Food

Sr. No	Botanical Name	*Local Name*	Parts used	Family	Ref. Page
1	*Abelmoschus manihot* (L.) Medik. ssp. *tetraphyllus* (Roxb. ex Horn) Borss. var. *tetraphyllus*	*Ran bhendi*	Fruits	Malvaceae	24
2	*Alternanthera sessilis* (L.) R.Br. ex DC.	*Gunguna, Bhuijambhal*	Young Leaves, Seeds	Amaranthaceae	138
3	*Amaranthus cruentus* L.	*Rajgira*	Young Leaves	Amaranthaceae	139
4	*Amaranthus spinosus* L.	*Katemat*	Young Leaves	Amaranthaceae	139
5	*Amaranthus viridis* Linn.	*Tandali*	Young Leaves	Amaranthaceae	139
6	*Amorphophallus commutatus* (Schott) Engl.	*Ransuran*	Rhizome	Araceae	139
7	*Anacardium occidentale* L.	*Kajavi*	Thalamus& Seeds	Anacardiaceae	140
8	*Artocarpus heterophyllus* Lam.	*Phanas*	Young and Mature Fruits	Moraceae	140
9	*Basella alba* L.	*Mayalu*	Young leaves	Basellaceae	140
10	*Bauhinia racemosa* Lam.	*Apta*	Seeds	Caesalpiniaceae	35
11	*Bidens biternata* (Lour.) Merr. & Sherff.	*Murada*	Young leaves	Asteraceae	36
12	*Bombax ceiba* L.	*Lalsavar*	Young buds	Bombacaceae	38
13	*Bridelia retusa* (L.) Spreng.	*Asana*	Fruits	Euphorbiaceae	135

14	*Cajanus lineatus* (W & A.) van der Maesen	*Turati / Rantur*	Seeds	Fabaceae	40
15	*Cajanus cajanifolius* (Haines) Maesen	*Tur*	Seeds	Fabaceae	140
16	*Canavalia gladiata* (Jacq.) DC.	*Abaibabaicha vel*	Fruits	Fabaceae	141
17	*Capparis cleghornii* Dunn ex Gamble	*Puravi*	Fruits	Capparaceae	141
18	*Carissa congesta* Wight. var. *congesta*	*Karavand*	Fruits	Apocynaceae	46
19	*Casearia championii* Thwaites.	*Modi*	Leaves	Flacourtiaceae	47
20	*Cassia fistula* L.	*Bahava*	Fruit pulp	Caesalpiniaceae	48
21	*Cassia tora* L.	*Takala*	Tender leaves, Seeds	Caesalpiniaceae	49
22	*Celosia argentea* L.	*Kuradu*	Tender leaves	Amaranthaceae	51
23	*Centella asiatica* (L.) Urban	*Gol Brahmi*	Leaves	Apiaceae	141
24	*Ceropegia jainii* Ansari & Kulkarni	*Kharatudi*	Tubers	Asclepiadaceae	142
25	*Ceropegia santapaui* Wadhwa & Ansari	*Kharatudi*	Tubers	Asclepiadaceae	142
26	*Cinnamomum verum* J.S. Presl.	*Dalchini*	Bark	Lauraceae	51
27	*Clausena indica* (Dalz.) Oliver	*Aambatgara*	Fruits	Rutaceae	142
28	*Clerodendrum serratum* (L.) Moon.	*Bharangi*	Young leaves	Verbenaceae	54

29	*Cocculus hirsutus* (L.) Theob.	*Vasanvel*	Young leaves	Menispermaceae	142
30	*Colocasia esculenta* (L.) Schott	*Alu*	Leaves	Araceae	56
31	*Commelina benghalensis* L.	*Kena*	Young leaves	Commelinaceae	143
32	*Cordia dichotoma* Forst.f.	*Bhokar*	Ripe and unripe fruits	Boraginaceae	57
33	*Coriandrum sativum* L.	*Kothmir*	Leaves	Apiaceae	57
34	*Costus speciosus* (Koen.) J.E. Sm.	*Kosta*	Rhizome	Zingiberaceae	57
35	*Crateva magna* (Lour.) DC.	*Vayavarna*	Tender leaves & flowers	Capparaceae	58
36	*Crotalaria filipes* Bth. var. *filipes*	*Phataphati*	Fruits	Fabaceae	143
37	*Crotalaria triquetra* Dalz.	*Ghagari*	Fruits	Fabaceae	143
38	*Cucumis melo* L.	*Meka*	Fruits	Cucurbitaceae	144
39	*Curcuma zedoaria* (Christm.) Rosc.	*Kachora*	Rhizome	Zingiberaceae	144
40	*Dimocarpus longan* Lour.	*Vamb*	Fruits	Sapindaceae	144
41	*Dioscorea alata* L.	*Ghorkand*	Tuber	Dioscoreaceae	144
42	*Dioscorea bulbifera* L.	*Karanda*	Bulbils	Dioscoreaceae	144
43	*Dioscorea oppositifolia* L.	*Kadu Karanda*	Bulbils	Dioscoreaceae	145
44	*Dioscorea pentaphylla* L.	*Shendvel*	Bulbs, Young shoots, Buds, Leaves and Infloresc-ence	Dioscoreaceae	145

45	*Elaeagnus conferta* Roxb.	*Dombal*	Fruits	Elaeagnaceae	67
46	*Elaeocarpus glandulosus* Wall. ex Merr.	*Kasav*	Fruits	Elaeocarpaceae	145
47	*Eleusine coracana* (L.) Gaertn.	*Nachani*	Grains	Poaceae	145
48	*Embelia basaal* (R & S) A.DC.	*Vavdungi*	Fruits	Myrsinaceae	146
49	*Embelia drupacea* (Dennst.) M.R. & S.M. Almeida	*Vashingi*	Fruits	Myrsinaceae	146
50	*Embelia ribes* Burm.f.	*Vavdinga*	Fruits	Myrsinaceae	68
51	*Emblica officinalis* Gaertn.	*Awala*	Fruits	Euphorbiaceae	68
52	*Ensete superbum* (Roxb.) Cheesm.	*Chavan*	Fruits	Musaceae	69
53	*Entada rheedei* Spreng.	*Gaidhad*	Seeds	Mimosaceae	69
54	*Ficus arnottiana* (Miq.) Miq.	*Pair*	Receptacles	Moraceae	73
55	*Ficus exasperata* Vahl	*Kharavat*	Receptacles	Moraceae	74
56	*Ficus hispida* L.	*Bhuiumber*	Receptacles	Moraceae	74
57	*Ficus racemosa* L.	*Umber*	Receptacles	Moraceae	74
58	*Flacourtia latifolia* (Hook.f. & Thoms.) T. Cooke.	*Tambat*	Fruits	Flacourtiaceae	146
59	Flacourtia Montana Grah.	*Atak*	Fruits	Flacourtiaceae	146
60	*Garcinia indica* (Du Petit-Thou.) Choisy	*Kokam*	Fruits	Clusiaceae	147

61	*Garuga pinnata* Roxb.	*Kakad*	Fruits	Burseraceae	147
62	*Girardinia diversifolia* (Link) Friis	*Aagya*	Tender buds	Urticaceae	147
63	*Gmelina arborea* Roxb.	*Shivan*	Fruits	Verbenaceae	78
64	*Gnetum ula* Roxb.	*Ombali*	Seeds	Gneateceae	148
65	*Grewia nervosa* (Lour.) Panigr.	*Shilan*	Fruits	Tiliaceae	148
66	*Grewia tiliifolia* Vahl	*Dhaman*	Fruits	Tiliaceae	79
67	*Heterophragma quadriloculare* (Roxb.) K. Schum.	*Varas*	Fruits	Bignoniaceae	82
68	*Hibiscus cannabinus* L.	*Ambadi*	Leaves	Malvaceae	148
69	*Hitchenia caulina* (Grah.) Baker.	*Chavar*	Rhizome	Zingiberaceae	148
70	*Holarrhena pubescens* (Buch.-Ham.) Wall ex G. Don.	*Pandhara Kuda*	Flowers	Apocynaceae	83
71	*Hygrophila schulli* (Buch.-Ham.) M.R. & S.M. Almeida	*Kate Kolisna*	Tender leaves	Acanthaceae	85
72	*Indigofera cassioides* Rottl. ex DC.	*Chimanti*	Flowers	Fabaceae	149
73	*Indigofera linifolia* (L.) Retz.	*Pandharphali*	Seeds	Fabaceae	149
74	*Ipomoea aquatica* Forssk.	*Nalichi bhaji*	Leaves	Convolvulaceae	149
75	*Ipomoea batatas* (L.) Lam.	*Ratali*	Tuber, Young leaves	Convolvulaceae	149

