ARUNACHAL PRADESH

1. **Agrawala, D.K., Sabapathy, C.M. & Chowdhery, H.J. 2004. "*Bulbophyllum trichocephalum* var. *wallongense* (Orchidaceae), a new variety from Arunachal Pradesh, India". *Indian J. Forest.* 27(3): 305-307.**

   Abst.- A new variety of *Bulbophyllum trichocephalum* (Schltr.) Tang & Wang viz. *B. trichocephalum* var. *wallongense* has been described and illustrated from Arunachal Pradesh, India.

2. **Angami, A., Gajurel, P.R., Rethy, P., Singh, B. & Kalita, S.K. 2006. "Status of potential of wild edible plants of Arunachal Pradesh". *Indian J. Traditional Knowledge* 5(4): 541-550.**

   Abst.- The consumption of wild plants is one of the strategies, adopted by the local people for sustenance, is intrinsically linked to their strong traditional & cultural system and is inseparable. The indigenous communities continuously include wild edible so their daily food intake and sales from the surplus add to their income. Simultaneously, an emphasis on the sustainable harvesting of wild edible plants will help enhance and maintain the region's biodiversity. As the local people are endowed with a vast knowledge concerning the utilization of wild plants, the paper focuses on their knowledge and illustrates the need to select local priority plant species with potential to become valuable staple foods and important alternatives to the usual cultivated agricultural crops.

3. **Banik, D., Sharma, A. & Muthu, J. 2003. "*Agapetes neriifolia* (King & Prain) Airy Shaw var. *minor* (King & Prain) Airy Shaw- A new record for India". *Bull. Bot. Surv. India* 45(1-4): 213-216.**

   Abst.- *Agapetes neriifolia* (King & Prain) Airy Shaw var. *minor* (King & Prain) Airy Shaw has been collected from Napdapha, Changland district of Arunachal Pradesh and is reported here as a new record for India. A detailed description and an illustration have been given for easy identification.

4. **Banik, Dipanwita. 2003. "Re-collection of *Agapetes mitrarioides* Hook.f. ex C.B. Clarke (Ericaceae) from Arunachal Pradesh, India". *Bull. Bot. Surv. India* 45(1-4): 209-212.**

   Abst.- During botanical exploration in Mehao Wildlife Sanctuary, author collected *Agapetes mitrarioides* from Myudia to Deopani track which is a new record from Arunachal Pradesh and the occurrence of this species away from the place where it was originally collected.

5. **Behari, Bipin & Rao, Rama N. 1997. "Diversity of plant resources at Amortala, Doimara and Papum Reserved Forests, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 21(3): 561-569.**

   Abst.- Paper deals with a list of 122 useful plant resources of Amortala, Doimara and Papum Reserved Forests under Khellong Forest Division of Arunachal Pradesh based on field survey and study of the area. All the important and useful taxa have been identified and latest nomenclature, family, local name and their uses have been enumerated in the light of their habits.

6. **Beniwal, B.S. & Singh, N.B. 1990. "Genetic improvement of forest trees in Arunachal Pradesh". *Indian Forester* 116(1): 3-10.**

   Abst.- Tree improvement work was started in Arunachal Pradesh in 1978 and within eight years plus trees are selected, grafting technique perfected and germplasm banks and seed orchards established for *Acrocarpus fraxinifolius, Ailanthus integrifolia, Altingia excelsa, Bombax ceiba, Canarium strictum, Chukrasia velutina, Duabanga grandiflora, Gmelina arborea, Michelia champaca, Phoebe goalparensis, Tectona grandis* and *Terminalia myriocarpa, Bombax ceiba, Gmelina arborea, Michelia champaca* and *Tectona grandis* have started producing viable seed. The experience shown that genetic improvement of trees can be successfully carried out within a short period provided the team of workers is sincere, bud wood is grafted timely, grafts are checked regularly, sprouts from stocks are removed, fertilizer and watering are given timely and the tree seed orchard is looked after like a horticultural orchard.

7. **Bennet, S.S.R. & Chandra, Sumer. 1982. "A new species of *Desmodium* Desv. from Eastern Himalaya". *J. Econ. Taxon. Bot.* 3(3): 993-994.**

Abst.- A new species, *Desmodium likabalium* Bennet & Chandra has been described from Arunachal Pradesh, Eastern Himalaya.

8. **Bennet, S.S.R. & Chandra, Sumer. 1986. "A new species of *Beilschmiedia* Nees (Lauraceae) from Eastern Himalaya". *Indian J. Forest.* 9(3): 273-274.**

Abst.- A new species of *Beilschmiedia* viz., *B. deomalica* has been described from Deomali Forest Division, Siang district in Arunachal Pradesh.

9. **Bennet, S.S.R. & Naithani, H.B. 1978. "Clethraceae Klotzsch- New to Indian flora". *Indian J. Forest.* 1(3): 189-190.**

Abst.- *Clethra monostachya* Rehder & Wilson, a Chinese species, belonging to the family Clethraceae has been collected from Arunachal Pradesh. This is the first report of the occurrence of the family Clethraceae in India.

10. **Bhattacharyya, Debjyoti & Sanjappa, M. 2008. "*Rhododendron callimorphum* Balf. f. & W.W. Sm. (Ericaceae)- An addition to the flora of India". *Indian J. Forest.* 31(4): 625-628.**

Abst.- *Rhododendron callimorphum* Balf. f. & W.W. Sm. (Ericaceae), a taxon so far known from China, is described here as a new record to India from Arunachal Pradesh. Two varieties are known under this species. The Indian specimens belong to typical variety (var. *callimorphum*). A detailed description, photograph and distribution map are provided for its easy identification.

11. **Bhattacharyya, U.C. 1993. "A new species of *Aeschynanthus* (Gesneriaceae) from Arunachal Pradesh, India". *Bull. Bot. Surv. India* 35(1-4): 131-133.**

Abst.- A new species of *Aeschynanthus* viz., *A. tirapensis* has been described from Tirap Frontier Division, Arunachal Pradesh.

12. **Bhaumik, M. & Pathak, M.K. 2001. "*Gaultheria dumicola* W.W. Sm. (Ericaceae)- A new record for India from Dibang Valley, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 25(3): 614-616.**

Abst.- *Gaultheria dumicola* W.W. Sm. (Ericaceae) has been reported for the first time from India. A brief description of the species along with line drawings and field data are given to facilitate its easy identification in the field.

13. **Bhaumik, M. & Pathak, M.K. 2001. "Notes on the extended distribution of *Oberonia ritaii* King & Pantling (Orchidaceae) to Arunachal Pradesh". *J. Econ. Taxon. Bot.* 25(3): 732-734.**

Abst.- In this paper, *Oberonia ritaii* King & Pantling (Orchidaceae) is reported from Arunachal Pradesh. It was earlier known only from its type locality i.e. Khasia & Jaintia hills, Meghalaya.

14. **Bhaumik, M. & Pathak, M.K. 2002. "*Dioscorea kamoonensis* Kunth (Dioscoreaceae)- A new report for Arunachal Pradesh". *Bull. Bot. Surv. India* 44(1-4): 147-148.**

Abst.- *Dioscorea kamoonensis* Kunth has been collected on the way to Brunii from Anini in Dihang Dibang Biosphere Reserve which is a new record for Arunachal Pradesh.

15. **Bhaumik, M. & Pathak, M.K. 2003. "*Oberonia helferi* Hook. f. (Orchidaceae)- A new record for India from Dibang Valley, Arunachal Pradesh". *Bull. Bot. Surv. India* 45(1-4): 217-220.**

Abst.- In course of plant collection authors collected *Oberonia helferi* Hook.f. from Dibang valley of Arunachal Pradesh and is reported to be a new record for India. A brief description and line drawing have been given here to facilitate its identification in the field.

16. **Bhaumik, M. & Pathak, M.K. 2004. "*Juncus spumosus* Noltie (Juncaceae), a new record for India". *J. Bombay Nat. Hist. Soc.* 101(1): 196-197.**

Abst.- During plant exploration in Dibang Valley, Arunachal Pradesh, authors collected an interesting plant of *Juncus* viz. *J. spumosus* Noltie which is a new record for India. A brief description along with line drawing and relevant data are given to facilitate identification in the field.

17. Bhaumik, M. & Pathak, M.K. 2004. "*Neottia alternifolia* (King & Pantl.) Szlach.- A new orchid record to Arunachal Pradesh". *J. Orchid Soc. India* 18(1-2): 59-61.

Abst.- The orchid species *i.e. Neottia alternifolia* (King & Pantl.) Szlach. which is known so far only from Sikkim has presently been reported from Arunachal Pradesh for the first time as a new record to the state.

18. Bhaumik, M. & Pathak, M.K. 2004. "Two new generic records of Poaceae from Dibang Valley District, for Flora of Arunachal Pradesh. *J. Econ. Taxon. Bot.* 28(1): 93-96.

Abst.- The genus *Acroceras* Stapf and *Schizachyrium* Nees are reported here for the first time for flora of Arunachal Pradesh.

19. Bhaumik, M. & Pathak, M.K. 2005. "A new variety of *Cheirostylis chinensis* Rolfe var. *glabra* (Orchidaceae) from Dibang valley, Arunachal Pradesh, India". *Bull. Bot. Surv. India* 47(1-4): 183-184.

Abst.- A new variety of *Cheirostylis chinensis* Rolfe viz. *C. chinensis* var. *glabra* has been described from Dibang valley district of Arunachal Pradesh.

20. Bhaumik, M. & Pathak, M.K. 2006. "*Carex echinata* Murray (Cyperaceae)- A new record for India". *J. Econ. Taxon. Bot.* 30(1): 204-205.

Abst.- *Carex echinata* Murray (Cyperaceae) is recorded here for the first time for Indian flora from Arunachal Pradesh.

21. Bhaumik, M., Pathak, M.K. & Bahali, D.D. 2007. "*Iris proantha* Diels (Iridaceae): A new record for India". *Indian J. Forest.* 30(1): 59-60.

Abst.- *Iris proantha* Diels (Iridaceae) reported first time for India from Dibang Valley District of Arunachal Pradesh.

22. Bhaumik, M., Pathak, M.K. & Mudgal, V. 1997. "On *Sapria himalayana* Griff. (Rafflesiaceae) from Mehao Wildlife Sanctuary, Arunachal Pradesh". *Indian J. Forest.* 20(2): 210-211.

Abst.- The interesting root parasite, *Sapria himalayana* Griff., is the sole representative of the family Rafflesiaceae in India, from Mehao Wildlife Sanctuary in Dibang valley district in Arunachal Pradesh. The present report not only brings to light a different site of occurrence of this critically endangered species in India, but it also records the possibility of an altogether new association of host plants for its growth.

23. Bhuyan, L.R. 2003. "Some plants used as medicine by the Nishi tribe of Arunachal Pradesh: a preliminary study". *J. Econ. Taxon. Bot.* 27(2): 447-450.

Abst.- Arunachal Pradesh, the largest state of N.E. India covers an area of 83,743 sq. km. Out of this 68,757 sq. km. is covered by forests. It has a very rich flora containing many rare, endangered and endemic plants with 4500 species of angiosperms including 525 species of orchids, 450 species of medicinal plants, 45 species of bamboos, 20 species of canes and 35 species of gymnosperms. The state is mountainous with altitudes ranging from 150 to 5500 m and above. According to the altitude the forest types are also different. The inhabitants of this hill state are tribal people and are mainly dependent on nature for their food, house and household equipment, treatment of diseases and other day to day needs. This paper is to highlight the medicinal plants used by the Nishi (Nishing) people of Arunachal Pradesh, for treatment of diseases.

24. Chakraborty, P., Pal, G.D. & Parmar, P.J. 2003. "Some wild edible plants sold in the daily markets of Arunachal Pradesh". *J. Econ. Taxon. Bot.* 27(2): 489-495.

Abst.- Ethnobotanical information on 35 species of wild edible plants sold in the daily markets of Arunachal Pradesh has been reported in this paper.

25. Chandra, Veena. 1989. "Medicinal plants used by the tribals of Arunachal Pradesh- A preliminary study". *J. Econ. Taxon. Bot.* 13(2): 391-394.

Abst.- The paper deals with 23 species of plants used in various ailments by the tribals of

Arunachal Pradesh. The information has been gathered from the specimens deposited in ASSAM herbarium.

26. Chauhan, A.S. 1990. "A new species of *Eurya* Thunb. (Theaceae) from Arunachal Pradesh". *Indian J. Forest.* 13(1): 76-77.

Abst.- A new species of *Eurya* Thunb. viz., *E. arunachalensis* has been described from Arunachal Pradesh.

27. Choudhary, R.K., Srivastava, R.C. & Das, A.K. 2008. "*Ranunculus trigonus* var. *strigosus* W.T. Wang (Ranunculaceae): A new record for India". *Rheedea* 18(1): 37-38.

Abst.- *Ranunculus trigonus* var. *strigosus* W.T. Wang (Ranunculaceae) is reported from Arunachal Pradesh, first time for India. Detailed description and relevant notes are provided.

28. Chowdhery, H.J., Giri, G.S. & Pal, G.D. 1993. "A new species of *Eria* Lindl. (Orchidaceae) from Lower Subansiri, Arunachal Pradesh, India". *Indian J. Forest.* 16(1): 91-93.

Abst.- A new species of *Eria*, namely *E. sharmae* has been described from Lower Subansiri district in Arunachal Pradesh.

29. Dam, D.P. & Dam, N. 1979. "Notes on *Rhododendron dalhousiae* Hooker var. *rhabdotum* (Balf. f. & Cooper) Cullen, comb. et stat. nov. from Kameng district of Arunachal Pradesh". *Bull. Bot. Surv. India* 21(1-4): 173-174.

Abst.- *Rhododendron rhabdotum* (Balf.f. & Cooper) Cullen has been treated as a variety of *Rhododendron dalhousiae* Hooker.

30. Dam, D.P. & Dam, N. 1980. "*Chrysoglossum erraticum* Hook.f.- A rare orchid from Kameng district, Arunachal Pradesh". *Bull. Bot. Surv. India* 22(1-4): 185-187.

Abst.- *Chrysoglossum erraticum* Hook.f. hitherto known from Sikkim and Bhutan has been recorded for the first time from Kameng district of Arunachal Pradesh.

31. Das, A.K. 1997. "Less-known uses of plants among the Adis of Arunachal Pradesh". *Ethnobotany* 9(1&2): 90-93.

Abst.- Adis constitute one of the important tribal groups of Arunachal Pradesh. The paper deals with the ethnobotany of one of the least-known and economically less important groups of plants, viz. ferns and fern-allies. Ferns are put into such diverse uses as rituals, beverage making, medicine, vegetables, famine food etc. While giving a detailed list of such plants, brief description of various uses and local name(s) and collection numbers are mentioned for ready reference.

32. Das, A.K. & Tag, Hui. 2006. "Ethnobotanical studies on the *Khamti* tribe of Arunachal Pradesh". *Indian J. Traditional Knowledge* 5(3): 317-322.

Abst.- An ethnobotanical study was done in *Khamti* dominated area of Chongkam and Namsai circle of Lohit district of Arunachal Pradesh during 2002-2004. *Khamti* tribe is rich in plant based traditional knowledge. Of 45 medicinal plants studied, 5 plants were found to be used in malaria and fever, 4 in bone fractured, 3 in anaemia, 2 each in snakebite, cancer, reproductive health and rabies, 1 each in tuberculosis, diabetes, and rest for curing different ailments which are used either singly or in combined form. The science of orthopaedics was found to be well developed and their medicinal preparation techniques are mostly accompanied by enchanting traditional mantra.

33. Das, Sudipa & Singh, D.K. 2007. "Two interesting records of liverworts from Mehao Wildlife Sanctuary, Arunachal Pradesh, India". *Bull. Bot. Surv. India* 49(1-4): 211-214.

Abst.- During the detailed morphotaxonomic study of specimens collected from Mehao Wildlife Sanctuary, Arunachal Pradesh, the authors identified and described *Archilejeunea minutilobula* Udar & Awasthi and *Colura tenuicornis* (A. Evans) Steph. which are new record for this state. A perusal of relevant literature reveals that the former had been so far confined to Western Ghats, the latter was known from China, Taiwan and West Bengal (Darjeeling) in India.

34. Deb, D.B. & Kataki, S.K. 1963. "Interesting plants from Eastern India I. *Dioscorea laurifolia* Wall. ex Hook.f.". *Bull. Bot. Surv. India* 5(2): 163-164.

Abst.- This paper records for the first time the occurrence of *Dioscorea laurifolia* Wall. ex Hook.f. in India from Tirap Frontier Division of North Eastern Frontier Agency. It further indicates the probability of its occurrence in Naga Hills, Tuensang Division and Burma.

35. Deori, N.C. & Hajra, P.K. 1975. "*Oberonia maxima* Hook.f.- An interesting orchid from Kameng district, Arunachal Pradesh". *Bull. Bot. Surv. India* 17(1-4): 170-171.

Abst.- Extended distribution of *Oberonia maxima* Hook.f. has been recorded from Mizo Hills and to the Eastern Himalaya in Kameng District in Arunachal Pradesh.

36. Deori, N.C. & Joseph, J. 1978. "*Pholidota convallariae* var. *breviscapa* - A new variety of orchid from Arunachal Pradesh". *Bull. Bot. Surv. India* 20(1-4): 159-160.

Abst.- A new variety of *Pholidota convallariae* viz. *P. convallariae* var. *breviscapa* Deori et Joseph has been described from Kameng district in Arunachal Pradesh.

37. Dixit, R.D. 1982. "A new species of *Vittaria* from Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 3(3): 959-960.

Abst.- *Vittaria arunachalensis* is described as new to science from the state of Arunachal Pradesh in India.

38. Dixit, R.D. & Kala, Y.K. 1988. "Notes on two species of fern genus *Pronephrium* Presl". *Bull. Bot. Surv. India* 30(1-4): 146-148.

Abst.- The occurrence of *Pronephrium asperum* (Presl) Holtt. in India has been confirmed. *P. simplex* (Hook.) Holtt. has been reported as new to India. Both the species have been described in detail with illustration to facilitate easy identification.

39. Gajurel, P.R., Rethy, P. & Kumar, Y. 1998. "*Piper lonchites* Roem. & Sch.- A lesser known species of *Piper* from Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 22(3): 731-733.

Abst.- *Piper lonchites* Roem. & Sch. (Piperaceae) a native plant of Malaya and a lesser known species of India has now been recorded for the first time from Arunachal Pradesh. It has been recorded from India after a lapse of 68 years. Present paper provides the first complete description of the plant from India. The detailed description of the plant with illustration is provided for easy identification.

40. Gajurel, P.R., Rethy, P. & Kumar, Y. 2001. "*Piper haridasanii* - A new species of *Piper* (Piperaceae) from Arunachal Pradesh, North Eastern India". *J. Econ. Taxon. Bot.* 25(2): 293-296.

Abst.- *Piper haridasanii* Gajurel, Rethy et Kumar (Piperaceae), a new species from Arunachal Pradesh, is described and illustrated. The relationship of the species with closely related taxa is also provided.

41. Gajurel, P.R., Rethy, P. & Kumar, Y. 2007. "A new species of *Piper* L. (Piperaceae) from Arunachal Pradesh". *Rheedea* 17(1 & 2): 35-39.

Abst.- *Piper nirjulianum* Gajurel, Rethy *et* Kumar, a new species from Arunachal Pradesh, North East India is described and illustrated. This species is most allied to *P. arunachalensis* Gajurel *et al.* but differs in having coriaceous leaves, three mucilage canalled stem, dithecous anthers and two stamens.

42. Gajurel, P.R., Rethy, P., Singh, B. & Angami, A. 2006. "Ethnobotanical studies on Adi tribes in Dehang Debang Biosphere Reserve in Arunachal Pradesh, Eastern Himalaya". *Ethnobotany* 18(1&2): 114-118.

Abst.- Dehang Debang Biosphere Reserve located in Eastern Himalayan region of Arunachal Pradesh is considered to be very rich in biological diversity. A number of tribal communities residing in the reserve area are totally dependent on the resources to meet their daily requirements and possess rich traditional knowledge on the uses of various plants. This paper

deals with indigenous knowledge on wild edible plants used by the Adi tribes residing along the banks of Siang river towards South western Boundary of DDBR. About 150 wild plant species are utilized by these tribes for various purposes; of these, about 85 plant species are found to be edible. Among these, most of the species are utilized as vegetables and fruits, while a few are used as medicine and for other needs.

43. Gaur, R.C. & Dayal, Ram. 1985. "A new species of *Greenea* W. & A. (Rubiaceae) from Arunachal Pradesh (India)". *Indian J. Forest.* 8(4): 323-325.

Abst.- *Greenea bahadurii* Gaur et Dayal, a new species allied to *Greenea wightiana* W.& A., is described from Seppa, West Kameng district, Arunachal Pradesh (India).

44. Ghosh, S.R. 1984. "*Vandenboschia gigantea* (Bory ex Willd.) Pic. Ser.- A new fern record from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 5(4): 814.

Abst.- *Vandenboschia gigantea* (Bory ex Willd.) Pic. Ser. has been first recorded from Arunachal Pradesh.

45. Giri, G.S. & Das, D.K. 1989. "*Maesa nayarii*- A new species of Myrsinaceae from Arunachal Pradesh". *Bull. Bot. Surv. India* 31(1-4): 178-180.

Abst.- A new species of *Maesa* viz. *M. nayarii* (Myrsinaceae) has been described and illustrated from Arunachal Pradesh.

46. Giri, G.S. & Lal, Jagadish. 1988. "New distributional record of *Mecanopsis paniculata* (D. Don) Prain (Papaveraceae) from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 12(2): 365-366.

Abst.- The paper presents the new distributional record of *Mecanopsis paniculata* (D. Don) Prain along with full description from Tawang, Arunachal Pradesh.

47. Giri, G.S., Pal, G.D. & Chowdhery, H.J. 1992. "A new variety of *Sadiria erecta* (Clarke) Mez. (Myrsinaceae) from Arunachal Pradesh, India". *Indian J. Forest.* 15(1): 93-94.

Abst.- A new variety of *Sadiria erecta* (Clarke) Mez. namely *S. erecta* (Clarke) Mez. var. *longipetiolata* has been described from the state of Arunachal Pradesh. Its flowering period and ecology have also been given.

48. Giri, G.S., Pramanik, A. & Chowdhery, H.J. 1992. "A new species of *Sonerila* Roxb. (Melastomataceae) from Arunachal Pradesh, India". *Indian J. Forest.* 15(1): 95-96.

Abst.- A new species of *Sonerila* viz. *S. arunachalensis* has been described from Mehao Wildlife Sanctuary, Dibang Valley in Arunachal Pradesh.

49. Gupta, Vishal. 2005. "*Jhum* cultivation practices of the Bangnis (Nishis) of Arunachal Pradesh". *Indian J. Traditional Knowledge* 4(1): 47-56.

Abst.- *Jhum* (slash and burn cultivation) is an age-old system of agriculture among the indigenous groups in the humid tropics. The Jhumias make use of the local ecological and environmental conditions to their advantage. The natural indicators, their magico-religious beliefs, and analogy and faith condition their decision-making. Worships, rituals, myths and folktales also govern their land and resource use. The entire gamut of their socio-cultural life is thus woven around jhum that is not merely an 'Agricultural Activity', but a 'Cultural Practice' and a 'Way of Life'.

The paper attempts at understanding the complex relation of how the socio-cultural life of Bangni jhumias of East Kameng to Jhum. The traditional calendar of Jhum activity is presented and is followed by tracing the origin, settlement history and land stewardship of the tribe that closely relates to origin of this practice. The socio-cultural beliefs, magico-religious practices, festivities and rituals associated with jhum are described, to give a view of their traditional system of agriculture and land management.

50. Gupta, Vishal. 2006. "Traditional medicinal plants of the *Bangnis* of East Kameng district, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 30 (Suppl.): 310-319.

Abst.- The state of Arunachal Pradesh has 25 major tribes and many subtribes which belong to

the Indo-Mongoloid group and comprise 63.66% of the state's population. The district of East Kameng is home of the Bangni tribe who practice jhum, depend on forests for supplementing their daily needs and are now taking to the newer modes of land use and settled agriculture. They have evolved their culture and traditions, myths and folktales in close association with the nature and have an intricate understanding of the forests and natural resources. This paper attempts to describe 75 traditional medicinal and healing plants of this tribe, comprising of 4 pteridophytes and 71 angiosperms, belonging to 37 families. These could be screened for the active principles and assessed for their medicinal potential.

51. Haridasan, K., Rao, Nageswara A. & Hegde, S.N. 1989. "Some additions to the orchid flora of Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 13(1): 110-112.

Abst.- Four species of orchids viz., *Cypripedium tibeticum* King ex Rolfe, *Galearis stracheyi* (Hk. f.) Hunt, *Neottia acuminata* Schltr. and *Platanthena bakeriana* (K.& P.) Krzl. are reported as new records to Arunachal Pradesh of India.

52. Hegde, S.N. 1995. "*Thrixspermum muscaeflorum* Rao & Joseph- A new record to Arunachal Pradesh, India". *J. Econ. Taxon. Bot.*, *Addl. Ser.* 11: 121-124.

Abst.- This paper described *Thrixspermum muscaeflorum* Rao & Joseph which forms a new distributional record in Arunachal Pradesh. Its relationship with other species and distribution pattern has been discussed. A key for identification of other species reported so far in the state has also been provided.

53. Hegde, S.N. & Rao, Nageswara, A. 1982. "*Epipogium sessanum* Hedge et Rao- A new species of orchid from Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 3(2): 597-601.

Abst.- A new species of *Epipogium* Gmel. viz. *E. sessanum* Hedge et Rao has been described from Arunachal Pradesh, India and key to the Indian species of the genus provided at the end. The paper includes 2 plates and 2 photos and 14 analytical sketches.

54. Hegde, S. N. & Rao, Nageswara A. 1983. "Further contribution to the orchid flora of Arunachal Pradesh-I". *J. Econ. Taxon. Bot.* 4(2): 383-392.

Abst.- This paper includes 30 species of orchids belonging to 21 genera as new additions to the orchid flora of Arunachal Pradesh. Out of them, 3 are new species, 3 new records to India and 3 new records to North East Himalayas. All the species are enumerated with relevant notes on ecology, phenology and distribution. Based on the field observations, 18 species have been noted either as rare and/or endangered and need for *in situ* and *ex situ* conservation emphasized.

55. Hegde, S.N. & Rao, Nageswara A. 1984. "Further contributions to the Orchid flora of Arunachal Pradesh, India-II". *Indian J. Forest.* 7(1): 76-79.

Abst.- Intensive survey and collection in West Kameng district of Arunachal Pradesh has yielded 13 more species as new additions to the Orchid flora of Arunachal Pradesh making the total 367. All the 13 species are enumerated here with relevant notes on their habitat-ecology, phenology and distribution.

56. Hegde, S.N. & Rao, Nageswara A. 1987. "Further contribution to the orchid flora of Arunachal Pradesh, India-III". *Indian J. Forest.* 10(3): 191-198.

Abst.- The paper records the occurrence of 25 orchids from Arunachal Pradesh for the first time and 9 out of these are new to India. 15 are epiphytes and the rest 10 are terrestrial.

57. Hegde, S.N. & Rao, A.N. 1982. "Three rare and little known orchids from Arunachal Pradesh, India". *Indian J. Forest.* 5(4): 311-314.

Abst.- Three rare and little known orchids, viz., *Oberonia anthropophora* Wall. ex Lindl., *Sunipia andersonii* (K. et P.) Hunt and *Bulbophyllum obrienianum* Rolfe from Arunachal Pradesh have been enumerated in this paper.

58. Hegde, S.N. & Rao, A.N. 1984. "*Biermannia jainiana* Hegde et Nageswara Rao- A new species of orchid from Arunachal Pradesh, India". *Bull. Bot. Surv. India* 26(1-2): 97-99.

Abst.- A new species of orchid belonging to the genus *Biermannia*, viz., *B. jainiana* has been described from Sessa, West Kameng district in Arunachal Pradesh.

59. Hegde, S.N. & Rao, A.N. 1994. "Role of herbaria in the study of orchid flora of Arunachal Pradesh, conservation and development with particular reference to orchid herbarium Tipi". *Bull. Bot. Surv. India* 36(1-4): 127-134.

Abst.- Arunachal Pradesh is known for its rich orchid Flora and to study them. An orchid herbarium has been established at Tipi in the year 1979. The herbarium has 2182 number of specimens representing 420 species of orchids deposited from time to time by the concerted efforts of the authors. This herbarium includes 15 holotype specimens and specimens of 57 endangered orchids. In this paper detailed list of the specimens deposited have been given. Its role in the study of orchid flora, conservation and development has been discussed.

60. Joseph, J. 1972. "*Asraoa triandra* (Arecaceae)- A new genus and species of palm from Lohit district, Arunachal Pradesh". *Bull. Bot. Surv. India* 14(1-4): 144-148.

Abst.- A slender, simple stemmed palm, superficially resembling *Wallichia* Roxb. and *Didymosperma* Wendl. & Drude but distinctive in its 3-stamened male flowers, collected from Lohit district, Arunachal Pradesh is described.

61. Joseph, J. & Rao, A.N. 1979. "*Bulbophyllum capillipes* Par. et Reichb.f. (*B. uniflorum* Griff.)- A rare orchid from Arunachal Pradesh". *Bull. Bot. Surv. India* 21(1-4): 196-198.

Abst.- The valid name of *Bulbophyllum uniflorum* Griff. (1851) non (Bl.) Hassk. (1842) is *Bulbophyllum capillipes* Par. et Reichb.f.

62. Joseph, J. & Singh, S. 1979. "*Trichomanes saxifragoides* Presl. (Hymenophyllaceae)- A new record of fern for North Eastern India from Tirap district, Arunachal Pradesh". *Bull. Bot. Surv. India* 21(1-4): 213-214.

Abst.- *Trichomanes saxifragoides* Presl, a wide spread taxon with a range from Japan, Philippines, Java, Sri Lanka to south India is reported from Tirap district of Arunachal Pradesh for the first time.

63. Joseph, J. & Singh, S. 1982. "*Asplenium neolaserpitifolium* Tardieu- Blot et Ching from Arunachal Pradesh- A new record for India". *Bull. Bot. Surv. India* 24(1-4): 189-190.

Abst.- *Asplenium neolaserpitifolium*, an epiphytic fern has been first recorded from India in Subansiri district, Arunachal Pradesh.

64. Joseph, J., Hegde, S.N. & Abbareddy, N.R. 1982. "*Eria connata* Joseph, Hegde et Abbareddy - A new species of orchid from Kameng district, Arunachal Pradesh, India". *Bull. Bot. Surv. India* 24(1-4): 114-116.

Abst.- During recent intensive collections in forests of Kameng district the authors gathered many specimens of *Eria* resembling *E. pumila* Lindl., epiphytic on large trees that had been felled. A critical comparative study of many fresh specimens of both, and other ones, as also concerned literature (see reference) has proved this to be a distinct new species. This new species should also be found in the moist subtropical dense forests of neighbouring district as well, on further search.

65. Kaul, R.N. & Haridasan, K. 1987. "Forest types of Arunachal Pradesh- A preliminary study". *J. Econ. Taxon. Bot.* 9(2): 379-389.

Abst.- The vegetation of Arunachal Pradesh exhibits marked differences according to climate and altitudinal changes. A broad classification of the different forest types is attempted here. The six broad types recognized are tropical forests, subtropical forests, temperate forests, pine forests, alpine forests and secondary forests. These types are further sub-divided according to floristic composition. Their tierwise structure is provided in detail. The present classification is compared with Champion & Seth's Revised Survey of Forest Types of India. The deviations observed in the forest composition, from what has been mentioned in earlier works have been discussed with a map.

66. Khan, Mahasin Ali, De, B. & Bera, Subir. 2007. "A fossil fern-leaflet of family Thelypteridaceae from the Middle Siwalik sediments of West Kameng district, Arunachal Pradesh". *J. Botan. Soc. Bengal* 61(1): 65-69.

Abst.- The article reports the occurrence of a Thelypteridaceae fossil fern-leaflet *Thelypteridaceophyllum* sp. from the middle Siwalik sediments (Subansiri Formation, Pliocene) exposed at the left bank of Kameng river in West Kameng district, Arunachal Pradesh. The present distribution of modern equivalents indicates the prevalence of warm humid climate and the occurrence of swamps/ rivers in the area during deposition.

67. Kulshrestha, V.K. & Shukla, B.K. 1987. "Rare and interesting plant records of proposed Namdapha Biosphere Reserve, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 11(1): 225-229.

Abst.- Present paper deals with 18 rare and interesting plant species collected from the proposed Namdapha Biosphere Reserve during the course of botanical exploration since 1981-1985. For each species reference to its status, their previous collection or records and their occurrence in the study area are discussed.

68. Kumar, Ambrish. 2007. "*Natsiatopsis* Kurz (Icacinaceae): A new generic record for India". *Rheedea* 17(1 & 2): 47-48.

Abst.- *Natsiatopsis thunbergiaefolia* Kurz (Icacinaceae) is reported here for the first time for India from Daporijo in Upper Subansiri district of Arunachal Pradesh. Detailed description and illustrations are provided. This is also the first report of the genus *Natsiatopsis* from India.

69. Kumar, Ambrish. 2008. "*Passiflora jugorum* W.W. Sm. (Passifloraceae): A new plant record for India from Arunachal Pradesh". *Indian J. Forest.* 31(4): 647-649.

Abst.: Passion flower is one of the most beautiful flowers of all flowers and distributed world wide from S. America to Europe and Asia. One of its species *Passiflora jugorum* W.W. Sm., Passifloraceae, so far known from China (Yunnan) and Myanmar (Bhamo) is reported for the first time from India as a new distributional record. It is explored from the subtropical forest areas of Limiking (alt. 1200 ± 50 m), Upper Subansiri District, Arunachal Pradesh, India. A brief taxonomic description of the taxon along with a colour photograph is provided.

70. Lal, J. & Verma, D.M. 1987. "*Globba rubromaculata* - A new species of Zingiberaceae from Arunachal Pradesh". *Bull. Bot. Surv. India* 29(1-4): 26-28.

Abst.- A new species of *Globba*, viz., *G. rubromaculata* (Zingiberaceae) has been described and illustrated from Ganga lake, Itanagar, Arunachal Pradesh.

71. Lal, Jagdish. 1990. "*Galeola altissima* (Bl.) Reichb. f.- A rare saprophytic orchid new to Arunachal Pradesh". *J. Econ. Taxon. Bot.* 14(1): 247-248.

Abst.- During the local collections in the Ganga Lake area of Lower Subansiri dist. the author collected a rare saprophytic orchid *Galeola altissima* (Bl.) Reichb. f. which is a new record for Arunachal Pradesh state.

72. Lal, Jagdish. 1990. "*Huperzia herteriana* (Kumm.) Sen & Sen (Lycopodiaceae *sensu lato*)- A taxon new to Arunachal Pradesh". *J. Econ. Taxon. Bot.* 14(3): 591-592.

Abst.- During a field collection trip in Tawang district the author collected *Huperzia herteriana* (Kumm.) Sen & Sen which is a new record for Arunachal Pradesh. A detailed description along with correct citation has also been given here.

73. Lal, Jagdish 1995. "A new locality of *Christensenia assamica* (Griffith) Ching (Christenseniaceae)- An endangered fern". *J. Econ. Taxon. Bot.* 19(3): 547-549.

Abst.- In India *Christensenia assamica* (Griffith) Ching is known from Assam & Arunachal Pradesh, but the live plants are not available in either of the localities at present. Inspite of several extensive collection trips by pteridologists the taxon could not be collected in former locality while the later locality is 'washed away' due to rapid development activities. A new locality in Lower Subansiri district, Arunachal Pradesh has been discovered by the author.

74. Lal, Jagadish. 2003. "*Colura acutifolia* Ast (Hepaticae) - New to Indian Bryoflora". *Bull. Bot. Surv. India* 45(1-4): 227-228.

Abst.- *Colura acutifolia* Ast collected from Doimukh forest area in Papa, Para district (Lower Subansiri) of Arunachal Pradesh constitutes a new record for India.

75. Lal, Jagadish & Kumar, Anand. 1987. "*Elatostema cuneatum* Wight (Urticaceae) - A rare taxon from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 10(1): 243.

Abst.- *Elatostema cuneatum* Wight is reported for the first time from the vicinity of Itanagar, Arunachal Pradesh in North Eastern India.

76. Mahapatra, H.S. 2006. "Notes on some poisonous plants of Arunachal Pradesh". *J. Econ. Taxon. Bot.* 30 (Suppl.): 243-246.

Abst.- This paper deals with 27 poisonous plants occurring naturally in Arunachal Pradesh and are being used by the local tribal people for various purposes. Some of them are very toxic and may result in death of man or animal.

77. Mahapatra, H.S. & Choudhury, R.K. 2006. "*Daphne papyracea* Wall. ex Steudal - A source of traditional handmade paper in Arunachal Pradesh". *J. Econ. Taxon. Bot.* 30(3): 651-653.

Abst.- *Daphne papyracea* Wall. ex Steudal under the family Thymelaeaceae is reported occurring in the natural habitats in Arunachal Pradesh. This paper deals with the taxonomy and economic aspects of the species.

78. Mahapatra, H.S. & Medhi, Homen. 2008. "Unconventional wild edible fruits of Arunachal Pradesh". *J. Econ. Taxon. Bot.* 32 (Suppl.): 282-286.

Abst.- The state of Arunachal Pradesh harbours a number of unconventional wild edible fruits plants. In the present paper 56 such plants have been reported which have a great potentiality for common human consumption.

79. Maikhuri, R.K. & Ramakrishnan, P.S. 1992. "Ethnobiology of some tribal societies of Arunachal Pradesh in North-East India". *J. Econ. Taxon. Bot., Addl. Ser.* 10: 61-78.

Abst.- The ethnobiology of four tribes, namely, the Nishis, the Karbis the Kacharis and the Chakmas in Arunachal Pradesh in north-east India was investigated. Of the 134 plant species 91 are of food value; 56% of the food plants are leafy vegetables, other yield fruits, tubers, roots and seeds. Nishis and Karbis depend more on wild resources than the other two tribes. A variety of animals collected from the wild are also used. Though the contribution of these plants to the total energy and protein needs of the tribals is limited, they are important particularly either when traditional food sources are in short supply or to meet the needs of relatively proper sections of the society.

80. Malhotra, C.L. & Hajra, P.K. 1977. "Status of floristic studies in Arunachal Pradesh". *Bull. Bot. Surv. India* 19(1-4): 61-63.

Abst.- From 1955 to 1977 Botanical Survey of India with its Eastern Circle Headquarters at Shillong has organized twenty five (25) collection tours to different places of Arunachal Pradesh. In these collection tour about 3000 species belonging to 1,155 genera and 188 families including many economic plants have been collected.

81. Mathur, R. 1986. "*Synotis auriculata* C. Jeffrey & Y.L. Chen- An addition to the Indian flora". *J. Econ. Taxon. Bot.* 8(2): 464.

Abst.- *Synotis auriculata* from Arunachal Pradesh and Nagaland is an addition to the Indian flora.

82. Naithani, H.B. & Bennet, S.S.R. 1979. "*Schizophragma* Sieb. & Zucc.- A generic record to the Indian Hydrangeaceae". *Indian J. Forest.* 2(2): 138-140.

Abst.- *Schizophragma integrifolia* Oliver has been collected for the first time from Kameng district, Arunachal Pradesh. This is also the first report of the genus *Schizophragma* Sieb. &

Zucc. from India. It can be introduced as an ornamental climber in the hill stations in eastern India.

83. Naithani, H.B. & Bennet, S.S.R. 1981. "Interesting distributional record of eleven species of Asteraceae from Arunachal Pradesh". *Indian J. Forest.* 4(1): 73-74.

Abst.- Interesting distributional record of eleven species of Asteraceae viz. *Ambrosia artemisifolia* Linn., *Aster himalaicus* C.B. Clarke, *Cacalia mortani* (C.B. Clarke) Kitamura ex Koyama, *Cotula australis* (Sieb. ex Spr.) Hook. f., *Dubyaea hispida* DC., *Galinsoga urticaefolia* (H.B.K.) Benth. *Inula hookeri* C.B. Clarke, *I. nervosa* Wall. ex DC., *Saussurea sughoo* C.B. Clarke, *Senecio acuminata* Wall. ex DC. and *S. borii* Raizada are given in this paper from Arunachal Pradesh.