76	*Ixora brachiata* Roxb.	*Lokhandi*	Fruits	Rubiaceae	150
77	*Jasminum malabaricum* Wight	*Kusar*	Fruits	Oleaceae	86
78	*Justicia diffusa* Willd.	*Tharmara*	Tender leaves	Acanthaceae	150
79	*Lactuca remotiflora* DC.	*Patri*	Tender leaves	Asteraceae	150
80	*Lagerstroemia parviflora* Roxb.	*Bondara*	Tender leaves	Lythraceae	150
81	*Lantana camera* L. var. *aculeata* (L.) Moldenke	*Ghaneri*	Fruits	Verbenaceae	89
82	*Luffa acutangula* (L.) Roxb.	*Ran dodaka*	Fruits	Cucurbitaceae	92
83	*Luffa cylindrica* (L.) M.J. Roem.	*Gosavale*	Fruits	Cucurbitaceae	150
84	*Lygodium flexuosum* (L.) Sw.	*Vel-vakchouda*	Tender leaves	Lygodiaceae	92
85	*Maesa indica* (Roxb.) A. DC.	*Ataki*	Fruits	Myrsinaceae	151
86	*Mangifera indica* L.	*Amba*	Fruits	Anacardiaceae	94
87	*Marsilea minuta* L.		Tender leaves	Marsiliaceae	151
88	*Memecylon umbellatum* Burm.f. var. *umbellatum*	*Anjan*	Fruits	Melastomataceae	95
89	*Meyna laxiflora* Robyns	*Aalu*	Fruits	Rubiaceae	95
90	*Mimusops elengi* L.	*Bakul, Haval*	Fruits	Sapotaceae	96
91	*Momordica dioica* Roxb. ex Willd.	*Karatoli*	Fruits	Cucurbitaceae	98
92	*Moringa oleifera* Lam.	*Shevaga*	Fruits, tender leaves	Moringaceae	98

93	*Morus alba* L.	*Tuti*	Fruits	Moraceae	151
94	*Mucuna pruriens* (L.) DC.	*Kavaskuli*	Seeds	Fabaceae	99
95	*Murraya koenigii* (L.) Spr.	*Kadipatta*	Leaves	Rutaceae	151
96	*Musa paradisiaca* L.	*Keli*	Fruits	Musaceae	100
97	*Mussaenda glabrata* (Hook.f.) Hutch. ex Gamble	*Bhutkes*	Leaves	Rubiaceae	152
98	*Neolamarckia cadamba* (Roxb.) Bosser.	*Kadamba*	Fruits	Rubiaceae	152
99	*Nothopegia castaneifolia* (Roth) Ding Hou	*Ambari*	Fruits	Anacardiaceae	152
100	*Oroxylum indicum* (L.) Vent.	*Tetav,Tetu*	Young Fruits	Bignoniaceae	102
101	*Oryza sativa* L.	*Bhat*	Seed grains	Poaceae	153
102	*Ougeinia oojeinensis* (Roxb) Hochr.	*Tivas*	Flowers and Fruits	Fabaceae	153
103	*Oxalis corniculata* var. *corniculata* L.	*Ambushi*	Tender leaves	Oxalidaceae	153
104	*Panicum miliaceum* L.	*Vari*	Seed grains	Poaceae	153
105	*Paracalyx scariosus* (Roxb.) Ali	*Ran Ghevada*	Fruits	Fabaceae	102
106	*Pavetta crassicaulis* Bremek.	*Phapat*	Flowers	Rubiaceae	103
107	*Persicaria auriculata* (Meissn.) Dixit, Datt & Roy	*Gilumbi*	Fruits	Polygonaceae	104

108	*Pimpinella adscendens* Dalz.	*Gajari*	Rhizome	Apiaceae	154
109	*Pinda concanense* (Dalz.) P.K. Mukh. & Constance	*Pand*	Rhizome	Apiacae	105
110	*Piper nigrum* L.	*Miri*	Fruits	Piperaceae	106
111	*Portulaca oleracea* L.	*Ghol*	Tender leaves	Portulacaceae	110
112	*Psidium guajava* L.	*Peravi,peru*	Fruits	Myrtaceae	110
113	*Pueraria Montana* (Lour.) Merr. var. *Montana*	*Bhuikohala*	Tubers	Fabaceae	154
114	*Radermachera xylocarpa* (Roxb.) K. Schum.	*Kharshing*	Fruits	Bignoniaceae	111
115	*Securinega virosa* (Roxb. ex Willd.) Baill.	*Pandhaphali*	Fruits	Euphorbiaceae	115
116	*Seshagiria sahyadrica* Ansari & Hemadri	*Khobardoda*	Young fruits	Asclepiadaceae	154
119	*Sida cordifolia* L.	*Chikana*	Tender leaves	Malvaceae	116
118	*Sida rhombifolia* L. ssp. *retusa* (L.) Borss.	*Chikankhada*	Tender leaves	Malvaceae	117
117	*Sida rhombifolia* L. ssp. *rhombifoli*a	*Chikankhada*	Tender leaves	Malvaceae	116
120	*Smilax zeylanica* L.	*Aakar*	Fruits	Smilacaceae	117
121	*Smithia bigemina* Dalz.	*Nal*	Tender leaves	Fabaceae	154
122	*Solanum anguivi* Lam.	*Ringaniwangi*	Fruits	Solanaceae	117

123	*Solanum nigrum* L.	*Kangoni*	Fruits	Solanaceae	118
124	*Solanum surattense* Burm.f.	*Kateringani*	Fruits	Solanaceae	155
125	*Solena amplexicaulis* (Lam.) Gandhi	*Gomati*	Fruits	Cucurbitaceae	155
126	*Sonchus oleraceus* L.	*Mhatara*	Tender leaves	Asteraceae	155
127	*Syzygium cumini* (L.) Skeels	*Jambhal, Hadaki*	Fruits	Myrtaceae	121
128	*Terminalia bellirica* (Gaertn.) Roxb.	*Hela, Behada*	Seeds	Combretaceae	123
129	*Terminalia chebula* Retz.	*Hirda*	Seeds	Combretaceae	124
130	*Vigna sublobata* (Roxb.) Babu & Sharma	*Ran-udid*	Seeds	Fabaceae	156
131	*Vigna radiata* (L.) R. Wilczek	*Ran mug*	Seeds	Fabaceae	156
132	*Vigna trilobata* (L.) Verdc. var. *trilobata*	*Mukani*	Seeds	Fabaceae	156
133	*Vigna vexillata* (L.) A. Rich. var. *vexillata*	*Birambula*	Young fruits, seeds, Bulbs	Fabaceae	130
134	*Woodfordia fruticosa* (L.) Kurz	*Dhayati*	Flowers	Lythraceae	132
135	*Wrightia tinctoria* R.Br. ssp. *tinctoria*	*Kala kuda*	Flowers	Apocynaceae	132
136	*Zanthoxylum rhesta* (Roxb.) DC.	*Tisal*	Fruits	Rutaceae	156
137	*Ziziphus rugosa* Lam.	*Toran*	Fruits	Rhamnaceae	133

Table No. 82. Plants used for Shelter

Sr. No.	Botanical Name	Local Name	Family	Ref. Page
1	*Artocarpus heterophyllus* Lam.	*Phanas*	Moraceae	140
2	*Bambusa arundinacea* (Retz.) Willd.	*Kalak*	Poaceae	34
3	*Bombax ceiba* L.	*Katesaar*	Bombacaceae	38
4	*Carvia callosa* (Wall) Bremek.	*Karvi*	Acanthaceae	159
5	*Dalbergia sissoo* Roxb.	*Sissam*	Fabaceae	63
6	*Dillenia pentagyna* Roxb.	*Karmel*	Dillenaiceae	66
7	*Eucalyptus globulus* Labill.	*Nilgiri*	Myrtaceae	71
8	*Ficus arnottiana* (Miq.) Miq.	*Pair*	Moraceae	73
9	*Ficus rumphii* Bl.	*Aashit*	Moraceae	76
10	*Gmelina arborea* Roxb.	*Shivan*	Verbenaceae	78
11	*Gnidia glauca* (Fresen.) Gilg.	*Rametha*	Thymelaeaceae	78
12	*Heterophragma quadriloculare* (Roxb.) K. Schum.	*Varas*	Bignoniaceae	82
13	*Lagerstroemia microcarpa* Wight.	*Nanya*	Lythraceae	89
14	*Setaria pumila* (Poir.) R. & S.	*Kolam*	Poaceae	159
15	*Swietenia mahagoni* (L.) Jacq.	*Mahogani*	Meliaceae	159
16	*Syzygium cumini* (L.) Skeels	*Jambhal*	Myrtaceae	121
17	*Terminalia elliptica* Willd.	*Ain*	Combretaceae	159
18	*Terminalia paniculata* Roth.	*Kinjal*	Combretaceae	124
19	*Xylia xylocarpa* (Roxb.) Taub.	*Jamba*	Mimosaceae	160