84. Naithani, H.B. & Bennet, S.S.R. 1981. "Interesting distributional records of seven species of flowering plants from Arunachal Pradesh". *Indian J. Forest.* 4(2): 160-163.

Abst.- Interesting distributional record of seven species of flowering plants viz. *Alternanthera pungens* H.B.K. (Amaranthaceae), *Crotalaria bhutanica* Thoth. ((Papilionaceae), *Lepidium virginicum* Linn. (Cruciferae), *Lespedeza striata* (Thunb.) Hook. & Arn. (Papilionaceae), *Luculia grandiflora* Ghose, *Mitracarpus verticillatus* (Schum. & Thonn.) Vatke (Rubiaceae) and *Radermachera sinica* (Hance) Hemsl. (Bignoniaceae) are given in this paper from Arunachal Pradesh.

85. Naithani, H.B. & Bennet, S.S.R. 1990. "Notes on the occurrence of *Cuphea carthagensis* from India". *Indian Forester* 116(5): 423-424.

Abst.- During a botanical trip to Tirap and Kameng districts of Arunachal Pradesh, one of the authors has collected an interesting weed namely *Cuphea carthagensis,* a native of South America and Mexico which is a new record for this state as well as for India.

86. Nath, S.C. & Bardoloi, D.N. 1989. "Ethnobotanical observation on some medicinal folklores of Tirap district, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 13(2): 321-325.

Abst.- In the communication 50 plant species used by various tribes of different ethnic groups like Nocte, Khamti, Tangsa, Singphow etc. in Tirap district of Arunachal Pradesh are being described. The folklore medicinal utilities of these plants are less known and not recorded in the literature of Indian medicinal plants. Therefore, the valuable informations regarding the utilities of plants and their botanical nomenclature together with local names are given. The plant species are preserved in the herbarium of Regional research laboratory, Jorhat by incorporating the field numbers.

87. Nath, S.C., Rabha, L.C., Hazarika, J.N. & Bordoloi, D.N. 1988. "Observation on medicinal and economic plants of Tirap district, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 12(2): 439-446.

Abst.- The western part of Tirap district was surveyed at different times during 1981 and 1982 to study the ethnobotany of the region and to assess the availability of medicinal and economic plants. About 56 plant species distributed within 52 genera and 40 families are recorded.

88. Pal, D.C., Uniyal, B.P. & Mudgal, V. 1982. "*Saccharum wardii* (Bor) Bor ex Cope (Poaceae)- A new record for India". *Bull. Bot. Surv. India* 24(1-4): 196-198.

Abst.- *Saccharum wardii* (Bor) Bor ex Cope, collected from Lohit district, Arunachal Pradesh, constitutes a new record for India.

89. Pal, G.D. 1982. "*Christensenia aesculifolia* (Blume) Maxon - First report of a poorly known fern from Subansiri district, Arunachal Pradesh". *Bull. Bot. Surv. India* 24(1-4): 180-182.

Abst.- A rare and poorly known lithophytic fern namely *Christensenia aesculifolia* has been collected from Subansiri district, Arunachal Pradesh. A detailed description and illustrations have also been provided.

90. Pal, G.D. 1984. "Observations on ethnobotany of tribals of Subansiri, Arunachal Pradesh". *Bull. Bot. Surv. India* 26(1-2): 26-37.

Abst.- The present paper deals with the plants used by the tribes of various ethnic groups like Nishi, Apatani, Hill-Miri, Adi etc. which dominate the hilly region of Subansiri district in Arunachal Pradesh.

The paper gives an account of 129 plants of ethnobotanical importance, of which 112 are not known outside their tribal community. These are used by the tribals, for various purposes such as food, medicine, fish-poison, fibre, local drinks, religious ceremonies, superstition, etc.

Some ethnobotanical studies conducted in other parts of the country are discussed in the paper.

The information obtained while studying the flora of the area is presented here. For such species, the botanical name with family, local name, uses, the way of plant or plant parts used, flowering and fruiting time, locality and the field number are given.

91. Pal, G.D. 1992. "Observations on less known interesting tribal uses of plants in Lower Subansiri district, Arunachal Pradesh". *J. Econ. Taxon. Bot., Addl. Ser.* 10: 199-203.

Abst.- The present paper gives an account of ethnobotanical observations of 22 species. The plants are used by the 'Adi' and 'Nishi' tribes for varied purposes such as medicine, food, dye, local drinks, religious ceremonies, etc.

92. Pal, G.D. 1994. "Fern and fern allies of Itanagar, Lower Subansiri district, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 18(1): 153-163.

Abst.- The present paper gives an account of Fern and Fern-allies of so far botanically unexplored part of Lower Subansiri District as observed by the author during collection in 1977-1980. It includes 56 species. A short note indicating the characteristic of the species, ecology, altitude, locality and distribution are provided.

Two plants viz. *Microsorum pteropus* (Bl.) Copel. and *Diplazium dilatatum* Bl. are reported here from Arunachal Pradesh for the first time. Three endangered plants viz. *Dipteris wallichii* (R. Br.) Moore, *Cyathea spinulosa* Wall. ex Hook. and *Christensenia aesculifolia* (Bl.) Maxon have been proposed here for conservation. Six plants are of special interest in the field of ethnobotany (Pal 1984).

93. Pal, G.D. & Abbareddy, N.P. 1982. "*Galeola nudiflora* Lour.- A rare orchid from Subansiri district, Arunachal Pradesh, India". *Bull. Bot. Surv. India* 24(1-4): 203-205.

Abst.- *Galeola nudiflora* Lour., earlier known to occur in Sikkim, has now been recorded from Subansiri district, Arunachal Pradesh.

94. Pal, G.D. & Giri, G.S. 1990. "Distributional notes on *Polygala* Linn. (Polygalaceae) from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 14(1): 225-228.

Abst.- The paper present the extended distribution and critical notes on *Polygala arillata* var. *purpurescens* Clarke ex Mukherjee, *P. arillata* var. *laevicarpa* R.N. Banerjee & G.S. Giri and *P. triphylla* Buch.-Ham. ex D. Don with a text figure.

95. Pal, G.D. & Maiti, G.G. 1984. "A new species of *Aconogonum* (Polygonaceae) from Eastern Himalaya". *Bull. Bot. Surv. India* 26(1-2): 95-96.

Abst.- A new species of *Aconogonum*, viz., *A. pangianum* has been described from Pange, Subansiri district of Arunachal Pradesh.

96. Pal, G.D. & Thothathri, K. 1988. "Critical notes on little known plants from Arunachal Pradesh". *Bull. Bot. Surv. India* 30(1-4): 173-175.

Abst.- *Rhynchotechum calycinum* C.B. Clarke (Gesneraceae) has been recorded from Arunachal Pradesh for the first time. The record of *Leycesteria glaucophylla* (Hook. f. & Thoms.) Clarke (Caprifoliaceae) from Arunachal Pradesh forms a connecting link with its occurrence in Burma and earlier reports from Sikkim, Bhutan and Nepal.

97. Panda, S. 2005. "*Gaultheria brevistipes* (C.Y. Wu & T.Z. Hsu) R.C. Fang (Ericaceae)- A

new record for India from Talley Valley, Arunachal Pradesh". *Bull. Bot. Surv. India* 47(1-4): 177-182.

Abst.- *Gaultheria brevistipes* (C.Y. Wu & T.Z. Hsu) R.C. Fang, collected from Talley Valley in Lower Subansiri district of Arunachal Pradesh constitutes a new record for India.

98. Panda, S. 2007. "Recollection of *Agapetes miranda* Airy Shaw (Ericaceae) from Arunachal Pradesh". *Rheedea* 17(1 & 2): 29-31.

Abst.- *Agapetes miranda* Airy Shaw was collected from Arunachal Pradesh after a gap of 69 years. The species is described and illustrated and its fruit is described for the first time.

99. Panda, S. 2007. "Recollection of *Vaccinium chaetothrix* Sleumer (Ericaceae) from Arunachal Pradesh, India". *Rheedea* 17(1 & 2): 49-51.

Abst.- *Vaccinium chaetothrix* Sleumer (Ericaceae), a rare epiphytic shrub, was recollected after 75 years of its first collection by F. Kingdon-Ward in 1928 from Lohit district of Arunachal Pradesh. The species is described and illustrated.

100. Panigrahi, G. & Naik, V.N. 1961. "A botanical tour to Subansiri Frontier Division (NEFA)". *Bull. Bot. Surv. India* 3(3&4): 361-388.

Abst.- A botanical collection tour along the 100 km. track passing through the Dafla hills and Apatanang valley and lying between Kimin (213 m) and Ziro (1525 m) in the Subansiri F.D., undertaken during September 1959 yielded 383 species of angiosperms and 66 species of Pteridophytes amongst other. This paper presents the topography, climate and vegetation together with a comprehensive analysis of the floristic composition of the vegetational types and is followed by enumeration of species in the appendix.

Vegetation in the Dafla hills area visited is ascribed to tropical evergreen forest from Kimin to Pitepool and to subtropical evergreen forest and grassland formation between Kherbari and Hapoli, the last one representing a biotic climax.

Apatanang valley is a flat alluvial plain of about 20 sq. miles representing the bed of dried up lake and is very suitable for rice and millet cultivation. *Pinus wallichiana* and *Dendrocalamus sikkimensis* are extensively planted in the surrounding hillocks.

The analyses of the distribution data shows the occurrence of a large number of species in the area as common to neighbouring region e.g. Assam sharing 260 species; Sikkim 119 species; Western Himalaya 107 species; Burma 52 species; Manipur 15 species; Bengal 29 species; Bihar and Orissa 13 species and Deccan Peninsula 28 species.

Borreria ocymoides, Torenia asiatica and *Cyanotis papilionacea*, so far reported as restricted to Deccan Peninsula, *Impatiens porrecta, I. paludosa* and *Solanum khasianum*, as endemic to Khasia hills, *Argyreia wallichia* as endemic to Sikkim, *Exacum tetragonum* var. *stylosa* and *Dendrobium chrysotoxum* reported by Hooker from Burma have now been collected from Subansiri F.D.

101. Panigrahi, G. & Singh, S. 1980. "*Thylacopteris papillosa* (Bl.) Kunze ex J. Smith (Polypodiaceae)- A new record for India, with nomenclatural notes". *Bull. Bot. Surv. India* 22(1-4): 223-225.

Abst.- *Thylacopteris papillosa* has been recorded from Tirap Frontier Division of Arunachal Pradesh for the first time. Nomenclatural notes have also been provided.

102. Parmer, P.J. 2002. "Gymnosperms of Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 26(2): 259-279.

Abst.- The paper presents 40 taxa belonging to 22 genera under 9 families of gymnosperms found in Arunachal Pradesh. It includes 1 variety and 1 forma. Key to genera and species, description, flowering and fruiting time and distribution have been given.

103. Pathak, M.K. & Bhaumik, M. 2005. "Vegetational pattern in Dibang Valley, Arunachal Pradesh". In: A.K. Pandey, Jun Wen & J.V.V. Dogra (eds.), Plant Taxonomy, pp. 179-191.

CBS Publishers & Distributors, New Delhi.

Abst.- The district Dibang Valley lies between 27º-29º30´ N latitude and 95º15´ - 97º50´ E longitude in the state of Arunachal Pradesh. It has an area of about 13,029 sq. km. The district is surrounded in the east by Lohit district, in the west by Upper, East and West Siang districts, in the south by the state of Assam and in the north by China. The district is a part of the famous Mishmi (Mishmee) hills. Altitudes varies from 150 m to over 6000 m. Major part of the district is rocky. Climate in Dibang valley varies greatly. The area comes under the regions of heaviest rainfall in the country. A wide variety of vegetation pattern ranging from grassland to alpine forests are found. The various types of vegetation pattern found in the district can be broadly divided into following major categories: Tropical forests, Sub Tropical forests, Temperate forests, Sub alpine forests and Alpine forests.

104. Pathak, M.K., Bhaumik, M. & Mudgal, V. 1997. "*Rubus calophyllus* C.B. Clarke (Rosaceae)- A new report for Arunachal Pradesh". *Indian J. Forest.* 20(2): 207-209.

Abst.- During a plant exploration in Dibang valley district of Arunachal Pradesh, the authors collected *Rubus calophyllus* C.B. Clarke from Mayadia pass, about 65 km from Roing on the way to Hunli, which is a new record for the state.

105. Paul, T.K. & Nayar, M.P. 1985. "A new species of *Camellia* (Theaceae) from Arunachal Pradesh, India". *Bull. Bot. Surv. India* 27(1-4): 92-93.

Abst.- A new species of *Camellia* viz., *C. siangensis* has been described in the present paper from Minguing-Takepokang, Siang F.D. of Arunachal Pradesh.

106. Pinokiyo, A., Singh, K.P. & Borthakur, S.K. 2004. "Foliicolous species of *Porina* (Lichens) from Arunachal Pradesh, India". *Indian J. Forest.* 27(4): 407-416.

Abst.- The paper reports 21 foliicolous species of lichen genus *Porina* Müll.-Arg. from Arunachal Pradesh, India along with a key for their identification. 3 species viz. *Porina applanata* Vainio, *P. napensis* Lücking and *P. tetramera* (Malme) R. Sant. are new records for Indian lichen flora. Phytogeographic affinities and distribution of species in India are discussed.

107. Pramanik, A. 1995. "Miscellaneous botanical notes on some interesting legumes in Arunachal Pradesh". *J. Econ. Taxon. Bot.* 19(2): 481-482.

Abst.- The existing knowledge on distribution and taxonomy of the rich and diversed legume flora in Arunachal Pradesh is scanty. This paper presents some miscellaneous botanical notes on 3 interesting wild legumes belonging to 2 different genera, viz., *Zornia* Gmel. and *Uraria* Desv. as a precursor to the materials for the flora of the state.

108. Pramanik, A. 1996. "*Gymnopteris vestita* (Wall.) Underwood (Gymnogrammaceae)- A new record for Dibang Valley district, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 20(3): 737-738.

Abst.- During a botanical exploration in Dibang Vallley, Arunachal Pradesh, the author collected *Gymnopteris vestita* (Wall.) Underwood from Miodia Pass which is new record for Dibang Valley, Arunachal Pradesh. A detailed description along with correct nomenclature, ecology, distribution and specimens examined have also given.

109. Pramanik, A. 1996. "Miscellaneous botanical notes on some interesting legumes in Arunachal Pradesh". *Indian J. Forest.* 19(1): 100-102.

Abst.- The existing knowledge on distribution and taxonomy of the rich and diverse legume flora in Arunachal Pradesh is scanty. This paper presents some miscellaneous botanical notes on 6 interesting wild legumes belonging 2 different genera, viz. *Zornia* Gmel. and *Uraria* Desv. as a precursor to the materials for the flora of the state.

110. Pramanik, A. 1998. "A contribution to the flora of Dibang Valley district, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 22(1): 123-138.

Abst.- There is no comprehensive published account on the flora of Dibang Valley district of Arunachal Pradesh. In this paper 232 taxa of flowering plants under 173 genera belonging to

78 families have been enumerated for the district with specific demarcation of new records of occurrence of different taxa either in the district or in the state itself based on author's own collections. It also gives the field numbers and flowering period of the taxa.

111. Pramanik, A. & Das, S.K. 1991. "Botany of Arunachal Pradesh: a case study and its limitations". *J. Econ. Taxon. Bot.* 15(3): 585-586.

Abst.- The present communication deals with a recent collection of *Bauhinia variegata* Linn. which constitutes a new record of its occurrence in Arunachal Pradesh. It shows some differences in usual leaf shedding phenomena and calyx limbs characters. Some limitations to study the species in detail are highlighted.

112. Rao, A.N. & Haridasan, K. 1997. "Four new records of orchids to Arunachal Pradesh (India)". *J. Econ. Taxon. Bot.* 21(3): 717-719.

Abst.- Four orchid species viz., *Bulbophyllum congestum* Rolfe, *B. nodosum* (Rolfe) J.J. Sm., *Epipactis helleborine* (L.) Crantz and *Ponerorchis chusua* (D. Don) Soo are reported as new records to Arunachal Pradesh.

113. Rao, A.S. & Balakrishnan, N.P. 1968. "*Bulbophyllum brachypodium nom. nov.* with two new varieties". *Bull. Bot. Surv. India* 10(3&4): 350-352.

Abst.- *Cirrhopetalum brevipes* is transferred to *Bulbophyllum* under the name of *B. brachypodium*. Further two new varieties of *B. brachypodium* viz. var. *geei* and var. *parviflorum* are described from Kameng district and Bhutan in Eastern Himalayas respectively.

114. Rao, A.S. & Deori, C. 1980. "A preliminary census of the orchids of Kameng district, Arunachal Pradesh". *Indian J. Forest.* 3(3): 255-260.

Abst.- A list of 173 species of orchids is provided here based on intensive collections in the five districts of Arunachal Pradesh viz., Kameng, Subansiri, Siang, Lohit and Tirap. 68 of these species are common to Sikkim and Bhutan and 120 species are common to those occurring in Khasia and Jaintia hills. For 22 species, marked with *, extended distribution has been found in the Kameng district, Arunachal Pradesh from the hitherto known distribution.

115. Rao, A.S. & Hajra, P.K. 1970. "*Zeylanidium olivaceum* (Gardn.) Engl. (Podostemonaceae)- First report of its presence in Kameng district, Arunachal Pradesh". *Bull. Bot. Surv. India* 12(1-4): 271-272.

Abst.- *Zeylanidium olivaceum* (Gardn.) Engl. collected from Dirang river and Bichom river of Kameng district of Arunachal Pradesh constitutes which a new record for the state.

116. Rao, A.S. & Hajra, P.K. 1973. "*Sebaea khasiana* C.B. Cl.- A little known Gentianaceae herb from Kameng district, Arunachal Pradesh". *Bull. Bot. Surv. India* 15(1&2): 145-146.

Abst.- *Sebaea khasiana* C.B. Cl. has been collected from Kameng-Lis village, north of Dirang, on the way to Sappar, Kameng district, which is a new distributional record from Arunachal Pradesh. A detailed description along with correct nomenclature, flowering, distribution and pollen morphology have also been given.

117. Rao, A.S. & Hajra, P.K. 1973. "*Ariopsis peltata* Nimmo, first report of a poorly known aroid, from Kameng district, Arunachal Pradesh, India". *Bull. Bot. Surv. India* 15(1&2): 171-173.

Abst.- *Ariopsis peltata* Nimmo has been first reported from Arunachal Pradesh.

118. Rao, A.S. & Hajra, P.K. 1974. "*Hedychium radiatum* & *H. robustum* (Zingiberaceae)- two new species from Kameng district, Arunachal Pradesh". *Bull. Bot. Surv. India* 16(1-4): 163-166.

Abst.- Two new species of orchids namely *Hedychium radiatum* & *H. robustum* have been described from Kameng district, Arunachal Pradesh.

119. Rao, A.S. & Joseph, J. 1967. "*Rhynchoglossum lazulinum*- A new species of Gesneriaceae". *Bull. Bot. Surv. India* 9(1-4): 280-282.

Abst.- *Rhynchoglossum lazulinum* A.S. Rao et Joseph has been described as a new species from Krishna, 36 km from Bhallukpong, on the way to Sessa, Kameng district, N.E.F.A.

120. Rao, A.S. & Verma, D.M. 1969. "*Arisaema setosum*- A new species of Araceae from Siang district, N.E.F.A.". *Bull. Bot. Surv. India* 11(1&2): 196-197.

Abst.- A new species of Araceae, viz., *Arisaema setosum* has been described from Sirang ad Guizing, Siang district, N.E.F.A.

121. Rao, G.V.S. & Kumari, G.R. 1968. "A new species of *Gaultheria* from NEFA". *Bull. Bot. Surv. India* 10(2): 223-225.

Abst.- A new species of *Gaultheria* viz., *G. seshagiriana* Subba Rao et Kumari has been described from Takepokong in Siang Frontier Division, NEFA.

122. Rao, G.V.S. & Kumari, T.R. 1963. "*Solanum blumei* Nees ex Blume - A new record for India". *Bull. Bot. Surv. India* 5(3&4): 241.