Table No. 83. Plants used for Religious purposes

Sr. No.	Botanical Name	Local Name	Family	Ref. Page
1	*Barleria cristata* L. var. *cristata*	*Nili Koranti*	Acanthaceae	34
2	*Barleria cristata* L. var. *dichotoma* (Roxb.) Prain.	*Pandhari Koranti*	Acanthaceae	35
3	*Bauhinia racemosa* Lam.	*Apata*	Caesalpiniaceae	35

4	*Butea monosperma* (Lam.) Taub. var. *monosperma*	*Palas*	Fabaceae	39
5	*Calotropis gigantea* (L.) Ait.	*Ravi*	Asclepiadaceae	41
6	*Canna indica* L.	*Dev-kel*	Cannaceae	161
7	*Crinum asiaticum* L.	*Nagdouna*	Amaryllidaceae	161
8	*Erinocarpus nimmonii* Grah. ex Dalz.	*Cher*	Tiliaceae	70
9	*Ficus racemosa* L.	*Umber*	Moraceae	74
10	*Mangifera indica* L.	*Amba*	Anacardiaceae	94
11	*Mitragyna parvifolia* (Roxb.) Korth.	*Kalamb*	Rubiaceae	97
12	*Ocimum basilicum* L.	*Tulas*	Lamiaceae	101
13	*Piper trichostachyon* (Miq.) C.B. Cl.	*Pachvel*	Piperaceae	161
14	*Plumeria rubra* L.	*Pandhara Chapha*	Apocynaceae	107
15	*Ricinus communis* L.	*Eranda*	Euphorbiaceae	112
16	*Senecio dalzellii* C.B. Cl.	*Sonaki*	Asteraceae	161
17	*Tabernaemontana alternifolia* (Roxb.) Nicols. & Suresh	*Aatavada, Nagkuda*	Apocynaceae	161
18	*Thunbergia fragrans* Roxb.	*Daheli*	Thunbergiaceae	162

Table No. 84. Plants used for Agricultural implements

Sr. No.	Botanical Name	Local name	Family	Ref. Page
1	*Careya arborea* Roxb.	*Dhaman*	Lecythidaceae	45
2	*Cassia fistula* L.	*Bhava*	Caesalpiniaceae	48
3	*Cordia macleodii* (Griff.) Hook.f. & Thoms.	*Dhaivan*	Boraginaceae	57
4	*Dalbergia sissoo* Roxb.	*Sisam*	Fabaceae	63
5	*Gmelina arborea* Roxb.	*Shivan*	Verbenaceae	78
6	*Grewia tiliifolia* Vahl	*Dhaman*	Tiliaceae	79
7	*Holarrhena pubescens* (Buch.-Ham.) Wall ex G. Don.	*Pandhari Kuda*	Apocynaceae	83
8	*Memecylon umbellatum* Burm.f. var. *umbellatum*	*Anjan*	Melastomataceae	95

9	*Terminalia bellirica* (Gaertn.) Roxb.	*Behada, Hela*	Combretaceae	123
10	*Terminalia chebula* Retz.	*Hirda*	Combretaceae	124
11	*Terminalia paniculata* Roth	*Kinjal*	Combretaceae	124

Table No. 85. Plants used for Fodder

Sr. No.	Botanical Name	Local Name	Family	Ref. Page
1	*Cynarospermum asperrimum* (Nees) Vollesen	*Dikana*	Acanthaceae	61
2	*Cynodon dactylon* (L.) Pers.	*Harali*	Poaceae	62
3	*Eleusine indica* (L.) Gaertn.	*Mahar nachani*	Poaceae	163
4	*Erinocarpus nimmonii* Grah. ex Dalz.	*Cher*	Tiliaceae	70
5	*Eriolaena quinquelocularis* (Wight. & Arn.) Wight.	*Bothi*	Sterculiaceae	163
6	*Ficus exasperata* Vahl	*Kharavat*	Moraceae	74
7	*Grewia tiliifolia* Vahl	*Dhaman*	Tiliaceae	79
8	*Helicteres isora* L.	*Kivan*	Sterculiaceae	81
9	*Indigofera dalzellii* T. Cooke	-	Fabaceae	163
10	*Ipomoea cairica* (L.) Sweet	*Garvel*	Convolvulaceae	163
11	*Maytenus senegalensis* (Lam.) Excell.	*Hekal*	Celastraceae	136
12	*Mitragyna parvifolia* (Roxb.) Korth.	*Kalam*	Rubiaceae	97
13	*Phyllanthus amarus* Schum & Thonn.	*Bhui-avali*	Euphorbiaceae	104
14	*Portulaca oleracea* L.	*Ghol*	Portulacaceae	110
15	*Smilax zeylanica* L.	*Aakar*	Smilacaceae	117
16	*Themeda quadrivalvis* (L.) O. Ktze.	*Bhatya*	Poaceae	163
17	*Xantolis tomentosa* (Roxb.) Raf.	*Kumbhal*	Sapotaceae	164

Table No. 86. Plants used for Fibre

Sr. No.	Botanical Name	Local Name	Family	Ref. Page
1	*Agave americana* L. var. *americana*	*Ghayapat*	Agavaceae	28

2	*Argyreia hookeri* C.B. Cl.	*Ranratale*	Convolvulaceae	165
3	*Argyreia sericea* Dalz. & Gibs.	*Gavel*	Convolvulaceae	32
4	*Bauhinia racemosa* Lam.	*Apata*	Caesalpiniaceae	35
5	*Eriolaena quinquelocularis* (Wight & Arn.) Wight	*Bothi*	Sterculiaceae	163
6	*Ficus amplissima* J.E. Sm.	*Piparan*	Moraceae	165
7	*Ficus arnottiana* (Miq.) Miq.	*Pair*	Moraceae	73
8	*Gnidia glauca* (Fresen.) Gilg.	*Raeta*	Thymelaeaceae	78
9	*Grewia tiliifolia* Vahl	*Dhaman*	Tiliaceae	79
10	*Helicteres isora* Linn.	*Kivan, Murudshenga*	Sterculiaceae	81
11	*Hibiscus cannabinus* L.	*Ambadi*	Malvaceae	148
12	*Ipomoea batatas* (L.) Lam.	*Ratali*	Convolvulaceae	149
13	*Kydia calycina* Roxb.	*Varang*	Malvaceae	165
14	*Sterculia guttata* Roxb. ex DC.	*Goldada*	Sterculiaceae	165
15	*Trema orientalis* (L.) Bl.	*Ghol*	Ulmaceae	165
16	*Urena lobata* L. ssp. *lobata*	*Jangali bhendi*	Malvaceae	166
17	*Urena lobata* L. ssp. *sinuata* (L.) Bors.	*Jangali bhendi*	Malvaceae	128

Table No. 87. Pants used as cosmetics

Sr. No.	Botanical name	Local Name	Parts used	Family	Used for	Ref. Page
1	*Bombax ceiba* L.	*Savar, Katesavar*	Roots	Bombacaceae	Pimples	38
2	*Cordia dichotoma* Forst.f.	*Bhokar*	seeds	Boraginaceae	Black heads	57
3	*Curcuma aromatica* Salisb.	*Amba halad*	Rhizomes	Zingiberaceae	Pimples	60
4	*Euphorbia geniculata* Orteg.	*Dudhani*	Latex	Euphorbiaceae	Pimples	71

Table No. 88. Plants used for preparation of dye

Sr. No.	Botanical Name	Local name	Parts used	Family	Ref. Page
1	*Bixa orellana*	*Shendri*	Seeds	Bixaceae	37

Table No. 89. Plants used as fish poison

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Ammannia baccifera* L. ssp. *baccifera*	*Bharjambul, Aagya*	Whole plant	Lythraceae	167
2	*Anamirta Cocculus* (L.) Wight & Arn.	*Vatoliyel*	Fruits	Menispermaceae	167
3	*Catunaregam spinosa* (Thunb.) Tirveng.	*Gela*	Fruit	Rubiaceae	49
4	*Diospyros montana* Roxb.	*Gavanda*	Fruits and leaves	Ebenaceae	66
5	*Gnidia glauca* (Fresen.) Gilg.	*Rametha*	Bark	Thymelaeaceae	78
6	*Sapium insigne* Bth. var. *malabaricum* (Wight) Hook.f.	*Hurya*	Latex	Euphorbiaceae	115
7	*Syzygium cumini* (L.) Skeels	*Jambhal, Hadaki*	Bark	Myrtaceae	121
8	*Scutia myrtina* (Burm. f.) Kurz var. *myrtina*	*Chimati*	Fruits and leaves	Rhamnaceae	167
9	*Zanthoxylum rhesta* (Roxb.) DC.	*Tisal*	Fruits	Rutaceae	156

Table No. 90. Plants used for preparation of household instruments

Sr. No.	Botanical Name	Local name	Parts used	Family	Use	Ref. Page
1	*Macaranga peltata* (Roxb.) Muell.-Arg.	*Chandada*	Leaves	Euphorbiaceae	Leaves used as plate for serving food, fruits etc.	93

2	*Butea monosperma* (Lam.) Taub. var. *monosperma*	*Palas*	Leaves	Fabaceae	Leaves used for the preparation of dishes for serving the food.	39
3	*Calamus pseudo-tenuis* Becc. & Hook.f.	*Vet*	Stem	Arecaceae	The stems used for preparation of household instruments and sold in local market.	40

Table No. 91. Plants used as an insecticide

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Leucas stelligera* Wall.	*Burambi*	Leaves	Lamiaceae	90
2	*Lobelia nicotianaefolia* Roth ex R. & S.	*Devnal*	Root	Lobeliaceae	91
3	*Clerodendrum viscosum* Vent.	*Kadavi*	Leaves	Verbenaceae	55
4	*Sterculia foetida* L.	*Jangali Badam*	Leaves	Sterculiaceae	120

Table No. 92. Plants used as ornament

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Triumfetta rhomboidea* Jacq.	*Chikenkhada*	Fruits	Tiliaceae	127

Table No. 93. Plants as a tonic to birds

Sr. No.	Botanical name	Local Name	Parts used	Family	Remarks	Ref. Page
1	*Cuscuta reflexa* Roxb.	*Aakashvel*	Whole plant	Cuscutaceae	Given to chicken as precautionary major for the diseases	60

Table No. 94. Poisonous plants

Sr. No.	Botanical name	Local Name	Poisonous Parts	Family	Ref. Page
1	*Clematis gouriana* Roxb. ex DC.	*Morvel*	Leaves	Ranunculaceae	53
2	*Crotalaria retusa* L.	*Dingal*	Seeds (Poisonous to birds)	Fabaceae	58
3	*Euphorbia fusiformis* Buch.-Ham. ex D.Don.	*Khirkand*	Latex	Euphorbiaceae	71
4	*Gloriosa superba* L.	*Kal-lavi*	Bulb	Liliaceae	77
5	*Gnidia glauca* (Fresen.) Gilg.	*Rameta*	Stem	Thymelaeceae	78
6	*Lobelia nicotianaefolia* Roth ex R. & S.	*Devnal*	Whole plant	Lobeliaceae	91
7	*Sapium insigne* Bth. var. *malabaricum* (Wight) Hook.f.	*Hurya*	Latex	Euphorbiaceae	115

Table No. 95. Plants used to restrict the snakes

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Maytenus rothiana* (Walp.) Lobreau-Collen	*Yenkli, Ikari*	Bark	Celastraceae	94
2	*Pittosporum dasycaulon* Miq.	*Gapsundi, Ikari*	Bark	Pittosporaceae	106

Table No. 96. Plants used for earning income

Sr. No.	Botanical name	Local Name	Parts used	Family	Ref. Page
1	*Acacia concinna* (Willd.) DC.	*Shikekai*	Fruits	Mimosaceae	25
2	*Amaranthus cruentus* L.	*Rajgira*	Leaves	Amaranthaceae	139
3	*Amaranthus spinosus* L.	*Katemat*	Leaves	Amaranthaceae	139
4	*Amaranthus viridis* Linn.	*Tandali, Tandulasa*	Leaves	Amaranthaceae	139

5	*Anacardium occidentale* L.	*Kajavi*	Seeds and thalamus	Anacardiaceae	140
6	*Artocarpus heterophyllus* Lam.	*Phanas*	Fruits	Moraceae	140
7	*Asparagus racemosus* Willd. var. *javanica* (Kunth) Baker	*Shatavari*	Roots	Liliaceae	33
8	*Bambusa arundinacea* (Retz.) Willd.	*Kalak*	Stems	Poaceae	34
9	*Bombax ceiba* L.	*Savar, Lalsavar*	The dried stalk of the flowers	Bombacaceae	38
10	*Butea monosperma* (Lam.) Taub. var. *monosperma*	*Palas*	Root fibres	Fabaceae	39
11	*Calamus pseudo-tenuis* Becc. & Hook.f.	*Vet*	Stems	Arecaceae	40
12	*Capparis moonii* Wight	*Waghati*	Fruits	Capparaceae	44
13	*Capparis cleghornii* Dunn ex Gamble	*Puravi*	Fruits	Capparaceae	141
14	*Carissa congesta* Wight var. *congesta*	*Karavand*	Fruits	Apocynaceae	46
15	*Caryota urens* L.	*Mad*	Sap	Arecaceae	47
16	*Cassia fistula* L.	*Bhava*	Fruits	Caesalpiniaceae	48
17	*Catunaregam spinosa* (Thunb.) Tirveng.	*Gela*	Fruits	Rubiaceae	49
18	*Centella asiatica* (L.) Urban	*Gol Brahmi*	Leaves	Apiaceae	141
19	*Celosia argentea* L.	*Kuradu*	Tender leaves	Amaranthaceae	51

20	*Clerodendrum serratum* (L.) Moon.	*Bharangi*	Tender leaves	Verbenaceae	54
21	*Colocasia esculenta* (L.) Schott	*Alu*	Leaves	Araceae	56
22	*Dioscorea alata* L.	*Ghorkand*	Tuber	Dioscoreaceae	144
23	*Dioscorea pentaphylla* L.	*Shendvel*	Tender leaves and tubers	Dioscoreaceae	145
24	*Eleusine coracana* (L.) Gaertn.	*Nachani*	Seeds/ Grains	Poaceae	14
25	*Elaeagnus conferta* Roxb.	*Dombal*	Fruits	Elaeagnaceae	67
26	*Emblica officinalis* Gaertn.	*Awala*	Fruits	Euphorbiaceae	68
27	*Embelia basaal* (R. & S.) A.DC.	*Vavdungi*	Fruits	Myrsinaceae	146
28	*Garcinia indica* (Du Petit-Thou.) Choisy	*Kokam*	Fruits	Clusiaceae	147
29	*Hibiscus rosa – sinensis* L.	*Jasvand*	Flowers	Malvaceae	83
30	*Ipomoea batatas* (L.) Lam.	*Ratali*	Roots	Convolvulaceae	149
31	*Mangifera indica* L.	*Amba*	Fruits	Anacardiaceae	94
32	*Meyna laxiflora* Robyns	*Aalu*	Fruits	Rubiaceae	95
33	*Moringa oleifera* Lam.	*Shevaga*	Fruits	Moringaceae	98
34	*Murraya koenigii* (L.) Spr.	*Kadipatta*	Leaves	Rutaceae	151
35	*Musa paradisiaca* L.	*Keli*	Inflorescence and Fruits	Musaceae	100
36	*Oryza sativa* L.	*Bhat*	Seeds /Grains	Poaceae	153
37	*Panicum miliaceum* L.	*Vari*	Seeds / Grains	Poaceae	153