Abst.- The paper records for the first time the occurrence of *Solanum blumei* Nees ex Bl. in India from Subansiri Frontier Division, N.E.F.A. This plant was hitherto known from Sumatra, Java and Borneo. A detailed description of the plant is given in the paper.

123. Rao, G.V.S. & Kumari, T.R. 1964. "*Illicium cambodianum* Hance- A new record for India". *Bull. Bot. Surv. India* 6(1): 105-106.

Abst.- During a botanical tour to the interior of the Subansiri Frontier Division, NEFA, the senior author collected a plant on way from Ziro to Begi, which was identified as *Illicium cambodianum* Hance. This species has not yet been reported from India.

124. Rao, G.V.S. & Kumari, T.R. 1966. "Notes on some rare plants collected from NEFA". *Bull. Bot. Surv. India* 8: 82-86.

Abst.- *Helwingia himalaica* Hook. f. & Thoms. ex Clarke var. *lanceolata* (Watt ex Kanjilal *et al*.) Deb, a rare plant has been collected from Ziro to Tamen, Subansiri FD after a lapse of more than 80 years. The other two plants *Senecio mortani* C.B. Clarke and *Vaccinium nuttalii* (Clarke) Sleumer have also been collected from Subansiri FD and all these species are new records for India.

125. Rao, Nageswara A. 1990. "Teratological observations in some orchids of Arunachal Pradesh". *Indian Forester* 116(9): 752-754.

Abst.- Observation and abnormalities in the vegetative growth and floral parts of five orchid species of Arunachal Pradesh are described in this paper.

126. Rao, Nageswara A. 1990. "*Dendrobium mannii* Ridl.- A rare orchid new to Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 14(2): 469-470.

Abst.- A rare orchid *Dendrobium mannii* Ridl. has been collected from Tipi area in West Kameng district which is a new record for Arunachal Pradesh. A complete description along with correct nomenclature, flowering and specimens examined has also given.

127. Rao, Nageswara A. 1992. "Two new species of orchids from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 16(3): 723-726.

Abst.- Two new species of orchids viz., *Gastrochilus arunachalensis* Nageswara Rao and *Herminium haridasanii* Nageswara Rao are described from Arunachal Pradesh.

128. Rao, Nageswara A. 1995. "New contributions to the Orchid Flora of North East India during 1950-1990, with special reference to Arunachal Pradesh- A review". *J. Econ. Taxon. Bot., Addl. Ser.* 11: 49-63.

Abst.- North-East India comprises of seven states viz. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. Out of about 1080 species of orchids reported so far from India, 57% of species i.e. about 620 are from N.E. India alone. Until 1950, most of these species are contributed by the British botanists only. Since 1950, there are about 108

species including 36 new species and 72 new records which have been added to the Indian Flora from N.E. India by Indian botanists until 1990. In the present paper all these 108 species are brought together to help the Indian taxonomists as a ready reference. Some of the new species which have been subsequently either reduced to synonyms or transferred to other genera are also discussed in the paper. Finally, while comparing the orchid flora of Arunachal Pradesh with the rest of N.E. India states, contributions from Orchid Research cum Development Centre, Tipi are highlighted.

129. Rao, Nageswara A. 1995. "Four new records of orchids from Arunachal Pradesh, India". *J. Econ. Taxon. Bot., Addl. Ser.* 11: 125-126.

Abst.- Three orchids viz., *Ascocentrum semiteretifolium, Chamaegastrodia shikokiana* and *Erythrorchis ochobiensis* are new records to India and one orchid viz. *Tropidia pedunculata* as a new record to N.E. India are reported from Arunachal Pradesh.

130. Rao, Nageswara A. 1995. "Two ground orchid species new to Arunachal Pradesh". *J. Econ. Taxon. Bot.* 19(3): 637-638.

Abst.- In the present paper, two ground orchids viz. *Malaxis purpurea* (Lindl.) Ktze. and *Peristylis richardianus* Wt. which have been collected during short collection trips in W. Kameng and L. Subansiri districts of Arunachal Pradesh are reported for the first time as new additions to the orchid flora of Arunachal Pradesh.

131. Rao, Nageswara A. 1996. "*Herminium monophyllum* (Orchidaceae)- A new record to N.E. India from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 20(1): 223-224.

Abst.- The orchid species *Herminium monophyllum* (D. Don) Hunt & Summ. reported here from Arunachal Pradesh is a new record to North East India.

132. Rao, Nageswara A. 1996. "Five new records of orchids from Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 20(3): 707-709.

Abst.- Five species of orchids viz. *Diploprora championii* (Lindl.) Hk. *f*., *D. truncata* Rolfe ex Downie, *Eria apertiflora* Summerh., *E. corneri* Rchb. *f*. and *Pennilabium struthio* Carr are reported as new additions to the orchid flora of Arunachal Pradesh. Out of them three species viz. *D. truncata, E. corneri* and *P. struthio* are reported for the first time in India. The paper also deals with a new combination viz. *Eria corneri* var. *clausa* (K&P) A.N. Rao.

133. Rao, Nageswara A. 1996. "*Oberonia katakiana* Nageswara Rao - A new orchid species from Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 20(3): 711-713.

Abst.- A new species of orchid viz., *Oberonia katakiana* Nageswara Rao is described from Tipi in West Kameng district of Arunachal Pradesh, India.

134. Rao, Nageswara A. 1997. "A preliminary census of the Monopodial (Vandaceous) orchids of Arunachal Pradesh (India)". *J. Econ. Taxon. Bot.* 21(2): 473-478.

Abst.- The paper deals with 90 species of 37 genera of monopodial orchids that are reported so far from Arunachal Pradesh. Details of distribution, status, phenology and chromosome numbers for each species are also discussed.

135. Rao, Nageswara A. 1997. "*Eria arunachalensis* Nageswara Rao- A new orchid from India". *J. Econ. Taxon. Bot.* 21(3): 711-713.

Abst.- A new species of orchid viz., *Eria arunachalensis* Nageswara Rao is described from Arunachal Pradesh in India. The new species is more allied to *E. foetida* Averyanov but differs in having a shorter midlobe and three calli on the disc of the labellum of the flower.

136. Rao, Nageswara A. 1998. "Five new records of orchids from Arunachal Pradesh, India". *Indian J. Forest.* 21(3): 264-266.

Abst.- Five species of orchids, viz., *Diploprora championii* (Lindl.) Hk. f., *D. truncata* Rolfe ex Downie, *Eria apertiflora* Summerh., *E. corneri* Rchb. f. and *Pennilabium struthio* Carr are reported as new additions to the orchid flora of Arunachal Pradesh. Out of them, three species, viz., *D.*

truncata, Eria corneri and *Pennilabium struthia* are reported for the first time in India. The paper also deals with a new combination viz., *Eria corneri* var. *clausa* (K. & P.) A.N. Rao.

137. Rao, Nageswara A. 1998. "*Gastrochilus rutilans* Seidenf. (Orchidaceae)- A new record to India from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 22(1): 239-240.

Abst.- An orchid viz., *Gastrochilus rutilans* Seidenf. which was known so far to be endemic to Thailand has been reported from Arunachal Pradesh as an addition to the Indian Orchid Flora.

138. Rao, Nageswara A. 1998. "Two monopodial orchid species new to Arunachal Pradesh (India)". *J. Econ. Taxon. Bot.* 22(2): 405-406.

Abst.- Two monopodial orchid species viz., *Cleisostoma striatum* (Rchb. f.) Garay and *Pennilabium proboscideum* A.S. Rao et Joseph are reported as new distributional records to Arunachal Pradesh in India.

139. Rao, Nageswara A. 1998. "*Rhomboda arunachalensis* Nageswara Rao- A new species from India". *J. Econ. Taxon. Bot.* 22(2): 426-428.

Abst.- A new species viz., *Rhomboda arunachalensis* of the family Orchidaceae has been described from Arunachal Pradesh state of India. This new species is more allied to *R. wardii* Ormd. but differs in floral characters as described in the paper.

140. Rao, Nageswara A. 1998. "*India arunachalensis* Nageswara Rao (Orchidaceae)- A new genus and species from Arunachal Pradesh (India)". *J. Econ. Taxon. Bot.* 22(3): 701-703.

Abst.- A new orchid genus viz., *India* Nageswara Rao with a new species viz. *I. arunachalensis* Nageswara Rao is described from Arunachal Pradesh. The genus is very much allied to *Saccolabiopsis* J.J. Sm. but differs in flower characters such as spur with a back-wall callus, column with dorsal clinandrium and 2 entire undivided pollinia.

141. Rao, Nageswara A. 2000. "Report on some new records of orchids to Arunachal Pradesh (India)". *J. Econ. Taxon. Bot.* 24(1): 213-214.

Abst.- The paper deals with 4 orchid species viz. *Cymbidium faberi* Rolfe var. *szechuanicum* (Wu & Chen) Wu & Chen; *Herminium kumaunensis* Deva & Naith.; *Liparis gamblei* Hk. f. and *Oberonia recurva* Lindl. which are reported for the first time from Arunachal Pradesh as new addition to the state and a new combination viz. *Cymbidium goeringii* var. *mackinnoni* (Duthie) A.N. Rao has been proposed for the first time.

142. Rao, Nageswara A. 2000. "Notes on some new records of orchids from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 24(2): 261-264.

Abst.- Four species of orchids are reported as new additions to the orchid flora of Arunachal Pradesh. Out of them, one species viz. *Oberonia pumilio* Rchb. f. is a new record to India and remaining species viz. *Anoectochilus luteus* Lindl., *Dienia cylindrostachya* Lindl. and *Nephelaphyllum cordifolium* (Lindl.) Lindl. are new records to Arunachal Pradesh.

143. Rao, Nageswara A. 2000. "*Oberonia kamlangensis* Nageswara Rao- A new orchid from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 24(2): 267-269.

Abst.- A new species viz., *Oberonia kamlangensis* Nageswara Rao (Orchidaceae) has been described with a plate of line drawing, from Lohit district of Arunachal Pradesh state of India. The new species is very much close to *O. mucronata* (D. Don) Ormd. & Seidenf. but differs in having very deep lacinations to the lateral lobes and terminal lobe's lobules of the lip.

144. Rao, Nageswara A. 2001. "*Herminium kamengensis* Nageswara Rao- A new orchid species from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 25(2): 287-289.

Abst.- A new species of orchid viz., *Herminium kamengensis* Nageswara Rao has been described from the West Kameng district of Arunachal Pradesh, India. The new species is more allied to *H. lanceum* (Thunb. ex Sw.) Vuijk but differs in having shorter lip with very broadly ovate hypochile and the bract always longer than the ovary. A plate of line drawing is also provided in the paper.

145. Rao, Nageswara, A. 2001. "Rediscovery of *Bulbophyllum bisetum* Lindl. (Orchidaceae)

after a century from North East India". *J. Econ. Taxon. Bot.* 25(2): 290-292.

Abst.- A rare and interesting orchid viz., *Bulbophyllum bisetum* Lindl. has been rediscovered in N.E. India from West Kameng district of Arunachal Pradesh after an elapse of more than 110 years. Earlier this species was collected from Meghalaya in 1850 and from Sikkim in 1890. A detailed description alongwith a plate of line drawing is also provided in the paper.

146. Rao, Nageswara A. 2004. "*Cirrhopetalum loherianum* Kranzlin- A new addition to the orchid flora of India from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 28(3): 556-558.

Abst.- *Cirrhopetalum loherianum* Kranzlin, an orchid species which is known so far only from Philippines has been reported from Arunachal Pradesh as a new distributional record to India. A detailed description and a plate of line drawing are also provided.

147. Rao, Nageswara A. 2006. "*Biermannia arunachalensis* Nag. Rao: a new orchid from Arunachal Pradesh". *Rheedea* 16(1): 29-31.

Abst.- A new species of *Biermannia* viz., *B. arunachalensis* Nag. Rao, is described from Arunachal Pradesh, India. This species is related to *B. bimaculata* (King & Pantl.) King & Pantl. but differs in having oblanceolate leaves, yellow coloured flowers, obtuse side lobes and lip without callus inside.

148. Rao, Nageswara A. & Saikia, D.K. 1996. "*Calanthe pachystalix* Rchb. f. ex Hook. f.- A new orchid record for N.E. India from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 20(3): 665-666.

Abst.- A rare orchid *Calanthe pachystalix* which is known so far only from Garhwal Himalayas and Nepal has been reported from Arunachal Pradesh as a new distributional record for N.E. Himalayas.

149. Rao, R.S. & Joseph, J. 1965. "Observations on the flora of Siang Frontier Division, North Eastern Frontier Agency (NEFA)". *Bull. Bot. Surv. India* 7(1-4): 138-161.

Abst.- The present paper is a preliminary study of the predominant species composition of the region of Siang Frontier Division lying between 28º10´ N -29º10´N latitude and 94º35´ E - 94º58´ E longitude along the north-eastern part of India bordering Tibet. 392 plant species has been recorded here within which 40 species orchid.

150. Rao, R.S. & Joseph, J. 1970. "*Rubus ghanakantae* Rolla Rao et Joseph- A new species from Arunachal Pradesh". *Bull. Bot. Surv. India* 12(1-4): 261-263.

Abst.- A new species of *Rubus* viz., *R. ghanakantae* Rolla Rao et Joseph has been described from Bomdila, Kameng district in Arunachal Pradesh.

151. Rawat, Vineet Kumar. 2006. "*Huperzia dixitiana* Mondal & Ghosh- A fern allies new to Arunachal Pradesh". *J. Econ. Taxon. Bot.* 30(2): 323-324.

Abst.- *Huperzia dixitiana* Mondal & Ghosh has been collected from Mehao Wildlife Sanctuary in Arunachal Pradesh for the first time, earlier recorded as endemic from Lachen valley in Sikkim.

152. Rawat, Vineet Kumar. 2007. "*Leucostegia immerse* (Wall. ex Hook.) Presl, a new record for Arunachal Pradesh (Eastern Himalaya)" *Indian J. Forest.* 30(1): 99-100.

Abst.- *Leucostegia immerse* (Wall. ex Hook.) Presl, belonging to Davalliaceae is reported as a new record for Arunachal Pradesh from Mehao Wildlife Sanctuary, Lower Dibang Valley district, a graceful, rare fern with full citations, correct nomenclature, detailed description, distribution and material studied of plant.

153. Rawat, Vineet Kumar & Dixit, R.D. 2006. "The fern genus *Metteuccia* Tod.- New to Arunachal Pradesh". *J. Econ. Taxon. Bot.* 30(3): 547-548.

Abst.- *Metteuccia orientalis* (Hook.) Trev. has been collected from Mehao Wildlife Sanctuary in Arunachal Pradesh for the first time during survey tour in December, 2002.

154. Rawat, Vineet Kumar, Sahu, T.R. & Dixit, R.D. 2005. "A preliminary account of the Pteridophytes from Mehao Wildlife Sanctuary, Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 29(4): 738-742.

Abst.- The present paper records 207 species of Pteridophytes distributed among 72 genera and 37 families from Mehao Wildlife Sanctuary in Dibang Valley district of Arunachal Pradesh. Family Polypodiaceae shows maximum diversity represented by 30 species within 13 genera, whereas *Athyrium* is the largest genus with 16 species.

155. Rout, Jayashree, Kar, Ashish & Upreti, D.K. 2005. "Traditional remedy for kidney stones from a high altitude lichen: *Cladonia rangiferina* (L.) Wigg (Reindeer moss) of Eastern Himalaya". *Ethnobotany* 17(1&2): 164-166.

Abst.- The present paper describes the ethnomedicinal use (removal of kidney stones) of a common lichen *Cladonia rangiferina*, found growing in the alpine regions of West Kameng district of Eastern Himalaya. The information provided here is based on personal interview with a herbalist from Monpa tribe.

156. Sahni, K.C. 1989. "A new variety of blue pine from the Eastern Himalaya". *Indian J. Forest.* 12(1): 40-42.

Abst.- A new variety of *Pinus wallichiana* A.B. Jacks. viz. *P. wallichiana* var. *parva* K.C. Sahni is described from Tawang, Arunachal Pradesh. It is characterized by shorter needles, smaller female cones, seeds and wing.

157. Sasikala, K., Vajravelu, E. & Daniel, P. 2002. "Additions to the Araceae of Arunachal Pradesh". *J. Econ. Taxon. Bot.* 26(2): 440-448.

Abst.- Five aroids, viz., *Alocasia fallax, Colocasia fallax, Gonatanthus ornatus, Pothos scandens* var. *helferianus* and *P. vriesiansu* are added to the flora of Arunachal Pradesh.

158. Sastry, A.R.K. 1967. "*Alniphyllum* Mats. and *Huodendron* Rehder.- Two additional generic records to the Indian Styraceae". *Bull. Bot. Surv. India* 9(1-4): 297-298.

Abst.- *Alniphyllum fortunei* Makino and *Huodendron biaristatum* Rehder. have been collected from Subansiri district, North East Frontier Agency for the first time. Previously the former species was recorded from Yunnan, Amoy and West of Hupeh in China and the latter from Yunnan, Kweichow and Kwangsi in China and Myitkyina in north-east Burma and from Tonkin. These two genus are also new to the Indian Styraceae. The present discovery of these two species in Subansiri district is thus extending the distribution and also hints at a possible phytogeographic affinity of these regions.

159. Sastry, A.R.K. & Chowdhury, S. 1969. "*Arthromeris jarrettii*- A new species of Polypodiaceae from Subansiri district, NEFA, India". *Bull. Bot. Surv. India* 11(3&4): 442-443.

Abst.- A new species of Polypodiaceae viz., *Arthromeris jarrettii* has been described from Amjee-Begi, Subansiri district, NEFA.

160. Sastry, A.R.K. & Deka, H. 1967. "*Nertera sinensis* Hemsl.- A new find from Subansiri district, N.E.F.A.". *Bull. Bot. Surv. India* 9(1-4): 285-286.

Abst.- The present discovery of *Nertera sinensis* Hemsl. from Subansiri district, N.E.F.A. is an addition to the Indian flora and extends the distribution of the genus and species further west, in the Eastern Himalayas, far from its type locality, Mt. Omei in Szechuen, China. This offers an example of an unusual link in the phyto-geographical relationship of these regions.

161. Shukla, B.K. & Deori, N.C. 1986. "*Cheirostylis moniliformis* (Griff.) Seidenf. - A new orchid record from India". *J. Econ. Taxon. Bot.* 8(1): 201-202.

Abst.- *Cheirostylis moniliformis* (Griff.) Seidenf. collected from Namdapha Biosphere Reserve, Arunachal Pradesh constitutes a new record for India.

162. Shukla, B.K. & Kulshrestha, V.K. 1986. "*Epigeneium chapaense* Gagnep. (Orchidaceae)

from Arunachal Pradesh - A new record for India". *J. Econ. Taxon. Bot.* 8(1): 196-197.

Abst.- *Epigeneium chapaense* Gagnep. collected from Namdapha Biosphere Reserve, Arunachal Pradesh constitutes a new record for India.

163. Sikarwar, R.L.S. & Dasila, Lokesh 2007. "*Livistona jenkinsiana* Griff. (Arecaceae) - An endemic and endangered palm of North East India". *J. Econ. Taxon. Bot.* 31(2): 414-416.

Abst.- During the floristic survey in West Siang district of Arunachal Pradesh, it was observed that *Livistona jenkinsiana* Griff. (family Arecaceae) is depleting fast from the natural habitats due to the overexploitation of leaves used for various purposes. In the present communication its causes of depletion and conservation measures are proposed.

164. Singh, D.K., Das, Sudipa & Dey, Monalisa. 2006. "*Leptolejeunea subdentata* Schiffn. ex Herzog (Hepaticae: Lejeuneaceae) new to India". *Indian J. Forest.* 29(3): 339-342.

Abst.- *Leptolejeunea subdentata* Schiffn. ex Herzog, a taxon so far known from China, Indonesia, Malaysia, Philippines, Vietnam and Caledonia, has been described for the first time in Indian bryoflora from Mehao Wildlife Sanctuary, Arunachal Pradesh.

165. Singh, Devendra Kumar. 1987. "A new species of *Folioceros* Bharad. (Anthocerotaceae) from Arunachal Pradesh, India". *Bull. Bot. Surv. India* 29(1-4): 176-180.

Abst.- A new species of *Folioceros* viz., *F. paliformis* Singh, has been described from West Kameng district, Arunachal Pradesh.