38	*Piper nigrum* L.	*Miri*	Fruits	Piperaceae	106
39	*Psidium guajava* L.	*Peravi, peru*	Fruits	Myrtaceae	110
40	*Solanum nigrum* L.	*Kangoni*	Fruits	Solanaceae	118
41	*Solena amplexicaulis* (Lam.) Gandhi	*Gomati*	Fruits	Cucurbitaceae	155
42	*Syzygium cumini* (L.) Skeels	*Jambhal, Hadaki*	Fruits	Myrtaceae	121
43	*Terminalia chebula* Retz.	*Hirda*	Fruits	Combretaceae	124
44	*Terminalia bellirica* (Gaertn.) Roxb.	*Hela, Behada*	Fruits	Combretaceae	123
45	*Zanthoxylum rhesta* (Roxb.) DC.	*Tisal*	Fruits	Rutaceae	156
46	*Ziziphus rugosa* Lam. var. *rugosa*	*Toran*	Fruits	Rhamnaceae	133

Table No. 97. List of Endemic plants of India occurring in Koyna

Sr. No.	Botanical Name	Local Name	Family	Ref. Page
1	*Ancistrocladus heyneanus* Wall. ex Grah.	*Kardal*	Ancistrocladaceae	31
2	*Argyreia cuneata* (Willd.) Ker Gawl.	*Mahalungi*	Convolvulaceae	32
3	*Argyreia sericea* Dalz. & Gibs.	*Gavel*	Convolvulaceae	32
4	*Arisaema murrayi* (Grah.) Hook.	*Sapkanda*	Araceae	32
5	*Begonia crenata* Dryand.	*Pavasali bedaki*	Begoniaceae	36
6	*Blumea malcolmii* (C.B. Cl.) Hook.f.	*Burandi*	Asteraceae	38
7	*Cajanus lineatus* (Wight & Arn.) van der Maesen	*Turati*	Fabaceae	40
8	*Carissa inermis* Vahl	*Karavand*	Apocynaceae	47
9	*Carvia callosa* (Wall.) Bremek.	*Karvi*	Acanthaceae	159
*10	*Ceropegia jainii* Ansari & Kulkarni	*Kharatudi*	Asclepiadaceae	142

*11	*Ceropegia santapaui* Wadhwa & Ansari	*Kharatudi*	Asclepiadaceae	142
*12	*Chlorophytum glaucoides* Blatt.	*Musali*	Liliaceae	51
13	*Crotalaria filipes* Bth. var. *filipes*	*Phataphati*	Fabaceae	143
14	*Curcuma pseudomontana* Grah.	*Ranhalad*	Zingiberaceae	60
15	*Cynarospermum asperrimum* (Nees) Vollesen	*Dikana*	Acanthaceae	61
16	*Dalbergia horrida* (Dennst.) Mabb. var. *horrida*	*Vavi*	Fabaceae	62
17	*Dendrobium barbatulum* Lindl.	*Kankidani*	Orchidaceae	63
18	*Ensete superbum* (Roxb.) Cheesm.	*Chavan*	Musaceae	69
19	*Eranthemum roseum* (Vahl) R.Br.	*Dasmuli*	Acanthaceae	70
20	*Erinocarpus nimmonii* Grah. ex Dalz.	*Cher*	Tiliaceae	70
21	*Eriolaena quinquelocularis* (Wight & Arn.) Wight	*Bothi*	Sterculiaceae	163
22	*Flacourtia latifolia* (Hook.f. & Thoms.) T. Cooke	*Tambat*	Flacourtiaceae	146
23	*Flacourtia montana* Grah.	*Atak*	Flacourtiaceae	146
*24	*Frerea indica* Dalz.	*Shindal Makadi*	Asclepiadaceae	76
25	*Garcinia indica* (Du Petit-Thou.) Choisy	*Kokam*	Clusiaceae	147
26	*Glochidion ellipticum* Wight	*Bhoma*	Euphorbiaceae	77
27	*Helicanthes elastica* (Desr.) Danser	*Bandgul*	Loranthaceae	80
*28	*Hitchenia caulina* (Grah.) Baker	*Chavar*	Zingiberaceae	148
29	*Holigarna grahamii* (Wight) Kurz	*Hulgeri*	Anacardiaceae	84
30	*Indigofera dalzellii* T. Cooke		Fabaceae	163

31	*Jasminum malabaricum* Wight	*Kusar*	Oleaceae	86
32	*Justicia trinervia* Vahl	*Suta*	Acanthaceae	88
33	*Lagerstroemia microcarpa* Wight	*Nanya*	Lythraceae	89
34	*Moullava spicata* (Dalz.) Nicols.	*Waghati*	Caesalpiniaceae	98
35	*Paracaryopsis malabarica* (C.B. Cl.) R. Mill.	*Nechardi*	Boraginaceae	103
36	*Pimpinella adscendens* Dalz.	*Gajari*	Apiaceae	154
37	*Pinda concanense* (Dalz.) P.K. Mukh. & Constance	*Pand*	Apiaceae	105
38	*Piper trichostachyon* (Miq.) C.B. Cl.	*Pachvel*	Piperaceae	161
39	*Pittosporum dasycaulon* Miq.	*Gapsundi, Ikari*	Pittosporaceae	106
40	*Pogostemon deccanensis* (Panigr.) Press	-	Lamiaceae	108
41	*Senecio dalzellii* C.B. Cl.	*Sonaki*	Asteraceae	161
42	*Seshagiria sahyadrica* Ansari & Hemadri	*Khobardoda*	Asclepiadaceae	154
43	*Smithia bigemina* Dalz.	*Nal*	Fabaceae	154
44	*Swertia densifolia* (Griseb.) Kashyapa	*Kadavi*	Gentianaceae	120
45	*Tabernaemontana alternifolia* (Roxb.) Nicols. & Suresh	*Aatavada*	Apocynaceae	161
46	*Terminalia paniculata* Roth	*Kinjal*	Combretaceae	124
47	*Zingiber neesanum* (Grah.) Ramam.	*Nishan*	Zingiberaceae	133

*** Endemic taxa occurring only in Maharashtra including Koyna.**

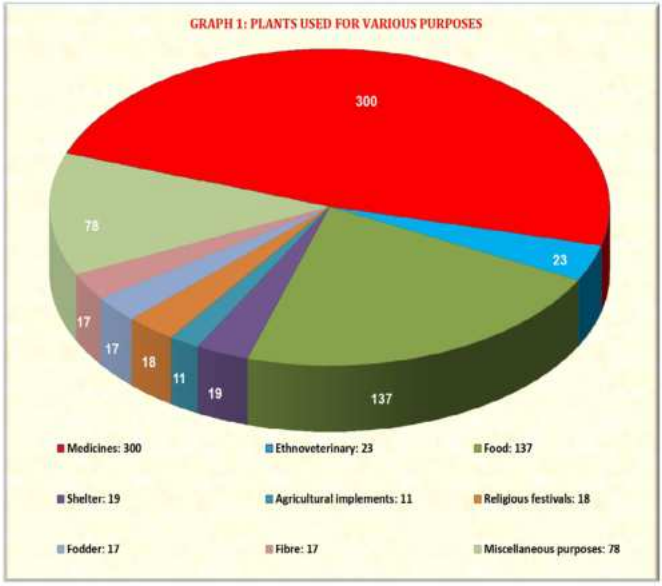
Table No. 98. List of products manufactured by self through NGO Shramjivi Janata Sahayyak Mandal

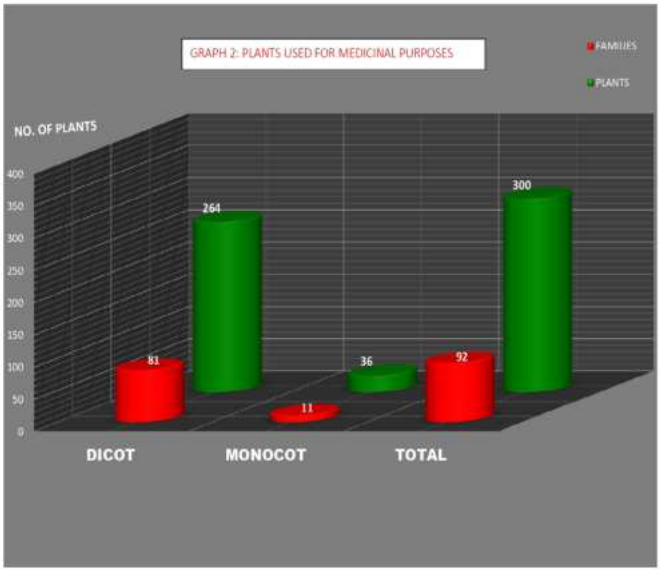
Sr. No.	Name of the Product	Composition	Indication
1	Awala Churna (Powder)	*Emblica officinalis* (Awala).	Anemia, Vigor and Vitality, Acidity.