166. Singh, J.N. & Mudgal, V. 1984. "Edaphological description of the type habitat of *Coptis teeta* Wall.- An endangered species of medicinal importance in Arunachal Pradesh". *Bull. Bot. Surv. India* 26(1-2): 71-75.

Abst.- The edaphic conditions of the habitat of *Coptis teeta* Wall. have been discussed. The soils, where this species grows either under cultivation or in wild are moderately acidic to highly acidic, poor in surface porosity, very rich in silica content and possess insufficient amount of inorganic binding agents. However, the soils in cultivated fields are satisfactory in organic carbon status, water-holding ability and cation exchange capacity but inadequate presence of liming material and temperate climate adversely effect their energy materials. The soils of Malenja where this species is growing wild have textural limitation and anthropogenic interference. In the end the paper is concluded with suggestions. Results depict that the reasons for rarity and depletion of this species are not only anthropogenic but also environmental.

167. Singh, K.P., Bujarbarua, Pranab, Pinokiyo, Athokpam & Dixit, P.K. 2004. "A preliminary account of the lichens from Mehao Wildlife Sanctuary, Arunachal Pradesh, India". *Indian J. Forest.* 27(3): 273-278.

Abst.- The paper records 106 species of lichens distributed among 39 genera and 17 families from Mehao Wildlife Sanctuary in Dibang Valley district of Arunachal Pradesh. Family Parmeliaceae shows maximum diversity, represented by 24 species within 9 genera, whereas *Graphis* is the largest genus with 13 species.

168. Singh, K.P., Pinokiyo, A. & Borthakur, S.K. 2006. "Foliicolous lichens of India with special reference to Arunachal Pradesh". *Indian J. Forest.* 29(3): 319-334.

Abst.- Foliicolous Lichens representing an interesting symbiotic life in phyllosphere, comprise 125 species in India and 91 species in Arunachal Pradesh that form *ca* 73% of the total Foliicolous Lichen flora of India. Arunachal Pradesh, in Eastern Himalaya exhibits maximum species diversity of Foliicolous Lichens among all the states in India. An analysis indicates that family Trichotheliaceae with 21 spp. is dominant, followed by Ectolechiaceae (16 spp.), Stigulaceae (13 spp.), Pilocarpaceae (13 spp.), Gomphillaceae (8 spp.), etc. The genus *Porina* with 20 spp. shows maximum diversity, followed by *Strigula* (12 spp.), *Byssoloma* (5 spp.), *Calopadia* (5 spp.), *Mazosia* (5 spp.), etc. Of the 9 taxa reported endemic to India, 3 are from Arunachal Pradesh. Similarly, out of 53 species identified as rare for India, 25 species are found in Arunachal Pradesh. The study reports 5 spp., viz. *Arthonia palmulacea* (Müll.-Arg.) R. Sant., *Byssoloma polychromum* (Müll.-Arg.) Zahlbr., *Coenogonium subleutum* (Rehm) Kalb. & Vzda, *C. zonatum*

(Müll.-Arg.) Kalb & Lücking, *Lasioloma phycophilum* (Vain.) R. Sant., as new to Indian Lichen flora and 16 spp. as new records for the state of Arunachal Pradesh. The paper also provides an undated checklist of all the known foliicolous species in India along with their status and distribution in the world.

169. Singh, N.B. 1985. "First report of *Sinocrassula indica* (Decne.) Berger (Crassulaceae) from Arunachal Pradesh". *J. Econ. Taxon. Bot.* 6(3): 691-692.

Abst.- *Sinocrassula indica* (Decne.) Berger (Crassulaceae) has been reported from Jabrang Shengri (Kameng) in Arunachal Pradesh.

170. Singh, N.B. 1993. "Present and future of agroforestry in Arunachal Pradesh". *J. Econ. Taxon. Bot.* 17(3): 519-533.

Abst.- The present paper deals with the physical features of Arunachal Pradesh, concept of agroforestry and land use systems. Present status and future prospects of agroforestry in Arunachal Pradesh have been discussed in detail. A list of useful plants i.e. plants used in medicine, fodder, fuel, nitrogen fixing and for various purposes has been provided.

171. Singh, N.B. & Beniwal, B.S. 1988. "Genetic improvement of economic species of Bamboo in Arunachal Pradesh: selection of Plus Bamboo and establishment of germplasm bank". *J. Econ. Taxon. Bot.* 12(1): 163-170.

Abst.- The preliminary survey has been undertaken in Arunachal Pradesh and adjoining areas of Assam for the selection of candidate plus clumps of commercially important species of bamboo such as *Bambusa balcooa, B. tulda, B. nutans, B. pallida, Dendrocalamus giganteus* and *D. hamiltonii* etc. The final selection of plus clump/bamboo was done and the rhizome were collected during May-June 1984 and planted in germplasm bank with in least possible time at Chessa and Namsai. The performance of young clumps on the basis of height, girth and number of culms shows that BB/CH-4. BT/NS-13 & BT/CH-4, BP/CH-3 and BN/CH-1 are superior and as such the potentiality of these clumps can be exploited for propagation and multiplication. In addition to this the flowering has been observed for the last two years in one and two culms of *Bambusa calcooa* and *Dendrocalamus giganteus* respectively. But there is no seed setting in germplasm bank as well as their parental clumps. Therefore, it can be considered as sporadic flowering.

172. Singh, Ranjay K., Singh, Anamika, Tag, Hui & Adi community. 2008. "Traditional skill among the *Adi* tribes of Arunachal Pradesh". *Indian J. Traditional Knowledge* 7(1): 27-36.

Abst.- The tribal people living in far flung areas dependent on rich biocultural resources have always been curious in exploring the plant resources of their immediate surrounding in order to sustain their traditional livelihood system. After centuries of being in close association with nature, they have developed for themselves the indigenous skill and technology to use these resources in various parts of their life support system. In recent decades, rapid modernization and acculturation process developed in traditional livelihood system of tribal community has practically endangered their age-old biocultural heritage and traditional skills, knowledge and technology in alarming proportion. The paper based on ethnobotanical field work discusses some vital aspects of plant based traditional skills and technology practiced by the rural *Adi* community of East Siang district of Arunachal Pradesh. A number of traditional plant based technologies such as handicrafts, fishing and hunting tools, storage items, utensils used in kitchen and foods system, etc. are available among the *Adis*. While crafting these valuable and low-cost traditional handicraft technologies, the local people are dependent on locally available plant biodiversity conserved in *jhum* land, kitchen gardens and community forest. Integrated and holistic approach can revive and sustain traditional plant technology through entrepreneurship development, coupled with ecotourism and economic empowerment to the concerned indigenous community.

173. Singh, Ranjay K., Singh, Dheeraj & Sureja, Amish K. 2006. "Community knowledge and biodiversity conservation by *Monpa* tribe". *Indian J. Traditional Knowledge* 5(4): 513-518.

Abst.- Community knowledge is the essence of social capital of the poor people and plays a significant role in conservation of biodiversity. Local culture, spirit, social and ethnical norms possessed by the local people has often been determining factors for sustainable use, and conservation of biodiversity. In the present paper, an effort has been made to explore the dynamics of using *Paisang* [*Quercus rex* (Hemsl.) Schottky, *Oak* tree], *Roinangsing* and *Lenthongsing* (pine tree spp. *Pinus wallichiana* A.B. Jacks. and *Pinus roxburghii* Sarg.) leaves in different crops by *Monpa* tribe of Arunachal Pradesh. To achieve this objective, *Monpa* tribe dominating villages from Dirang development block, West Kameng district of Arunachal Pradesh, Northeast India have been selected. Study indicates that *Monpa* tribe is having their location specific life-long experience and indigenous strategy for sustainable biodiversity use and management at community level. This has been built up through regular practice and observations of local practices related with use of dry leaves of *Paisang* and pine trees. The use of dry leaves of these trees as mulch and organic matter helps the farmers to increase the soil fertility, control soil erosion and conserve soil moisture, thereby, helpful in diversifying the local cropping systems and reducing the risk.

174. Srinivasan, K.S. & Sen Gupta, G. 1966. "Occurrence of *Tetracentron sinense* Oliv. in N.E.F.A.". *Bull. Bot. Surv. India* 8: 342-344.

Abst.- The present discovery of *Tetracentron sinense* Oliv. in N.E.F.A. gives a further extension of this species eastwards from Nepal and Bhutan in the Himalayas, thus bringing into closer proximity with the nearest known locality in N. Burma. The NEFA specimens collected from Bombi-La would probably represent the first collection of *Tetracentron sinense* Oilv. from the Himalayan region.

175. Srivastava, R.C., Singh, V.P. & Singh, M.K. 2005. "Living gymnosperms in Arunachal Pradesh". *J. Econ. Taxon. Bot.* 29(3): 661-665.

Abst.- Paper presents a preliminary report on the distribution of living gymnosperms in Arunachal Pradesh state of India which falls under one of the global megabiodiversity centres (Eastern Himalaya). As per the records available at BSA, 44 species, 3 varieties and 2 forma (including indigenous & planted taxa) are recorded so far from the area under study. *Cycas pectinata*, the only indigenous species of this region is rather scarcely recorded. *Pinus merkusii* occurs in Lohit and *Pinus bhutanica* is known from Tawang and West Kameng district but nowhere else in India. Reports of introduction of *Cedrus deodara*- an endemic species of Western Himalaya are also there. The tree *Gnetum* (*G. gnemon*) is commonly recorded throughout the state. *Pinus patula* and *Pinus kesiya* now cover huge areas in Zero region. *Gnetum montanum* f. *megalocarpus* is endemic to this state.

176. Srivastava, S.K. 1985. "A critical note on *Phalaenopsis parishii* Reichb. f. (Orchidaceae) from W. Siang, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 7(1): 141-143.

Abst.- An illustrated account of *Phalaenopsis parishii* Reichb. f. recently collected from W. Siang district of Arunachal Pradesh has been given. A detailed description has been given to facilitate easy identification.

177. Srivastava, S.K., Mehrotra, B.N. & Palvi, S.K. 1992. "Distributional notes on some plants in Arunachal Pradesh". *J. Econ. Taxon. Bot.* 16(3): 709-713.

Abst.- An enumeration of 19 plants collected from different forest areas of Arunachal Pradesh has been reported. Some of these taxa has not been reported from the state earlier. Present collection reveals that these species have shown their extended distribution.

178. Subba Rao, G.V. & Halim, M.R. 1963. "A new species of *Lysimachia* from NEFA". *Bull. Bot. Surv. India* 5(1): 101-103.

Abst.- A new species of *Lysimachia* named *L. santapaui* Subba Rao *et* Halim, collected from Amji, Subansiri Frontier Division, NEFA , has been described with illustrations.

179. Tag, Hui & Das, A.K. 2004. "Ethnobotanical notes on the Hill Miri tribe of Arunachal Pradesh". *Indian J. Traditional Knowledge* 3(1): 80-85.

Abst.- This paper on the ethnobotanical use of plants covers an area inhabited by Hill Miri and some other tribes of Arunachal Pradesh. In all 28 species are described, which include 5 medicinal and 11 food plants; remaining 12 plants are put to various other ethnobotanical uses.

180. Tag, Hui, Das, A.K. & Kalita, Pallabi. 2005. "Plants used by the Hill Miri tribe of Arunachal Pradesh in ethnofisheries". *Indian J. Traditional Knowledge* 4(1): 57-64.

Abst.- The state of Arunachal Pradesh is known for its rich bioresources and ethnocultural diversity. Ethnobiological survey was conducted during 2001-2003 in Hill Miri dominated districts of Arunachal Pradesh, which reveals their hidden Indigenous Knowledge System. Fishing and hunting is one of the major economic activities of this hilly tribe apart from *jhum* cultivation. They derive their fish protein diet requirement directly from the wild sources. Two major rivers and number of its tributaries form ideal site for fisheries activity. A total of 21 plants significant for ethnofisheries have been listed. Twelve plants are used as ethnotoxic (Fish Poison) and rest 9 species are used in different ethnofisheries techniques and gears.

181. Tag, Hui, Das, A.K., Pallabi, H., Singh, Ranjay K. & Palit, G. 2008. "Botanical resources used in traditional wood carving industry among the *Wancho* tribe of Arunachal Pradesh". *Indian J. Traditional Knowledge* 7(1): 148-156.

Abst.- Traditional woodcarving system is quite popular among the *Wancho* tribe of Arunachal Pradesh. The art and skills of woodcarving practiced among the *Wancho* community is closely associated with their age-old religious beliefs and cultural practices, which are evident through their traditional institutions in the form of *Morung* (Bachelor dormitory), funeral rites, fertility cult and human head hunting. Unfortunately, the traditional art of wood carving among the *Wancho* has suffered a set back in recent decades. As a result, local artisans, who solely depend on woodcarving industry for the sustenance of their livelihood, are in dwindling position. However, Government initiative at community level somehow rescuing the degrading art but concerted effort is still needed to make the industry traditionally reliable and economically sustainable. The paper discuss the role of botanical resources used in woodcarving industry of *Wancho* and attempt has been made to highlight status of botanical species of *Wancho* locality emphasized on cultural knowledge of woodcarving, commercial prospect and role of traditional knowledge in conservation of botanical resources associated with local woodcarving industry. In all, 12 plant species has been reported to be used in local woodcarving industry in *Wancho* dominated region of Tirap district of Arunachal Pradesh.

182. Tayung, Kumananda & Saikia, Nabin. 2003. "*Cryptolepis buchanani* – A less-known medicinal plant used in bone fracture". *Indian J. Traditional Knowledge* 2(4): 371-374.

Abst.- The paper presents the use of *Cryptolepis buchanani* for the treatment of bone fracture by tribal people in East Siang district of Arunachal Pradesh. The information is provided on the basis of personal interview with a local herbal practitioner known as 'Bhejuyai'. Botanical description of the plant with local names, detection and nature of fracture and mode of administration by the herbal practitioner are described in detail.

183. Thomas, Sunny & Haridasan, K. 1997. "On the occurrence of *Calamus inermis* T. Anders. in Arunachal Pradesh, India". *J. Econ. Taxon. Bot.* 21(3): 715-716.

Abst.- During the course of a collection of rattans from the forests of Arunachal Pradesh, the authors collected *Calamis inermis* T. Anders. from Pasighat, East Siang which is a new record for the state of Arunachal Pradesh. The collection of this species from the wild habitats of this state shows its extended distribution further eastwards from Sikkim and West Bengal to Arunachal Pradesh.

184. Thothathri, K. & Pal, G.D. 1984. "A new species of *Agapetes* (Vacciniaceae) from Arunachal Pradesh, India". *Bull. Bot. Surv. India* 26(3-4): 239-241.

Abst.- A new species of *Agapetes* viz., *A. subansirica* has been described from Begi, Subansiri district in Arunachal Pradesh.

185. Thothathri, K. & Pal, G.D. 1987. "Further contribution to the ethnobotany of tribals of Subansiri district, Arunachal Pradesh". *J. Econ. Taxon. Bot.* 10(1): 149-157.

Abst.- The paper deals with 67 species of ethnobotanical importance, collected from central and western parts of Lower Subansiri district, Arunachal Pradesh. The area covered in the survey were Hapoli, Old Palin, New Palin, Zorum, Deed, Talo, Rakwsa and Dem. Correct name, family, local name, uses, locality, field number, flowering and fruiting time were given for each species. All uses mentioned in the paper (except very few) appear to be new and hence original contribution not recorded so far. The plant specimens have been kept in the herbarium of Arunachal circle, Itanagar.

186. Tiwari, K.C. & Tiwari, V.P. 1996. "Some important medicinal plants of the tropical, subtropical and temperate region of Siang, Subansiri and Tirap districts of Arunachal Pradesh". *J. Econ. Taxon. Bot.*, *Addl. Ser.* 12: 359-363.

Abst.- Paper enumerates 56 species of plants used in folk tribal medicines growing in tropical, subtropical and temperate regions of Arunachal Pradesh. Sanskrit names of plants and diseases are also given wherever available.

187. Tripathi, Sunil & Prakash, Ved 1998. "Studies on Zingiberaceae of N.E. India: IV. A new distributional record of *Curcuma petiolata* Roxb.". *J. Econ. Taxon. Bot.* 22(2): 468-470.

Abst.- *Curcuma petiolata* Roxb. hitherto known to exist only in Thailand, Myanmar and Andaman Islands, is reported here for the first time from Arunachal Pradesh. It is characterized by pale-yellow rhizome, pinkish-orange coma bract and absence of spur on anther.

188. Uddin, Amad, Phukan, S. & Borthakur, S.K. 2008. "Notes on *Begonia* sect. *Platycentrum* for India and new record of *Begonia xanthina* Hook. from Arunachal Pradesh and Assam, India". *J. Econ. Taxon. Bot.* 32(3): 613-617.

Abst.- *Begonia xanthina* Hook., a less known and rarely collected species, reported so far from Sikkim Himalayas, Bhutan and China is reported from the north-eastern states of Arunachal Pradesh and Assam for the first time. Detailed taxonomic description along with illustration and distinction with allied species *Begonia rex* Putzeys are provided.

189. Vohra, J.N. & Kar, B.D. 1996. "On a collection of mosses from Arunachal Pradesh". *Bull. Bot. Surv. India* 38(1-4): 46-54.

Abst.- 82 species of mosses have been collected from Arunachal Pradesh. *Brachythecium formosanum* Tak., *B. wichurae* (Broth.) Par. and *Hypnum macrogynum* Besch. are new records for India. 7 species: *Brachymenium sikkimense* Ren. et Card., *Brachythecium buchananii* (Hook.) Jaeg. var. *cuspidiferum* (Mitt.) Gangulee et Vohra, *Brotherella nictans* (Mitt.) Broth., *Dicranodontium capillifolium* (Dix.) Tak., *Ectropothecium ramuligerum* Dix., *Taxithelium laeviusculum* Dix. and *Trichosteleum stereodontoides* Broth. ex Gangulee, known so far only by the type material, have been collected for the first time since then. 48 species and 11 genera are additions to Arunachal Pradesh.

ASSAM

190. Acharyya, B.K. & Sharma, H.K. 2004. "Folklore medicinal plants of Mahmora area, Sivasagar district, Assam". *Indian J. Traditional Knowledge* 3(4): 365-372.

Abst.- Traditional methods of treatment using plants and animals are followed in Mahmora region of Sivasagar district, Assam. The plants, either single or as multi component preparations are used to treat various ailments. An attempt has been made to study 35 plant species, from 35 genera belonging to 30 families along with the method of preparation and mode of use.

191. Agarwal, N.K. & Borah, A. 2001. "On the biodiversity of Bhairab hills of Bongaigaon district of Assam Part-I. Flora". *J. Econ. Taxon. Bot.* 25(2): 247-252.

Abst.- The Bhairab hill is a part of Aie-Valley Forest Division, Bongaigaon district of Assam, situated within the geographical limits of 90º28´ to 90º50´ E and 26º15´ to 26º30´ N. It is a proposed reserved forest covered chiefly by dry or moist deciduous forest, tall grasses grow on vast areas and provide cover for rich biodiversity.

The paper enumerates 87 species of ferns and spermatophytes collected and identified

during two years of biodiversity study. There are a few species of ferns, gymnosperms, angiospermic herbs, shrubs and undershrubs, climber and straggling plants, trees, orchids and documented plants respectively. Three rare and threatened plants including one medicinal plant species prohibited for export and six other species which have not been recorded earlier in '*Flora of Assam*' by Kanjilal *et al.* have also been enumerated. The floristic composition, vegetation type of the area and their significance are briefly discussed.

192. Bahali, D.D. & Mudgal, V. 1999. "*Iris ruthenica* Ker var. *uniglumis* Spach (Iridaceae)- A new record for India". *Indian J. Forest.* 22(2): 185-186.

Abst.- *Iris ruthenica* Kar var. *uniglumis* Spach is reported for the first tome from Sadiya, Upper Assam, India. Detailed description and illustration are provided for easy identification.

193. Baishya, A.K. & Bora, P.J. 2007. "Cross community ethno-medico botany of Dibru-Saikhowa Biosphere Reserve, Assam". *Bull. Bot. Surv. India* 49(1-4): 121-154.

Abst.- The communication enumerates the result of ethnobotanical surveys carried out in Dibru-Saikhowa Biosphere Reserve, Assam. Information on ethno-medicinal uses and other economic and traditional uses of 121 species belonging to 107 genera and 66 families gathered from four ethnic communities viz. Mishing, Moran, Assamese and Bengali are documented.

194. Barooah, C. 2003. "Bambusoid grasses of Assam, India". *J. Econ. Taxon. Bot.* 27(Suppl.): 1061-1079.

Abst.- The present paper deals with an account of 40 species, 1 variety and 1 forma belonging to 10 genera of bamboos occurring in Assam. Genera and species are enumerated in alphabetical order followed by citations and distribution.

195. Barooah, C. & Borthakur, S.K. 2001. "Four new species of *Bambusa* Schreber from Assam, India". *Indian J. Forest.* 24(4): 503-509.

Abst.- *Bambusa assamica* Barooah et Borthakur, *B. barpatharica* Borthakur et Barooah, *B. garuchokua* Barooah et Borthakur and *B. rangaensis* Borthakur et Barooah have been described as new species from Assam, India.

196. Barooah, C. & Mahanta, P.K. 2006. "Aquatic angiosperms of Biswanath Chariali, Assam". *Indian J. Forest.* 29(3): 307-318.

Abst.- The paper deals with the aquatic angiosperms of Biswanath Chariali of Sonitpur district of Assam. 95 species belonging to 75 genera under 37 families have been enumerated. Their vernacular name, family, habitat, phenology and uses are also provided.

197. Barua, I.C. & Gogoi, A.K. 1995. "*Stylidium kunthii* Wallich ex DC.- A new record for Assam". *J. Econ. Taxon. Bot.* 19(3): 501-504.

Abst.- *Stylidium kunthii* Wallich ex DC. (Stylidaceae), has been collected from Jorhat, Assam which is new record for the state of Assam. Owing to its rarity in the country, a detailed description of the plant along with drawings and some other information are provided.

198. Barua, I.C., Goswami, T.K. & Barua, K.N. 1996. "Distributional notes on some plants in Assam". *J. Econ. Taxon. Bot.* 20(3): 655-660.

Abst.- The distribution of altogether 12 species in Assam as well as North-East India have been discussed alongwith their brief distinguishing characters, out of which 9 species belonged to Cyperaceae and one each to Butomaceae, Potamogetonaceae and Rubiaceae. *Mitracarpus villosus, Eriophorum comosum, Scleria sumatrensis* and *Tenagocharis latifolia* are new record for Assam and the later three thus extended their distribution in N.E. India. During present investigation precise locality of 3 species have been traced in N.E. India and extended distribution of other 5 species in Assam was also recorded. *Cyperus difformis, Eleocharis dulcis, E. geniculata* and *Mitracarpus villosus* have appeared as weed, however, the rests are rare but not uncommon in their collection localities.

199. Barua, I.C., Rajkhowa, D.J., Deka, N.C. & Kandali, R. 2003. "Host range study of *Cuscuta reflexa* Roxb. in Assam". *Indian J. Forest.* 26(4): 414-417.

Abst.- The host plants of the parasitic weed *Cuscuta reflexa* Roxb. were studied in Assam since 1999. Altogether 86 species were recorded, out of which 28 were herbs, 27 shrubs, 20 trees and 11 climbers respectively. It showed severe infestation on *Bougainvillea spectabilis, Clerodendrum inerme, Moringa oleifera* and *Ziziphus mauritiana* and moderate to severe parasitism on certain problematic weeds like *Chromolaena odorata, Glochidion assamicum, Mikania micrantha* and *Stachytarpheta dichotoma. Thuja orientale* was the only gymnosperm infested by this parasite.

200. Barua, Iswar & Barua, Kuntala. 1997. "A new species of *Zeuxine* (Orchidaceae) from Assam, India". *J. Econ. Taxon. Bot.* 21(2): 491-494.

Abst.- A new species of *Zeuxine* viz. *Z. assamica* Iswar Barua et Kuntala Barua has been described from Jorhat, Assam.

201. Barua, Ishwar Chandra, Chowdhury, Sudhangshu & Neogi, Bhaskar. 1988. "Primitive land plants (Angiosperms) and their distribution pattern in Assam". *J. Econ. Taxon. Bot.* 12(1): 81-92.

Abst.- Assam is bounded by Himalaya-Patkai-Barail mountain ranges and the Meghalayan plateau- the whole region comprise a long geological history since the time of Gondwana-Land. The geology and the vegetation which they comprise, supports the idea of Takhtajan (1969) to find out the cradle of flowering plants in between Assam and Fiji. Within the territory of Assam besides the naturally growing gymnosperms like *Cycas pectinata* and *Podocarpus neriifolia*, 113 primitive angiosperms belonging to 6 primitive families have been found to occur, and in this paper their distribution has also been shown. Amongst them, Lauraceae with 68 representatives found to be the largest family which is followed by Annonaceae (36), Magnoliaceae (19) and Myristicaceae (7), whereas Chloranthaceae and Schizandraceae with only one species each. *Litsea* of Lauraceae with 21 species recorded its wide distribution in Assam.

202. Barua, Iswar Chandra & Bora, Naba Kumar. 2002. "*Rhynchostylis albiflora*: a new orchid species from Assam". *J. Econ. Taxon. Bot.* 26(1): 251-255.

Abst.- A new species of *Rhynchostylis* viz. *R. albiflora* has been described from Assam.

203. Barua, Iswar Chandra & Nath, Subhan Chandra. 1998. "A systematic census of the Asteracean members growing in Assam". *J. Econ. Taxon. Bot.* 22(1): 1-17.

Abst.- Considering the widespread occurrence of bioactive substances in Asteracean members, a programme of systematic survey was conducted during 1990 to 1995 in Assam which holds good for free migration of plants due to its position in subtropical climatic zone of northern hemisphere. Inspite of the report of 70 species belonging to 25 genera from Assam by Rao (1993) this investigation recorded 104 taxa of species and variety entities in wild state belonging to 59 genera, which added 34 taxa to the Panigrahi *et* Kar (1966)'s list of Asteraceae of Assam, Meghalaya and Arunachal Pradesh, and 61 taxa to the state of Assam. Similarly, it is also added 21 and 65 taxa to the Hooker's (1881) *Flora of British India* and *Flora of Assam* by Kanjilal *et al.* (1939), respectively. Moreover, 40 taxa belonging to 22 genera were also screened out which had been reported by different workers from Assam, but their precise locality within the state could not be traced out. Added to this, 29 species belonging to 21 genera were also recorded which were known only in cultivated states. About 33 percent of the wild taxa had wider distribution in the World and rests are confined to Old-World only. Amongst them, 8 species were restricted in distribution to North-East India to Malaysia and its vicinity and other 8 species were rather confined to North-East India only.

204. Barua, Iswar Chandra & Neogi, Bhaskar. 1995. "New report and rediscovery of some rare and endangered plants in Assam". *J. Econ. Taxon. Bot.* 19(2): 273-276.

Abst.- 8 rare and endangered Angiosperm species belonging to 8 genera under 7 families have been recollected in Assam after at least 50 years and 2 such species have been reported for the first time from Assam.

205. Barua, K.N. & Boissya, C.L. 1998. "Palynology of the genus *Callicarpa* Linn. (Verbenaceae)

from Assam, India". *J. Econ. Taxon. Bot.* 22(3): 709-713.

Abst.- A palynogical account of four available species of *Callicarpa* Linn. from Assam, viz., *C. arborea* Roxb., *C. longifolia* Lamk. var. *lanceolaria* (Roxb.) Clarke, *C. macrophylla* Vahl, *C. rubella* Lindl. has been carried out and illustrated. The study revealed that pollen grains of all the species have rather uniform in apertural type, i.e. 3-zonicolpate except *C. longifolia* var. *lanceolaria*, which has shown- 3 zonicolporate grains with indistinct columellae and endoapertures forming 7-10 faint narrow, elongated areas for its colpus. Thus this species confirms its affinity with *Congea tomentosa* than that of other species of *Callicarpa*. Considering the physical measurements of all the pollen grain characters, the statistical analysis showed that *C. longifolia* var. *lanceolaria* is comparatively closer to (2.96) *C. macrophylla* and far apart (4.83) from *C. arborea*.

206. Barua, Kuntala N. & Boissya, C.L. 2000. "Palyno-taxonomical studies on *Clerodendrum* Linn. in Assam". *Indian J. Forest.* 23(3): 268-273.

Abst.- The pollen morphology of 10 species of the genus *Clerodendrum* L. collected from Assam was studied. Pollen grains represents 3-zonicolpate apertural morphoforms. Some inter-specific major differences in exine ornamentation and shape of the grains as subsidiary characters were noticed. Comparative analysis showed the closer relationship of *Clerodendrum speciosum* D'Ombrain and *C. wallichii* Merr. amongst the studied species.

207. Barua, Kuntala Neog, Barua, Iswar Chandra & Das, Mrigen. 1999. "Ethnobotany of Rajbanshis of Assam". *J. Econ. Taxon. Bot.* 23(2): 609-614.

Abst.- Rajbanshis belong to Mongoloid races and are distributed in the Brahmaputra valley of Assam, in the north Bengal and Bangladesh. The ethnobotanical survey among the Rajbanshis of western Brahmaputra valley of Assam documented 58 plant species used as folk medicine. This enumeration included 11 species which have antidote or sedative properties against animal bites, 10 species as medicine in muscle-pain or bodyache, 8 in diarrhoea or dysentery, 6 in impotency and 5 species have relation exclusively with the problems of women. The species list also accomplished by vernacular names, uses, method(s) of administration and citation of voucher specimens.

208. Baruah, Akhil & Nath, Subhan C. 2003. "Comparative morphological and essential oil characters of two *Cinnamomum tamal* Nees variants growing in Northeast India". *J. Econ. Taxon. Bot.* 27(Suppl.): 1201-1209.

Abst.- Two phenotypic variants of *Cinnamomum tamala* Nees (Lauraceae), grown in an identical Brahmaputra valley condition of Assam were evaluated for their comparative morphological and essential oil characters from a taxonomic and economic point of view. Significant differences observed on growth, foliar morphology and essential oil characters indicate the variants as two distinct infra-specific categories of the species. The taxa thus recognized were classified and named as cultivar- JORLAB CT1 and JORLAB CT2. A key to the cultivars based on their comparative morphological and essential oil characters is provided.

209. Baruah, Akhil & Nath, Subhan C. 2008. "A new species of *Cinnamomum* Schaeffer (Lauraceae) from Assam, North Eastern India". *J. Econ. Taxon. Bot.* 32(3): 525-532.

Abst.- *Cinnamomum champokianum* A. Baruah & S.C. Nath sp. nov., is illustrated and described as new, with a note on its leaf, panicle and stem bark essential oils reported earlier as a variant of *Cinnamomum bejolghota* (Buch.-Ham.) Sweet.

210. Baruah, H.K., Singh, D.K. & Islam, M. 1971. "On the distribution of higher Basiodiomycetes in the Sibsagar district, Assam". *Bull. Bot. Surv. India* 13(3&4): 285-289.

Abst.- The distribution of the higher basidiomycetes of the Sibsagar district of Assam has been studied with the application of Poisson's probability distribution.

The fungi mostly occur in patches or pockets of podzolic soil formations having a rich forest cover, Agaricaceae occurring most commonly. The types of fungi were also classified as soil-inhabiting and weed-inhabiting, the former with sporophores submerged in the soil superficially.

The Poisson's probability distribution also explains the mode of distribution to certain extent provided the places of occurrence of these fungi are not disturbed markedly.

211. Baruah, M.K., Choudhury, P.D. & Sarma, G.C. 2006. "Ethno-medicinal plants used by the Khasi tribe of Cachar district, Assam". *J. Econ. Taxon. Bot.* 30 (Suppl.): 110-114.

Abst.- Systematic survey was conducted on some ethno-medicinal plants used by the Khasi tribe of Cachar district of Assam. Altogether 45 plants were recorded to have medicinal properties and widely used by the Khasi tribe as remedies against a wide range of common diseases such as diarrhoea, jaundice, pains, fever, piles, tuberculosis etc, and other interesting observations were made in regards to the use of some plants like minor and major cuts, injuries, relieving delivery pains, burns, sciatica, boils leading to its bursting, skin diseases etc.

212. Baruah, Madhumita & Kalita, Dilip. 2007. "Ethnomedicine used by *Mishings* tribe of Dibrugarh district, Assam". *Indian J. Traditional Knowledge* 6(4): 595-598.

Abst.- Ethnobotanical folklore of *Mishings* of Dibrugarh district of Assam is very rich. An attempt has been made to study ethnomedicine used by *Mishings* for the treatment of diseases like allergy, backache, cough, constipation, cut injury, diabetes, dysentery, eczema, epilepsy, indigestion, lice control, piles and ringworm infection. A total number of 22 medicinally important plant species are described.

213. Baruah, P.P. 2003. "Biological spectrum of the flora of Sand Bars (Chapories) of Brahmaputra river". *Indian J. Forest.* 26(2):172-176.

Abst.- Life forms of the vegetation and biological spectrum of the flora of sand bars (islands) of Brahmaputra River have been determined. Results show that the percentage of therophytes and cryptophytes in the newly developed sand bars is nearly three times higher than those of the same life forms in the normal biological spectrum of Raunkiaer (1934). Gradual sedimentation with annual recurrence of flood may be attributed for higher percentage value of therophytes. There is a general progression of plant species resulting from modification of the micro-environment by developing forests vegetation and changes in the soil characteristics with time, which resulted invasion of more phanerophytic plant species in the mature sand bars.

214. Baruah, P.P. 2007. "Impact of crude oil contamination on macrophytic species diversity in Upper Burhidihing Reserve Forest". *Indian J. Forest.* 30(3): 255-262.

Abst.- Macrophytic species diversity was studied in crude oil contaminated and non-contaminated sites within the Upper Burhidihing Reserve Forest. Species richness was 57 and 86 in contaminated and non-contaminated sites respectively. On the basis of Importance Value Index (IVI), *Cynodon dactylon* (13.92), *Cyperus cyperoides* (12.75), *Imperata cylindrica* (10.01) were dominant ground-flora herbs in former sites. The IVI value of *Axonopus compressus* (7.90) was high in non-contaminated land. The distribution of most macrophytes in contaminated areas was contiguous, in contrast to regular distribution of most of ground flora in other sites. The value of concentration of dominance (C) of the macrophytic flora at both sites was lower and index of diversity (H) was higher. The index of dissimilarity between the vegetation groups was high indicating the effect of crude oil contamination on vegetation.

215. Baruah, Parukutty & Sarma, Gajen Chandra. 1984. "Studies on the medicinal uses of plants by the Boro tribals of Assam-II". *J. Econ. Taxon. Bot.* 5(3): 599-604.

Abst.- A preliminary survey of the medicinal plants used by the Boro tribals of Assam has been undertaken with special reference to antiseptic, purgative, blood purifier, tonic, piles and worm control. The present communication deals with twenty five plants giving details of the parts used, their local names and methodology of the treatment have been described. The plants described are *Artocarpus heterophyllus* L., *Ageratum conyzoides* L., *Annona squamosa* L., *Achyranthes aspera* L., *Asparagus racemosus* Willd., *Bryophyllum calycinum* Salisb., *Biophytum sensitivum* DC., *Cassia fistula* L., *Gynandropsis gynandra* Merrill, *Holarrhena antidysenterica* Wall., *Hibiscus rosa-sinensis* L., *Ipomoea aquatica* Forsk., *Ixora parviflora* Vahl, *Jussiaea repens* L., *Justicia gendarussa* L., *Leucas aspera* (Willd.) Spreng., *Mesua ferrea* L., *Moringa oliefera* L., *Plumeria alba* L., *Ranunculus scleratus* L., *Sphaeranthus indicus* L., *Sonchus arvensis* L.,

Sida rhombifolia L., *Vinca rosea* L. and *Xanthium strumarium* L.

216. Basu, D. 1985. "*Elaeagnus griffithii* Servettaz (Elaeagnaceae)- A new record for India". *J. Econ. Taxon. Bot.* 7(3): 655-657.

Abst.- During scrutiny of the herbarium specimens the author recorded *Elaeagnus griffithii* Servettaz from Assam which is a new record for India. A detailed description and illustration have been provided for easy identification.

217. Basu, D. 1985. "*Elaeagnus conferta* ssp. *dendroidea* Servettaz (Elaeagnaceae)- A rare plant in Indian flora". *J. Econ. Taxon. Bot.* 7(3): 658.

Abst.- During scrutiny of the herbarium specimens the author recorded a rare plant viz. *Elaeagnus conferta* ssp. *dendroidea* from Assam-Khasia mountains which is a new record for India.

218. Begum, Samim Sifika & Gogoi, Rajib. 2007. "Herbal recipe prepared during *Bohag* or *Rongali Bihu* in Assam". *Indian J. Traditional Knowledge* 6(3): 417-422.

Abst.- The work relates to the herbal recipe prepared during *Bohag* or *Rongali Bihu* in Assam. For the preparation of this recipe, 101 plant species are used. In the paper, each species is provided with plant name, family, vernacular name, plant parts used and their other uses.

219. Bhattacharjee, B., Dutta, B.K. & Hajra, P.K. 2005. "*Paphiopedium spicerianum* (Reichb. f.) Pfitz.– A fast disappearing lady's slipper orchid in Cachar district, Assam". *J. Orchid Soc. India* 19(1-2): 71-72.

Abst.- *Paphipedilum spicerianum*– a critically endangered ground orchid is recollected from the Cachar district of Assam. A detailed description is provided for its easy identification in field.

220. Bhattacharjee, Bikash & Sharma, G.D. 2006. "Report on new record of orchid to southern Assam (India)". *J. Econ. Taxon. Bot.* 30(2): 431-432.

Abst.- The paper deals with a new record of orchid *Oberonia recurva* Lindl. from Dwarbond basti, Lowherbond Reserve Forest, *ca* 40 km from north Silchar, Cachar district of southern Assam. The species grows in epiphytic form and cover branches of trees in open tropical wet evergreen forest. The species has so far been recorded from Peninsular India, Sikkim and Arunachal Pradesh. Its record from Assam is of great phyto-geographical interest.

221. Bhuyan, T.C., Pathak, K.C. & Biswas, Sas. 1987. "New distributional record of *Acalypha australis* Linn. (Euphorbiaceae) in India". *Indian J. Forest.* 10(1): 65-66.

Abst.- *Acalypha australis* Linn, collected from Kachugaon Forest Division of Kokrajhar district of Assam, constitutes a new record for India.

222. Biswas, Sas. 1993. "On the occurrence of *Bambusa burmanica* Gamble in India". *Indian J. Forest.* 16(1): 75-76.

Abst.- During bamboo surveys in north Cachar hills district of Assam, the author collected *Bambusa burmanica* Gamble which is a new record for India in its natural condition. To facilitate its identification, detailed description and illustration have also been provided.

223. Bora, H.R., Borthakur, S.K. & Hazarika, L.K. 2003. "Use of plants in control of pests in Assam- An ethnobotanical approach". *J. Econ. Taxon. Bot.* 27(4): 956-963.

Abst.- Traditional knowledge about plants and their properties have been used to control pests in different parts of Assam among the rural people of various ethnic groups. An investigation on this aspect of ethnobotany has resulted in the recording of 42 plant species used in Assam against agricultural pests, wound maggots and flies, mosquito, cockroach, external and/or internal parasites of human beings and animals, snacks, scorpion, leech, etc. The uses of 16 species are recorded here for the first time. The modes of usage alongwith the part(s) used are mentioned in details.

224. Bora, H.R. & Pandey, A.K. 1996. "Less known wild food plants of Assam". *J. Econ. Taxon. Bot., Addl. Ser.* 12: 357-358.

Abst.- The present communication reports hitherto unreported food uses of 8 angiospermic plants of Assam belonging to 7 families and 8 genera.

225. Bora, P.J. 1999. "A study on the ethnomedicinal uses of plants among the Bodo tribe of Sonitpur district, Assam, India". *J. Econ. Taxon. Bot.* 23(2): 604-608.

Abst. The paper deals with new or less known medicinal uses of 34 plant species by the Bodo tribe of Sonitpur district of Assam.

226. Borah, Ananta & Sarkar, Partha Pratim. 2008. "A preliminary study of wild vegetables of Bongaigaon district of Assam". *J. Econ. Taxon. Bot.* 32 (Suppl.): 457-464.