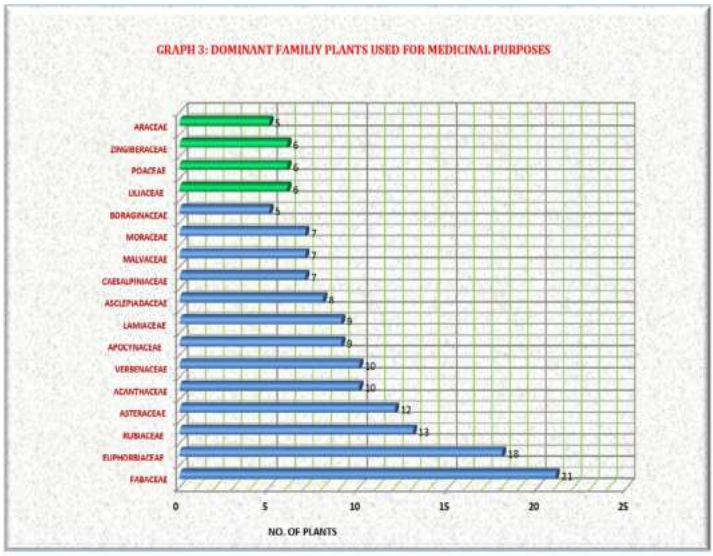
2	Hirda Churna	*Terminalia chebula* (Hirada).	Laxative, Constipation, Gases.
3	Behada churna	*Terminalia bellirica.* (Behada).	Chronic cough, Asthma, Tonsillitis.
4	Triphala Churna	*Emblica officinalis, Terminalia chebula, Terminalia bellirica.*	Constipation, Gases, Skin diseases, Piles, Eye problems.
5	Gulvel Churna	*Tinospora sinensis.* (Gulvel)	Bitter tonic. Excess body heat, Stomatitis, Burning micturition, Fever, Jaundice, Skin diseases.
6	Rasayana Churna	*Emblica officinalis, Tinospora sinensis* & *Cyperus rotundus* ssp. *rotundus* (Nagarmotha)	Diabetes, Heat & Hair problems (Gray hair, Alopecia), Weakness. Rejuvenator.
7	Madhumehari Churna	*Emblica officinalis, Cyperus rotundus* ssp. *rotundus, Tinospora sinensis, Syzygium cumini* (Jambhal) *& Gymnema sylvestre* (Bedakicha pala).	Diabetes.
8	Gudmar Churna	*Gymnema sylvestre* (Bedakicha pala)	Diabetes.
9	Koyna Amlaji Churna	*Emblica officinalis, Terminalia chebula, Zingiber officinalae.* etc.	Hyper acidity, Vomiting, Nausea, Headache, Indigestion.
10	Ashvagandha churna	*Withania somnifera*	Insomnia, vigor & vitality. Effective in treating general debility, Weakness, Sexual problems.
11	Shikekai Churna	*Acacia concinna.*	Hair problems like bad smell, dandruff, falling of hairs. For nourishing and shining the hairs.

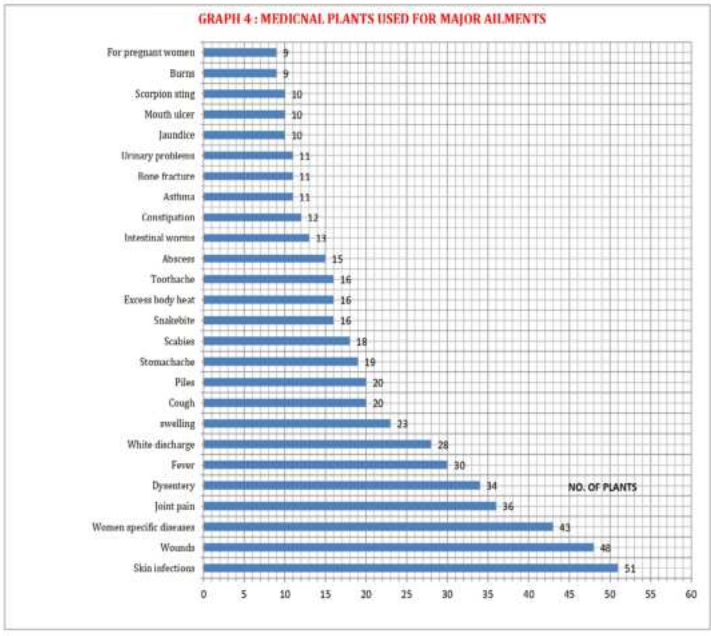
12	Koyna Shikekai churna	*Acacia concinna*, *Emblica officinalis Vetiveria zizanioides* & *Cyperus rotundus* ssp. *rotundus.*	Hair problems like bad smell, dandruff, falling of hairs. For nourishing and shining of hairs.
13	Koyna Lal Dantamanjana (Toothpowder)	*Mimusops elengi, Acacia chundra,* , *Rubia cordifolia, Mentha arvensis* (corn mint) Triphala Churna, Camphor etc.	Pyorrhoea, Toothache, Bad breath, Useful for strengthening gums and teeth.
14	Koyna Face Pack	*Vetiveria zizanioides, Curcuma zedoaria, Rubia cordifolia, Symplocos racemosa, Hemidesmus indicus* var. *indicus, Curcuma aromatica,* Fullers' earth (Multani mati) etc.	Skin complexion promoter and effective in treating Black spots, Pimples, Skin rincles and Dull skin.
15	Koyna Shatavari Kalpa (Granules)	*Asparagus racemosus* var. *javanica,* Sugar.	Family health tonic for strong bones. Useful for growing children. Lactation.
16	Narayan Tel (Oil)	*Asparagus racemosus* var. *javanica* (Narayani), Cow milk, sesame oil, other 24 herbs.	Paralysis, Joint pain, Sciatica, Lumbago, Rheumatoid arthritis.
17	Mahabringaraj tel	*Eclipta prostrata* (Bhringaraj, Maka) Coconut oil, *Emblica officinalis,* Triphala churna, etc.	Hair problems, Loss of hairs, Alopecia, Gray hair & dandruff.
18	Koyna Jasvand Tel	*Hibiscus rosa-sinensis* (Jasvand), *Emblica officinalis,* coconut oil etc.	Hair problems, Loss of hairs, Alopecia, Gray hair & dandruff.