Abst.- Bongaigaon district of Assam has been inhabited by different ethnic groups, viz. Koch-Rajbangshi, Bod, Garo, Rabha etc., the traditional food of which is comprised of different wild plants and plant parts. Most of such plants are not documented and analyzed. Investigation has been carried out to know the species, parts and mode of use of wild vegetables in the Bongaigaon district and adjacent areas. The present preliminary report enumerates fifty-six species of plants that have been collected from their wild habitat and are used as vegetable traditionally in different forms by different ethnic groups in the area. The botanical names along with vernacular ones, habit and habitat, use as vegetable, traditional medicinal utilization and seasonal variation of such plants are recorded. It has also been revealed that due to change in socio-economic condition, a lot of information regarding wild vegetables has been lost and some of such plants are on verge of rarity.

227. Borah, P.K., Gogoi, P., Phukan, A.C. & Mahanta, J. 2006. "Traditional medicine in the treatment of gastrointestinal diseases in Upper Assam". *Indian J. Traditional Knowledge* 5(4): 510-512.

Abst.- Treatment of diseases with medicinal plants in different ethnic groups of Assam is widespread, because of effectiveness, easy availability, lack of modern healthcare alternatives, cultural preferences and century old association with the plants. The study performed in Dibrugarh district of Upper Assam included interview with 27 traditional practitioners from three different communities, i.e. *Deori* (8), *Muttak* (15) and *Nepalee* (4). The results reveal use of 38 plant species represented by 36 genera and 29 families for the treatment of various gastrointestinal diseases.

228. Borah, R.K., Dutta, D. & Hazarika, P. 1998. "Three new *Phyllachora* leaf spots from Assam". *Indian J. Forest.* 21(3): 256-258.

Abst.- The paper describes three new *Phyllachora* leaf spots on *Ficus lepidosa, Bambusa balcooa* and *B. tulda* incited by *Phyllachora infectoria, P. ischaemi* and *P. shiraiana* respectively with illustration, being collected from Assam.

229. Borthakur, S.K. 1976. "Less known medicinal uses of plants among the tribes of Karbi-Anglong (Mikir Hills), Assam". *Bull. Bot. Surv. India* 18(1-4): 166-171.

Abst.- The paper deals with firsthand information on medicinal uses of 43 species of plants gathered among the tribes inhabiting Karbi-Anglong district of Assam state in eastern India. Scientific name, local name, short description and uses are given for each species. All uses mentioned in the paper appear to be new information, not recorded in earlier published literature.

230. Borthakur, S.K. 2003. "Ethnobiological wisdom behind the traditional muga silk industry in Assam". *Indian J. Traditional Knowledge* 2(3): 230-235.

Abst.- This article focuses on indigenous knowledge, innovations, practices and beliefs pertaining to muga silk industry - a traditional cottage industry in Assam, which had its origin in the distant past and continued till today.

231. Borthakur, S.K. & Hajra, P.K. 1976. "*Vanilla pilifera* Holtt. (Orchidaceae) in Mikir hills, Assam". *Bull. Bot. Surv. India* 18(1-4): 228-230.

Abst.- *Vanilla pilifera* Holtt. from Garampani and Kalioni reserve forest of Mikir hills constitutes a new record for Assam.

232. Borthakur, S.K., Sarma, T.R., Nath, K. & Deka, P. 1999. "The house gardens of Assam: a traditional Indian experience of management and conservation of biodiversity-II". *Ethnobotany* 11(1&2): 65-80.

Abst.- The present communication deals with diversity, variability and composition of species found in house gardens and other production systems in rural Assam alongwith uses of the plants. This constitutes the second part of a study on house gardens of Assam.

233. Bujarbarua, P. & Sarma, S.K. 2006. "A note on the diversity of family Poaceae in Gibbon Wildlife Sanctuary, Assam, India". *J. Econ. Taxon. Bot.* 30(1): 1-5.

Abst.- The present paper deals with the members of the family Poaceae of Gibbon Wildlife Sanctuary in Assam. A total number of 37 species belonging to 22 genera were collected from the study area. Among these genera, *Panicum* in the most dominant genus with 6 species, followed by *Crytococcum* and *Digitaria* with 3 species each.

234. Buragohain, Jitu & Konwar, B.K. 2008. "Ethnomedicinal plants used in skin diseases by some Indo-Mongoloid communities of Assam". *J. Econ. Taxon. Bot.* 32 (Suppl.): 394-403.

Abst.- An ethnobotanical study was carried out among five Indo-Mongoloid communities distributed in five districts of Upper Assam, India to document plants used in various skin diseases. A total of 68 plant species belonging to 40 families were described. All these plants and plant parts need to be evaluated through phyto and pharmaco-chemical investigations to discover their potentiality as drugs.

235. Chowdhury, S. 1982. "*Cleisostoma spicatum* Lindl. in Cachar district, Assam". *Indian Forester* 108(8): 589-592.

Abst.- *Cleisostoma spicatum* Lindl. in Cachar district of Assam is recorded as new locality in India.

236. Chowdhury, S., Kataki, S.K. & Barua, I.C. 1994. "Floristic analysis of angiosperms of Kamrup district (*sensu lato*), Assam". *J. Econ. Taxon. Bot.* 18(3): 697-703.

Abst.- Floristic analysis of 1309 species of Angiosperms occurring in erstwhile Kamrup district of Assam has been made statistically. It is apparent from the study that these species belong to 703 genera distributed in 153 families of which 50.04 percent are herbs, 20.70 percent trees, 12.53 percent shrubs and 16.73 percent represented by scandent shrubs, vines and climbers. This finding has been compared with published Floras of North East India along with that of Hooker's (1904) British India and Gangetic Plain. Floristic pattern and the species distribution ratio of Monocots versus Dicots have been found to have a distinct similarity with that of Joseph's (1982) Flora of Nongpoh and its Vicinity, but significantly less number of species are found within a genus in regional Floras of North East India as compared to Hooker's Flora of British India.

237. Dam, D.P. & Dam, N. 1984. "*Phalaenopsis cornu-cervi* (Breda) Bl. & Rechb. f.- An orchid record from the tropical rain forest of Assam (India)". *Bull. Bot. Surv. India* 26(3&4): 195-196.

Abst.- One intertropical orchid viz., *Phalaenopsis cornu-curvi* Bl. & Rechb. f. has been first record from Bhutan hills, Cachar in Assam.

238. Das, A.K., Dutta, B.K. & Sharma, G.D. 2006. "Study of medicinal plants used by the different tribes/communities of Cachar district, Assam-I". *J. Econ. Taxon. Bot.* 30 (Suppl.): 294-309.

Abst.- A survey was carried out in different parts of Cachar district of Assam to gather information regarding the uses of medicinal plants by the different tribes/communities settled in the district. The study revealed that out of the total 116 plant species some are being used against jaundice, diarrhoea, dysentery, cough, malarial fever, skin diseases, sexual diseases etc. It has been observed that due to the impact of urbanization and partial modernization the primitive communities in this region are losing their traditional culture and practice of medicinal plant

use in their daily life. Certain anthropogenic activities (i.e. deforestation, jhum cultivation, construction of roads etc.) are the main causes to effect the medicinal plant diversity. Therefore, appropriate measures should be taken to improve the habitat of these wild medicinal plants by controlling deforestation, soil erosion etc. Sustainable harvesting of medicinal plants and the newly found medicinal plant species are advised to be cultivated and *in vitro* conservation should encouraged for the benefit of mankind at large.

239. Das, A.K. & Saikia, D.C. 2002. "Investigation into folk belief on anti-fertility and fertility-induced plants". *Ethnobotany* 14(1&2): 20-22.

Abst.- The present paper deals with some plants used as abortifacient in and around Lakhimpur district of Assam. Plants mentioned here are common and easily available in the locality. Some of them are wild and others are grown for other economic uses. The method of preparation of effective dose is very simple; mostly a raw extract is administered orally to terminate pregnancy. The paper includes information about the identity of the plants in scientific and local names, method of preparation, including precaution to be taken in case of any complication arising out of use of the herbal preparation.

240. Das, A.K., Sharma, G.D. & Dutta, B.K. 2004. "Study of plant and its conservation in Hailakandi district, Assam, India Part-I. Flora". *J. Econ. Taxon. Bot.* 28(1): 213-228.

Abst.- The present paper mainly deals with the bio-diversity of Hailakandi district and its conservation. The paper also deals with the habitat and distribution of plants in different localities of the district. A large varieties of Pteridophytes and angiosperms were collected from the natural habitat which exhibits various kinds of diversities. Out of the total 188 plants 43 species were Pteridophytes and 145 species were angiosperms. The present survey work revealed that amongst the Pteridophytes, dominant families are found to be Polypodiaceae and Pteridaceae. On the other hand, among the angiosperms, plants belonging to the family Asteraceae, Orchidaceae and Leguminosae (Fabaceae) were dominant in comparison to others. Since the habitat and the plant biodiversity of the area have been degraded in a big way, appropriate conservation measures have been discussed and recommended.

241. Das, Ajit Kumar & Dutta, B.K. 2007. "*Cycas pectinata*- A wonderful native plant remedy for piles and asthma in southern Assam, N.E. India". *Ethnobotany* 19(1&2): 140-141.

Abst.- A market survey of medicinal plants was carried out in different parts of south Assam including N.C. hills and Pachertal of Tripura. Female and male cones of *Cycas pectinata* are sold in the market by local herbalists, which are used to cure piles and asthma.

242. Das, Ajit Kumar, Dutta, B.K. & Sharma, G.D. 2007. "Study of the Tea garden flora of Barak Valley, Assam, India". *J. Econ. Taxon. Bot.* 31(4): 858-866.

Abst.- A survey of Tea Garden flora of Barak Valley has been carried out during the last three years, covering all the seasons of the year. In the present investigation a total 105 plant species are reported. Out of the total 105 plants, 14 species are pteridophytes and 91 species are angiosperms. The present survey revealed that amongst the pteridophytes the dominant family was found to be Pteridaceae, while among the angiosperms the family Orchidaceae and Poaceae were found to be the dominant, compared to others.

243. Das, Ajit Kumar, Dutta, B.K. & Sharma, G.D. 2008. "Study of non-conventional edible plants used by different communities of Barak valley, Assam (N.E. India)". *J. Econ. Taxon. Bot.* 32 (Suppl.): 327-333.

Abst.- A survey on different areas of Barak valley has been conducted in different seasons of the year to identify the non-conventional edible plants. The present paper deals with 70 edible plants belonging to 45 families of the flowering and non-flowering plants. Out of which some of the plants are used as edible green vegetable and edible fruits, and for other purposes. The use of these plants varies from place to place. Different parts of the plants are used for different purposes and by adopting different methods. The plant species are arranged alphabetically and for each species scientific name, vernacular name and their uses are given.

244. Das, Ajit Kumar & Sharma, G.D. 2003. "Ethno-medicinal uses of plants by Manipuri and

Barman communities of Cachar district, Assam". *J. Econ. Taxon. Bot.* 27(2): 421-429.

Abst.- The paper describes the results of an ethno-medico botanical study of plants of Barman and Manipuri communities of Cachar district. Total 47 vascular plants have been observed for their uses and curing of several diseases such as skin diseases, wounds, sores, toothache, diarrhoea, dysentery, jaundice, fever, sexual diseases of women and cancer etc.

245. Das, K.K. & Singha, D.N. 2006. "Plant diversity in Mural habitats of greater Guwahati, Kamrup district (Assam)". *J. Econ. Taxon. Bot.* 30(4): 873-880.

Abst.- Mural flora of greater Guwahati of Kamrup district, Assam has been studied and intensive survey and exploration was undertaken during past 2 years (2002-2004). A large variety of Pteridophytes and angiosperms were collected from mural habitats, which exhibit various kinds of diversities. Out of 102 plants, 9 species are Pteridophytes and 93 species angiosperms. The present investigation revealed that amongst the pteridophytes, Polypodiaceae is the dominant family. On the other hand, among the angiosperms, plants belonging to the family Compositae, Solanaceae, Amaranthaceae, Euphorbiaceae and Gramineae are dominant is comparison to others.

246. Das, N.J., Saikia, S.P., Sarkar, S. & Devi, K. 2006. "Medicinal plants of North-Kamrup district of Assam used in primary healthcare system". *Indian J. Traditional Knowledge* 5(4): 489-493.

Abst.- Medicinal value of herbaceous plants used by different ethnic groups of the North-Kamrup district of Assam, based on survey is presented. Information was collected through personal interview with local herbal practitioners. Of 31 plant medicinal species documented, 8 species were found to be used in stomach disorder, 4 in body pain, 3 species in piles, 2 species in skin diseases, 2 in ulcer and remaining in dysurea, boils, nervous affection, spermatorrhoea, jaundice, toothache, hydrophobia, sinusitis, asthmatic trouble and obstetrics problem.

247. Das, Nikhil Jyoti, Devi Kamala & Goswami, Satya Ranjan. 2005. "Report on the treatment of dysmenorrhoea by the tribes of Nalbari district, Assam". *Indian J. Traditional Knowledge* 4(1): 72-74.

Abst.- The paper describes the use of *Jatropha curcus* Linn. collected through personal interview with local herbal practitioner for the treatment of dysmennorrhoea by the Koch-Rajbongshi tribe in Nalbari district of Assam. Botanical description of the plant, local name and method of administration have been described.

248. Das, Parth Sarathi & Dutta Choudhury, M. 2003. "A survey on non-conventional food plants of southern Assam". *J. Econ. Taxon. Bot.* 27(2): 416-420.

Abst.- Field and rural market survey was undertaken to enlist non-conventional food plants which are of common use in southern Assam. The plants that are not very commonly available in the market and those which are not commonly utilized as food throughout the country are considered as non-conventional food plants. During the present work as many as 39 species of plants have been recorded which belong to 26 families. Some of the plants are *Amischotolype hookeri, Blumea lanceolaria, Cyathea contaminans, Dendrocalamus strictus, Enhydra fluctuans, Lepisanthes senegalensis, Solanum torvum* etc.

249. Deka, Dipali, Sarma, Gajen Chandra, Devi, Nilakshee & Pathak, Namrata. 2006. "Indigenous herbal medicines used against malaria in Goalpara and Morigaon district of Assam". *J. Econ. Taxon. Bot.* 30 (Suppl.): 177-183.

Abst.- Among various parasitic diseases, malaria is one of the most important causes of mortality in India, specially in Assam. Malaria is caused due to mosquito bite containing malarial protozoa which after entering into body remain in blood cell. Now a days DDT and other antibiotics are also proved ineffective against malaria. There have been resurgent hopes of severe complication and fatal form of malarial infection caused by parasitic Protozoa *Plasmodium* after achievement of an almost controlled status. Sometimes this infection also includes cerebral involvement. At the same time thousands of preventive herbal folk medicines have been playing an important role in healing various kinds of human as well as animal diseases. Some indigenous herbal

recipes when given in particular dose for some particular days, they may exhibit high curative properties. Some folklore practices for the treatment of malaria have been followed by two major tribal communities of Assam since time immemorial which was recorded from two different districts of the state. These were recorded during a course of our medico-ethnobotanical study in 2001-03 and have been enumerated 28 wild plant species used successfully to prevent malaria. The present study throws light on these 28 plant species used by the Bodos of Goalpara district and Tiwas of Morigaon district in curing malarial diseases.

250. Deka, P. & Borthakur, S.K. 1995. "Pteridophytic flora of Darrang distrct, Assam". *Bull. Bot. Surv. India* 37(1-4): 70-78.

Abst.- The present paper deals with first-hand information on the pteridophytic flora of Darrang district of Assam. Altogether 78 spp., belonging to 45 genera have been reported. Each species is appended with relevant field data.

251. Devi, Maya. 2003. "Wild edible plants of Sonitpur district, Assam". *J. Econ. Taxon. Bot.* 27(2): 396-409.

Abst.- The paper deals with 156 species (including 3 species of fern and 1 species of gymnosperm) of wild plants of Sonitpur district of Assam used for food by local inhabitants both tribals and non tribals of the area. Part(s) of plants used as food has been categorized and enumerated accordingly. The generic and specific names of the plants in each category have been arranged in alphabetic order. The enumerated plant species are assigned with family names followed by vernacular names (as far as possible) and also provide with exact spot of collection, collector's name and field number of collection.

252. Dey, S., Lakhar, B.P., Das. J.P., Nath, N.K. & Brahma, N. 2007. "Orchid diversity in Manas National Park, Assam". *J. Orchid Soc. India* 21(1-2): 65-68.

Abst.- Orchid diversity was studied at Manas National Park, Assam. Six additional species are recently recorded for this region, and notes are provided on orchid ecology and conservation.

253. Dixit, R.D. 1984. "*Selaginella minutifolia* Spring- New to India". *Bull. Bot. Surv. India* 26(1-4): 127-128.

Abst.- *Selaginella minutifolia* Spring has been found to occur in Assam for the first time and is also a new record for India.

254. Dutta, Malakshmi & Nath, Subhan C. 1999. "Ethno-medico botany of the Tai-Ahoms of Assam, India". *J. Econ. Taxon. Bot.* 23(2): 591-598.

Abst.- An account of the folklore medicinal uses of 71 plant species used among the Tai-Ahoms, one of the ethnic groups predominant in Assam, India is reported.

255. Dutta, R.M. & Babu, C.R. 1968. "*Desmodium cephalotoides* Craib (Papilionaceae)- An interesting new record for India". *Bull. Bot. Surv. India* 10(3&4): 270-272.

Abst.- *Desmodium cephalotoides* Craib, a species of Thailand, closely allied to *D. triangulare* (Retz.) Merr. is recorded for the first time from India and Burma. A detailed description with illustrations is provided for facilitating easy identification. A short note on the taxonomic position is also added.

256. Gogoi, Khyanjeet. 2005. "The genus *Dendrobium* in Dibru-Saikhowa National Park and Biosphere Reserve". *J. Orchid Soc. India* 19(1-2): 17-25.

Abst.- Thirty five species of epiphytic including the floriculturally significant *Dendrobium moschatum, D. fimbriatum, D. nobile, D. transparens, D. lituiflorum, D. aphyllum* and *D. aduncum*, were recorded from Dibru-Saikhowa National Park and Biosphere Reserve in an intensive survey during 1996-2002. The dendrobes are described, highlighting their important features for easy identification.

257. Gogoi, R. 2006. "*Centrosema pubescens* Benth.- A new addition to the flora of Assam". *J. Econ. Taxon. Bot.* 30(2): 283-284.

Abst.- *Centrosema pubescens* Benth.- a legume added to the flora of Assam.

258. Gogoi, R., Bokolial, D. & Hazarika, Dipanjali. 2003. "Preliminary observation on the medicinal plants of Chandrapur area of Kamrup district, Assam". *J. Econ. Taxon. Bot.* 27(2): 410-415.

Abst.- The present communication deals with the observation on medicinal plants of Chandrapur area of Kamrup district of Assam. In this preliminary survey altogether 74 species of 67 genera from 42 families are recorded medicinal. The medicinal importance of the plants with their part used are enumerated in this paper.

259. Gogoi, R. & Das, M.K. 2003. "Observations on some weeds of medicinal importance in the Brahmaputra valley of Assam". *J. Econ. Taxon. Bot.* 27(2): 434-441.

Abst.- This communication deals with the observations of medicinally important weeds of Brahmaputra valley of Assam. About 74 species belonging to 64 genera of 36 families were recorded medicinal. The medicinal importance of these plants are enumerated in this paper.

260. Islam, M. 1984. "A contribution to the flora of the greatest river island, Majuli, Jorhat, Assam-I". *J. Econ. Taxon. Bot.* 5(3): 617-633.

Abst.- The present paper relates to a floristic account of the greatest river island of the world, Majuli, Jorhat, Assam during the years 1978-83. The paper enumerates 252 polypetalous taxa distributed over 186 genera and 67 families. For each taxon the frequency of occurrence along with field numbers have been provided. All the species have been recorded for the first time.

261. Islam, M. 1986. "A contribution to the flora of the greatest river island Majuli, Jorhat, Assam-II". *J. Econ. Taxon. Bot.* 8(1): 77-105.