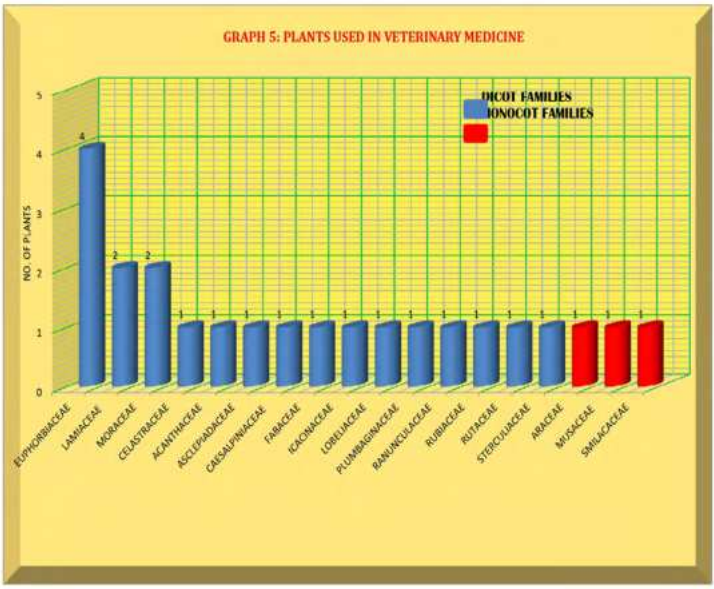
GRAPHICAL REPRESENTATIONS

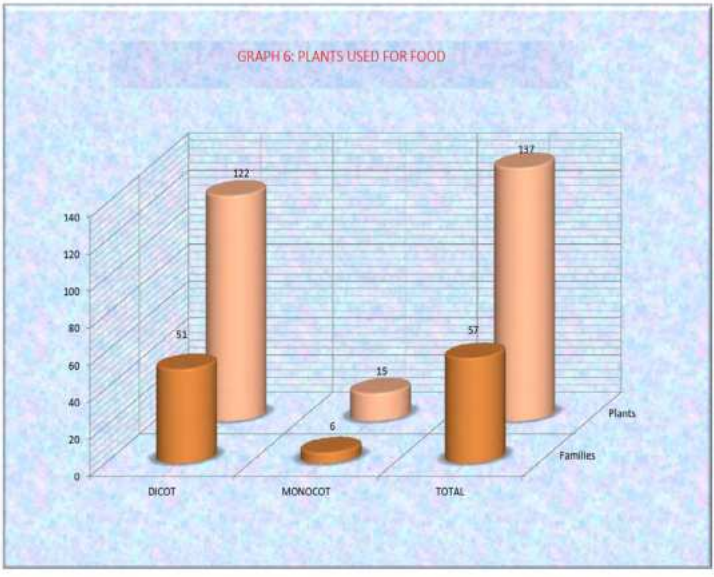


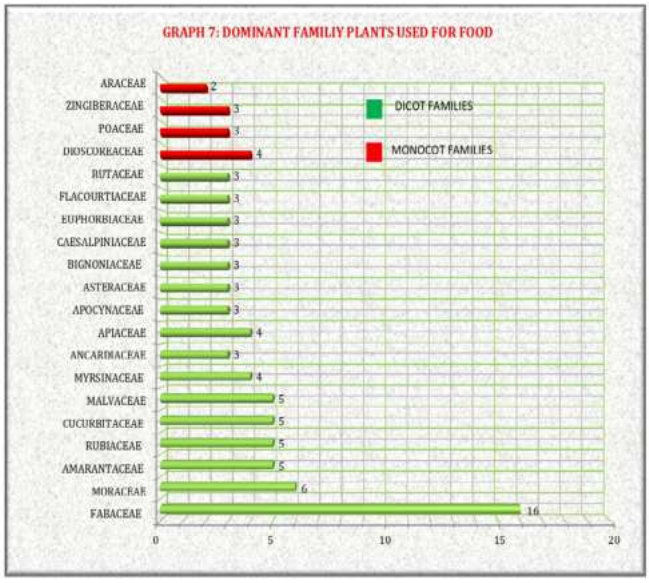


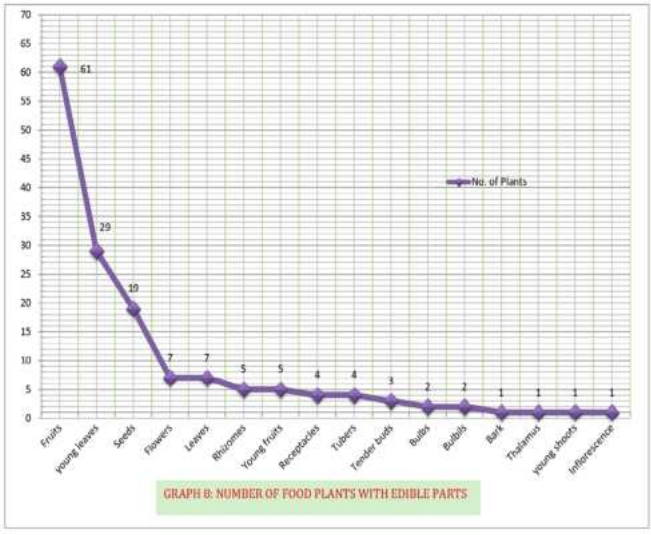

GRAPH 3: DOMINANT FAMILIY PLANTS USED FOR MEDICINAL PURPOSES
ARACEAE
ZINGIBERACEAE
POACEAE
LILIACEAE
BORAGINACEAE
MORACEAE
MALVACEAE
CAESALPINIACEAE
ASCLEPIADACEAE
LAMIACEAE
APOCYNACEAE
VERBENACEAE
ACANTHACEAE
ASTERACEAE
RUBIACEAE
EUPHORBIACEAE
FABACEAE
5
6
6
6
5
7
7
7
8
9
9
10
10
12
13
18
21
0
5
10
15
20
25
NO. OF PLANTS


GRAPH 4 : MEDICNAL PLANTS USED FOR MAJOR AILMENTS
For pregnant women
Burns
Scorpion sting
Mouth ulcer
Jaundice
Urinary problems
Bone fracture
Asthma
Constipation
Intestinal worms
Abscess
Toothache
Excess body heat
Snakebite
Scabies
Stomachache
Piles
Cough
swelling
White discharge
Fever
Dysentery
Joint pain
Women specific diseases
Wounds
Skin infections
9
9
10
10
10
11
11
11
12
13
15
16
16
16
18
19
20
20
23
28
30
34
36
43
48
51
NO. OF PLANTS
0
5
10
15
20
25
30
35
40
45
50
55
60

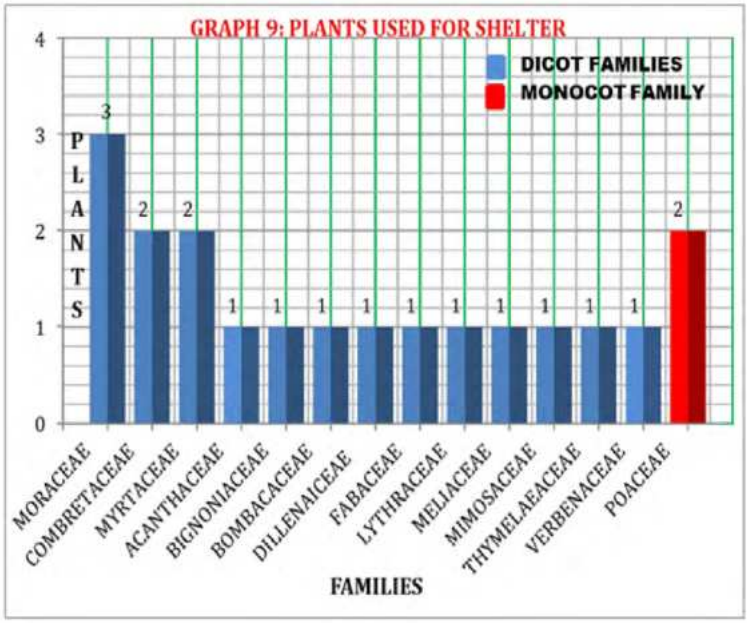

GRAPH 5: PLANTS USED IN VETERINARY MEDICINE
DICOT FAMILIES
MONOCOT FAMILIES
NO. OF PLANTS
0
1
2
3
4
5
4
2
2
1
1
1
1
1
1
1
1
1
1
1
1
1
1
EUPHORBIACEAE
LAMIACEAE
MORACEAE
CELASTRACEAE
ACANTHACEAE
ASCLEPIADACEAE
CAESALPINACEAE
FABACEAE
ICACINACEAE
LOBELIACEAE
PLUMBAGINACEAE
RANUNCULACEAE
RUBIACEAE
RUTACEAE
STERCULIACEAE
ARACEAE
MYSACEAE
SMILACACEAE

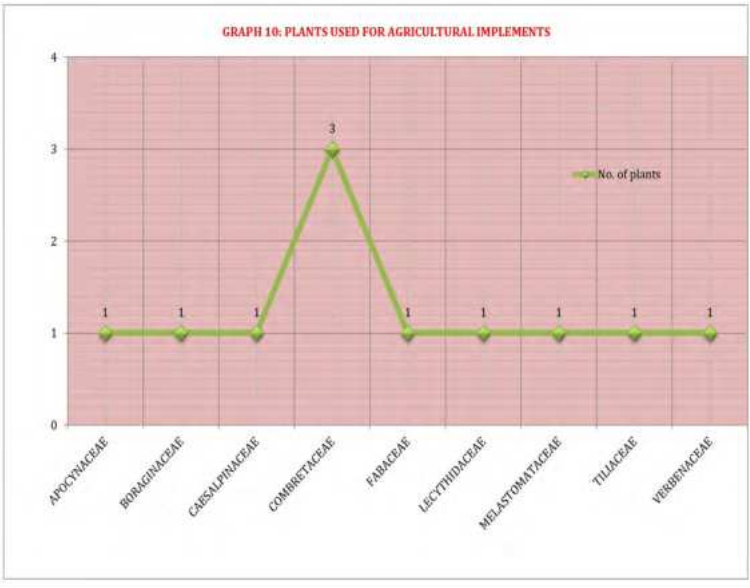

GRAPH 6: PLANTS USED FOR FOOD
0
20
40
60
80
100
120
140
51
122
6
15
57
137
DICOT
MONOCOT
TOTAL
Plants
Families

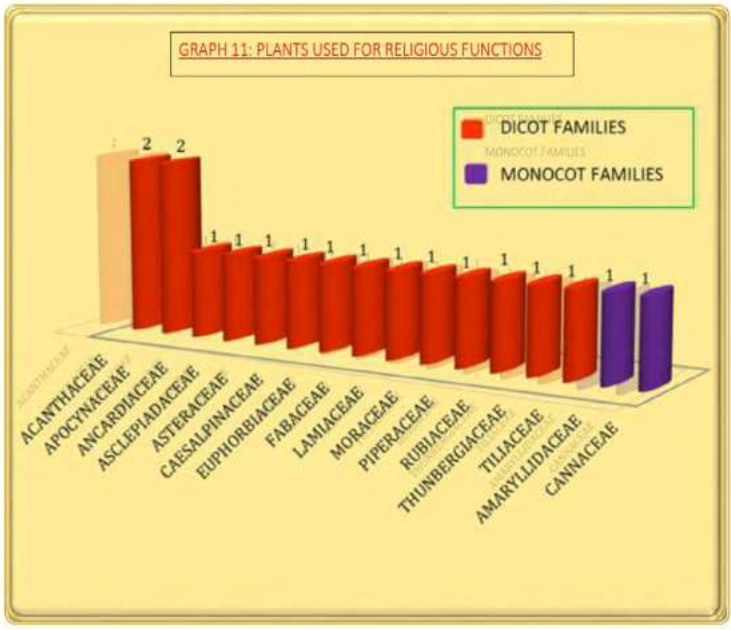


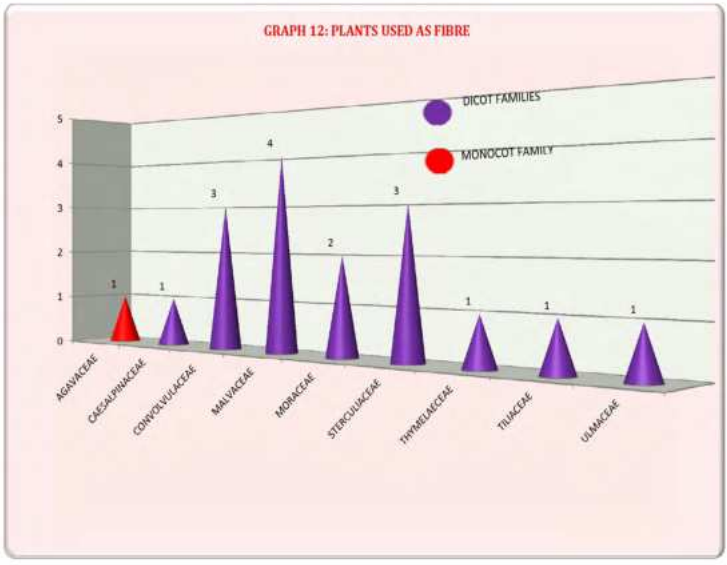


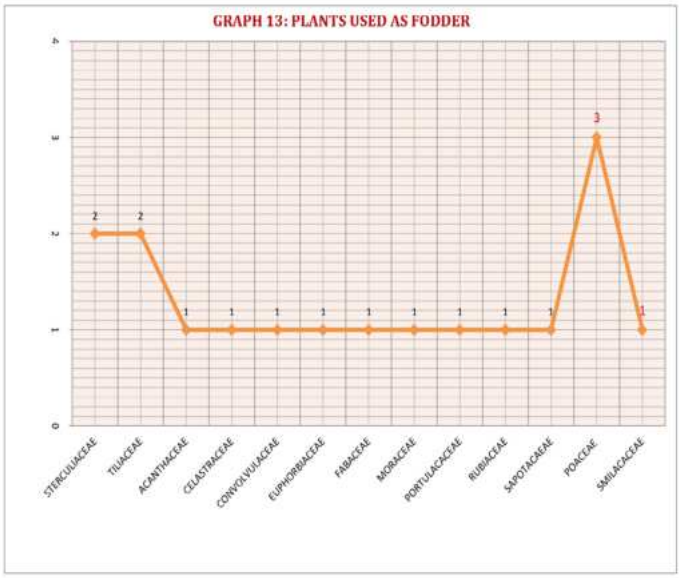
GRAPH 8: NUMBER OF FOOD PLANTS WITH EDIBLE PARTS

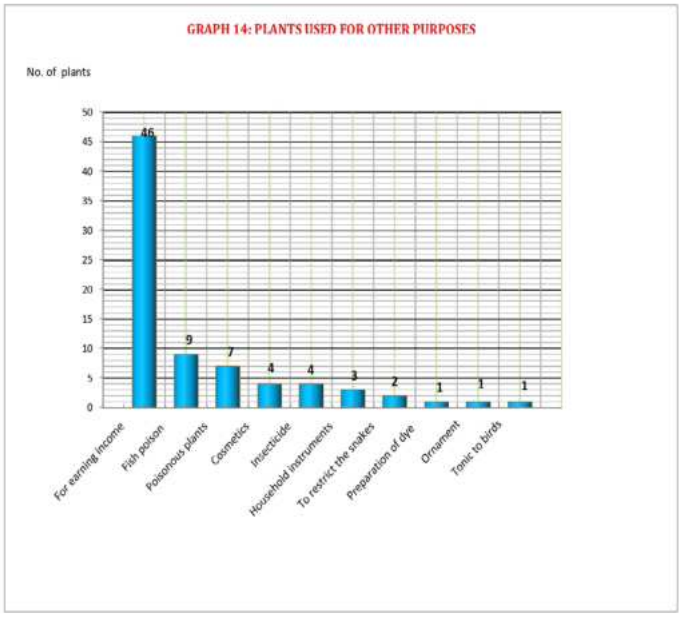

GRAPH 9: PLANTS USED FOR SHELTER
DICOT FAMILIES
MONOCOT FAMILY
PLANTS
FAMILIES
MORACEAE
COMBRETACEAE
MYRTACEAE
ACANTHACEAE
BIGNONIACEAE
BOMBACACEAE
DILLENAICEAE
FABACEAE
LYTHRACEAE
MELIACEAE
MIMOSACEAE
THYMELAEACEAE
VERBENACEAE
POACEAE


GRAPH 10: PLANTS USED FOR AGRICULTURAL IMPLEMENTS
No. of plants
APOCYNACEAE
BORAGINACEAE
CAESALPINACEAE
COMBRETACEAE
FABACEAE
LECYTHIDACEAE
MELASTOMATACEAE
TILIACEAE
VERBENACEAE


GRAPH 11: PLANTS USED FOR RELIGIOUS FUNCTIONS
DICOT FAMILIES
MONOCOT FAMILIES
2
2
1
1
1
1
1
1
1
1
1
1
1
1
1
ACANTHACEAE
APOCYNACEAE
ANCARDIACEAE
ASCLEPIADACEAE
ASTERACEAE
CAESALPINACEAE
EUPHORBIACEAE
FABACEAE
LAMIACEAE
MORACEAE
PIPERACEAE
RUBIACEAE
THUNBERGIACEAE
TILIACEAE
AMARYLLIDACEAE
CANNACEAE


GRAPH 12: PLANTS USED AS FIBRE
DICOT FAMILIES
MONOCOT FAMILY
5
4
3
2
1
0
1
1
3
4
2
3
1
1
1
AGAVACEAE
CAESALPINACEAE
CONVOLVULACEAE
MALVACEAE
MORACEAE
STERCULIACEAE
THYMELACEAE
TILIACEAE
ULMACEAE


GRAPH 13: PLANTS USED AS FODDER
0
1
2
3
4
2
2
1
1
1
1
1
1
1
1
1
3
1
STERCULIACEAE
TILIACEAE
ACANTHACEAE
CELASTRACEAE
CONVOLVULACEAE
EUPHORBIACEAE
FABACEAE
MORACEAE
PORTULACACEAE
RUBIACEAE
SAPOTACEAE
POACEAE
SMILACACEAE


GRAPH 14: PLANTS USED FOR OTHER PURPOSES
No. of plants
50
45
40
35
30
25
20
15
10
5
0
46
9
7
4
4
3
2
1
1
1
For earning income
Fish poison
Poisonous plants
Cosmetics
Insecticide
Household instruments
To restrict the snakes
Preparation of dye
Ornament
Tonic to birds

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