Abst.- The present paper relates to a floristic account of the greatest river island of the world, Majuli, Jorhat, Assam during the years 1978-83. The paper enumerates 259 polypetalous taxa under 43 families and 158 gamopetalous taxa under 22 families. For each taxon the frequency of occurrence along with field numbers have been provided. All the species have been recorded for the first time.

262. Islam, M. 1990. "A contribution to the flora of the greatest river island, Majuli, Jorhat, Assam-III". *J. Econ. Taxon. Bot.* 14(1): 27-31.

Abst.- The present paper relates to a floristic account of the greatest river island, Majuli, Jorhat, Assam during the year 1978-83. The paper enumerates 23 dicot plant of 13 families, 7 monocot of 3 families and 33 pteridophytes of 17 families. For each taxon the frequency of occurrence along with field numbers have been provided.

263. Islam, M. 1991. "Exotic flora of Assam". *J. Econ. Taxon. Bot.* 15(2): 391-407.

Abst.- A comprehensive study on the occurrence of exotic flora of Assam has been made. Only three gymnospermic and two hundred and eighty five angiospermic species included in two and eighty two families respectively have been recorded as exotic plants in the present survey of the work.

264. Islam, M. 1998. "The aquatic and marshland flora of Assam". *J. Econ. Taxon. Bot.* 13(2): 461-491.

Abst.- A comprehensive study on the occurrence, frequency of distribution and economic uses of aquatic and marsh plants of Assam has been made. Only 12 pteridophytic and 204 angiospermic species included in 8 and 68 families respectively have been recorded as aquatic and marsh plants in the present survey of the work.

265. Islam, M. & Hasin, F. 1994. "Gasteromycetes of Assam". *J. Econ. Taxon. Bot.* 18(1): 43-46.

Abst.- A comprehensive account on the occurrence of certain Gasteromycetous fungi of Assam has been made. 5 species of Nidulariaceae, 5 of Phallaceae, 9 of Lycoperdaceae and 2 of Sclerodermataceae have been recorded alongwith their nature of growth, time and frequency

of occurrence, edibility etc. in the present survey of the work.

266. Islam, M. & Hasin, F. 2003. "Ethnobotany of certain Asteraceous plants of Assam and its neighbouring areas". *J. Econ. Taxon. Bot.* 27(2): 442-446.

Abst.- A brief study on the occurrence of certain Asteraceous plants, utilized in different aspects by the inhabitants, both tribals and non-tribals, of Assam and its neighbouring areas has been made. 43 species included in 40 genera belong to the family Asteraceae have been recorded in the present work. Most of the plants enumerated here are medicinally useful besides the food, fodder, insecticidal, ornamental and other purposes.

267. Islam, M. & Hasin, F. 2008. "Dye yielding plants of Assam and its neighbouring areas". *J. Econ. Taxon. Bot.* 32 (Suppl.): 43-47.

Abst.- A comprehensive study on dye yielding plants of Assam and its neighbouring areas revealed that 62 species belonging to 52 genera and 34 families are used for different colours by the natives. The dicotyledonous species are found to be dominant over all others in yielding dyes.

268. Jain, S.K. & Hajra, P.K. 1975. "On the botany of Manas Wildlife Sanctuary in Assam". *Bull. Bot. Surv. India* 17(1-4): 75-86.

Abst.- The Manas Wildlife Sanctuary (26º30´-27º N and 91º-92º E) falls under the 'Tiger Project' of Assam. The area is covered chiefly by dry or moist deciduous forests; tall grasses grow on vast areas and provide cover for rich wild life.

The paper enumerates 383 species of phanerogams, collected during three botanical excursions. There are about 90 tree species in the area, and same number of shrubs and undershrubs. The composition of the flora and dominant vegetation types are briefly discussed.

269. Kalita, Bhagaban, Dutta, Amalesh & Choudhury, M. 2007. "Herbal fish toxicant used by fishers of Karbi-Anglong district, Assam". *Indian J. Traditional Knowledge* 6(2): 334-336.

Abst.- Use of plant, *Polygonum hydropiper* Linn. (Smartweed) as fish toxicant by the tribal people of Karbi-Anglong district of Assam for catching fish from natural aquatic resources as well as for removal of uneconomical fishes from the aquaculture pond has been discussed. Indigenous Technical Knowledge on aquaculture has generously been passed on to newer generation by older ones. Plant's botanical identity, local name, family, plant parts used, therapeutic uses and mode of application of the drug have been described. It was observed that carp fishes died immediately, but air-breathing fishes (*Heteropneustus fossilis* and *Channa puntatus*) lasted for sometime.

270. Kalita, Dilip, Dutta, Manashi & Islam, Nazim Forid. 2005. "Few plants and animals based folk medicines from Dibrugarh district, Assam". *Indian J. Traditional Knowledge* 4(1): 81-85.

Abst.- An attempt has been made to study the plant and animal based folk medicine used by people of Dibrugarh district, Assam for treatment of eleven different diseases, viz. ascites, body pain, carbuncle, diabetes, epilepsy, gastritis, indigestion, obesity, piles, pimples and urinary tract infection.

271. Kalita, P.C. & Borthakur, S.K. 2006. "Two new species of *Glochidion* J.R. & G. Forst. (Euphorbiaceae) from Assam, India". *J. Econ. Taxon. Bot.* 30(3): 488-491.

Abst.- Two new species of *Glochidion* J.R. & G. Forst. viz., *G. mandakatensis* Kalita & Borthakur and *G. madankamdevi* Borthakur & Kalita are described from Assam, India.

272. Kar, S.K. & Panigrahi, G. 1963. "The Rubiaceae in Assam and North East Frontier Agency". *Bull. Bot. Surv. India* 5(3&4): 227-237.

Abst.- The paper presents the distribution and relative abundance of 123 taxa including 118 species belonging to 47 genera of the family Rubiaceae in Assam and North East Frontier Agency. The family is best represented in the tropical and subtropical evergreen and semi-evergreen forests, comparatively less abundant in deciduous forests and grassland vegetation,

mostly poorly presented in temperate altitudes and altogether absent from subalpine and alpine situations. *Hedyotis macrophylla* Wall., *Ixora finlaysonia* Wall. ex G. Don and *Borreria ocymoides* DC. have turned up as new records for Eastern India. Similarly, *Nauclea gageana* King and *Ophiorrhiza caudipetala* C.B. Clarke not recorded by Hooker (1880, 1881), Cooke (1904), Gamble (1921), Haines (1922), Mooney (1950) and Kanjilal *et al.* (1939) in their respective Floras, have also been collected from this area. The species of economic importance have also been listed under different categories on the basis of their utility.

273. Kataki, S.K. & Panigrahi, G. 1963. "New records of plants for India: Orchids – I". *Bull. Bot. Surv. India* 5(3 & 4): 243-246.

Abst.- This note presents three species of orchids viz. *Bulbophylum penicillium* Par. & Reichb.f., *Dendrobium infundibulum* Lindl. and *Dendrobium podagraria* Hook.f. as new records for India and presents data on their habitat and distribution, both in India and abroad. All the three species have been recorded from Assam.

274. Mahapatra, A.K. 1987. "Common weeds in the Ramie field research station farm at Sorbhog, Assam". *J. Econ. Taxon. Bot.* 11(1): 201-204.

Abst.- Forty seven common weed species have been collected from the experimental farm of Ramie research station at Sorbhog, Assam. Thirty one species belong to dicot representing fifteen families and twenty eight genera. Sixteen species belong to monocot representing three families and thirteen genera.

275. Naik, V.N. 1964. "A note on Hydrocharitaceae of Assam and NEFA". *Bull. Bot. Surv. India* 6(2-4): 301-303.

Abst.- The present paper provides an account of the family Hydrocharitaceae in Assam and NEFA. 7 species under 5 genera have been recorded.

276. Nath, Ashis & Maiti, G.G. 2003. "Ethnobotany of Barak valley (Southern Assam) with special reference to folk medicine". *J. Econ. Taxon. Bot.* 27(4): 964-971.

Abst.- The paper represents folk-medico-botanical prescriptions of 53 plant species, out of which 51 species of angiosperms and 2 species of ferns. All these plants are used to the traditional herbal medicinal practices among the different communities of Barak valley (Southern Assam). Altogether 66 prescriptions are described here along with, 17 new processes of utilization. Different diseases covered in this paper include both human and veterinary viz. dysentery, gastric troubles, gynaecological problems, haemorrhagic septicaemia (HS), respiratory diseases, sexual disorders, skin diseases, taeniasis etc.

277. Nath, K.K., Deka, P. & Borthakur, S.K. 2007. "Ethnomedicinal aspect of some weeds from Darrang district of Assam". *Ethnobotany* 19(1&2): 82-87.

Abst.- The ethnic people of Darrang district have rich tradition of using weeds for various purposes in their day to day life including their healthcare needs. In the present study an attempt has been made to record the ethnomedicinal uses of 38 species of weeds used by different ethnic groups.

278. Nath, S.C. & Barua, I.C. 1994. "A rare *Cinnamomum* (*C. sulphuratum* Nees) discovered in Assam". *J. Econ. Taxon. Bot.* 18(1): 211-212.

Abst.- During a collection trip to North Cachar Hills of Assam, a rare species *C. sulphuratum* Nees was collected by authors. This species is reported for the first time from Assam state, thus extending its range of distribution from Southern parts of India particularly in Western Ghats, Nilgiris, Hassan district of Mysore and Anamalais.

279. Pandey, Ashok K. & Bora, H.R. 1997. "Edible plants of Shan tribe of Assam". *Ancient Sci. Life* 16(4): 258-276.

Abst.- The paper presents an accounts of wild edible food plants used by the Shan tribe of Assam. The Shan tribe of Assam is Sino-Tibeto race of Mongoloid stock whose ancestors migrated from South-West China. They depend upon forests products for their day to day

needs, i.e. food, fodder and shelter etc. Their food includes leaves, tubers, bulbs, rhizomes, flowers, fruits and seeds of various wild plant species which they collect from the forest. The present study was conducted during the year 1991-94 in Golaghat, Karbi-Anglong, Lakhimpur, Dibrugarh and Jhorat districts of Assam. About 143 plants species were collected which are being used by Shan tribe as their supplementary source of food material.

280. Pandey, Ashok K., Bora, H.R. & Deka, S.C. 1996. "An ethno-medico-botanical study of Golaghat district, Assam: native plant remedies for jaundice". *J. Econ. Taxon. Bot., Addl. Ser.* 12: 344-349.

Abst.- The paper presents an account of medicinal plants used to cure jaundice by Shan and Bodo tribes of Golaghat district of Assam. The data have been gathered from the tribal medicine men in different villages of the district. Based on our ethno-medico-botanical exploration conducted in the area total 23 species of ethnomedicinal plants under 23 genera and 18 families are collected. Plant species are arranged alphabetically along with their family and local name, part used, traditional preparation, mode of use, mode of traditional collection and availability in the state.

281. Panigrahi, G. & Kar, S.K. 1966. "The family Compositae in Assam and North East Frontier Agency". *Bull. Bot. Surv. India* 8(3 & 4): 228-236.

Abst.- The paper presents the distribution and relative abundance of 167 taxa belonging to 47 genera of the Compositae in Assam and North East Frontier Agency. The family is best represented in the tropical evergreen and semi-evergreen and again, in subtropical pine and mixed forests; it is much less abundant in temperate altitudes, very rarely extending up to sub-alpine zone in NEFA. Of the species enumerated, the number of species found common to other countries are indicated against each: Burma (45), Malaya (16), Java (25), China (25), Japan (24), Ceylon (21), Philippines (7), Africa (17), Australia (5), Europe (5) and America (5).

Ambrosia artemisiifolia Linn., *Eupatorium trapezoideum* Kunth, *Erigeron annuua* Pers. and *Petasites albus* Gaertn. appear to be new records of species for India. On the other hand, these species viz. *Ainsliaea angustifolia* Hook.f. & Thoms., *Brachycome assamica* Clarke, *Cnicus griffithii* Hook.f., *Inula kalapani* Clarke etc. appear to be endemic to Assam and NEFA.

282. Panigrahi, G. & Kataki, S.K. 1966. "New records of plants for India: Orchids II". *Bull. Bot. Surv. India* 8: 87-88.

Abst.- Four species of orchids viz., *Dendrobium chrysotoxum* Lindl., *D. pendulum* Roxb., *Coelogyne carnea* Hook.f. and *Sarcochilus hystrix* Reichb.f. have been recorded from India for the first time.

283. Pathak, K.C. 1999. "Note on the occurrence of *Eriocaulon setaceum* from Assam". *Indian J. Forest.* 22(2): 189-190.

Abst.- The present paper records the occurrence of *Eriocaulon setaceum* L. as new to Assam along with description, correct nomenclature, ecology, distribution and flowering and fruiting period.

284. Prasad, Nagendra P. & Abraham, Z. 1982. "Chromosome study of a seeded banana from Assam". *Indian J. Forest.* 5(2): 90-91.

Abst.- Karyological feature of *Musa balbisiana* Colla has been analyzed and discussed. The somatic complement shows 2n= 22.

285. Purkayastha, Jubilee, Dutta, Malakshmi & Nath, Subhan C. 2007. "Ethnomedicinal plants from Dibru-Saikhowa Biosphere Reserve, Assam". *Indian J. Traditional Knowledge* 6(3): 477-480.

Abst.- An account on medicinal usage of 61 plant species traditionally used as folk medicine to treat different ailments by the inhabitants of Dibru-Saikhowa Biosphere Reserve in Northeast India has been reported. For each plant species, local names, parts used, purpose of use, processing and mode of administrations are indicated.

286. Purkayastha, Jubilee & Nath, Subhan C. 2006. "Biological activities of ethnomedicinal claims of some plant species of Assam". *Indian J. Traditional Knowledge* 5(2): 229-236.

Abst.- Folklore medicinal uses and biological activities of some plant species growing wild in Assam of North-East India were studied based on the review of literature reports. An account of 65 plant species indicating positive correlation between their folklore claims and biological activities were reported in this communication. For each plant species described, botanical name, local names(s), parts used and folklore claim, and biological activities were given. The present study not only revealed the authenticity of traditional knowledge of the people of Assam on utilitarian aspects of these plant species but also indicated the possibility of utilizing them for greater economic use.

287. Rahman, H. 2007. "Diversity of Rattans canes in Assam and their conservation". *J. Econ. Taxon. Bot.* 31(4): 907-912.

Abst.- Rattans or canes are the commercially important non-timber forest produce (NTFP). About 60 species under 5 genera, viz., *Calamus, Daemonorops, Korthalsia, Plectocomia* and *Zalacca* have been reported, out of which North East India alone accounts for 4 genera and 25 species. This paper presents results of recent survey done on rattans in different districts of Assam and reviews the distribution of different species in entire North East region of India. Altogether 14 species under 4 genera, namely *Calamus, Daemonorops, Plectocomia* and *Zalacca* have been recorded. The present status of Rattans in the state is also recorded basing on the IUCN Red List Criteria Review 1999 and 2000 (Species Survival Committee Provisional Report). Three species of Rattans reported during earlier survey (*Calamus khasianus, Plectocomia bractealis* & *P. himalayana*), could not be located in Assam. Conservation strategies for rattans in the region have been suggested.

288. Rahman, M.A. & Wilcock, C.C. 1989. "Notes on tropical Asian Asclepiadaceae-II". *J. Econ. Taxon. Bot.* 13(1): 181-185.

Abst.- A new species of *Gymnema* is described from Lushai hills (Assam), India; a new combination in the genus *Wattakaka* is made and a lectotype for it proposed; a new variety of *Tylophora indica* (Burm. f.) Merr. is described from the Indian subcontinent.

289. Rao, A.S. & Deori, N.C. 1973. "*Galeola altissima* (Bl.) Reichb.f.- First report of its occurrence in India, from North Cachar Hills, Assam". *Bull. Bot. Surv. India* 15(1-4): 123-125.

Abst.- The occurrence of *Galeola altissima* (Bl.) Reichb.f. in the wild condition has been reported for the first time in India from North Cachar Hills, Assam.

290. Rao, A.S. & Hajra, P.K. 1974. "*Eulophia mannii* Hook. f.- A scarcely known ground orchid from Assam". *Bull. Bot. Surv. India* 16(1-4): 156-157.

Abst.- During a botanical exploration to the Manas Wildlife Sanctuary, Kamrup district, a species of *Eulophia* viz., *E. mannii* was collected which is a new record for Assam. A detailed description along with correct nomenclature, flowering and specimen examined have been given.

291. Rao, A.S. & Hajra, P.K. 1976. "*Polypleurum stylosum* (Wt.) J.B. Hall (Podostemonaceae) in Kamrup district, Assam with taxonomic notes and a new combination". *Bull. Bot. Surv. India* 21(1-4): 192-195.

Abst.- *Polypleurum stylosum* (Wt.) J.B. Hall of the family Podostemonaceae has been collected from Kulsi river at Ukiam, Kamrup district, Assam and it constitutes a new record of distribution for the state. A new combination has also been made in *Polypleurum*.

292. Rao, A.S. & Joseph, J. 1968. *"Pennilabium proboscideum* A.S. Rao & Joseph – A new orchid species from K. & J. Hills, Assam, with incidental first record of the genus for India". *Bull. Bot. Surv. India* 10(2): 231-233.

Abst.- A new species of orchid namely, *Pennilabium proboscideum* has been described from Umran and Umsaw beside the Gauhati-Shilong road from K. & J. Hills, Assam. This also constitutes a new generic record of *Pennilabium* to India.

293. Rao, A.S. & Joseph, J. 1969. "*Thrixspermum muscaeflorum* A.S. Rao & J. Joseph- A new orchid species from K. & J. Hills, Assam". *Bull. Bot. Surv. India* 11(1&2): 204-205.

Abst.- A new species of orchid viz., *Thrixspermum muscaeflorum* has been described from Umrana and Umsaw, K. & J. Hills, Assam.

294. Rao, A.S. & Rabha, L.C. 1966. "Contribution to the botany of Kamrup district (Southern part), Assam". *Bull. Bot. Surv. India* 8(3&4): 296-303.

Abst.- This is an account of the vegetation and an enumeration of the vascular plants of the southern part of Kamrup district, Assam, the area lying between the Khasia hills and the Brahmaputra river, based upon a three weeks collection and study in June and October.

295. Rao, A.S. & Verma, D.M. 1968. "*Gonatanthus* Klotzsch in Khasia and Jaintia Hills, Assam". *Bull. Bot. Surv. India* 10(3&4): 353-357.

Abst.- The genus *Gonathathus* Klotz. including only two species, both occurring in Khasia & Jaintia Hills has been discussed after a detailed study of live plants and herbarium specimens. Apart from description and documentation of specimens, notes on variations and confusions in literature, are added, including a *de novo* description of the hitherto unknown spadix of *G. ornatus* Schott. The two new species are illustrated with analytical drawings.

296. Rao, A.S. & Verma, D.M. 1969. "Notes on *Hedychium* Koenig, including four new species from Khasia and Jaintia hills, Assam". *Bull. Bot. Surv. India* 11(1&2): 120-128.

Abst.- Four new species of *Hedychium* Koenig: *H. calcaratum, H. dekianum, H. gracillimum* and *H. rubrum* are described from K. & J. Hills, Assam with analytical illustrations. Critical additional descriptive notes are also included in respect of a few other species.

297. Rao, A.S. & Verma, D.M. 1969. "Notes on Zingiberaceae from Assam". *Bull. Bot. Surv. India* 11(3&4): 245-248.

Abst.- These notes based on a study of live plants and related herbarium material include the description of the hitherto unknown vegetative phase of *Amomum pauciflorum* Baker; distribution of *Amomum corynostachyum* Wall.; detailed description of *Hornstedtia loroglossa* (Gagnep.) Schum. and additional remarks on *Globba clarkei* Baker, *Kaempferia involucrata* King ex Baker and *Mantisia saltatoria* Sims.

298. Rao, A.S. & Verma, D.M. 1969. "*Parakaemferia synantha* (Zingiberaceae)- A new genus and species from Assam". *Bull. Bot. Surv. India* 11(1&2): 206-208.

Abst.- A new species of *Parakaempferia* viz., *P. synantha* A.S. Rao et D.M. Verma has been described from Kana river, Chaldhowa, N. Lakhimpur, Assam. The genus also constitutes a new record for India.

299. Rao, A.S. & Verma, D.M. 1969. "Contribution to the botany of North Lakhimpur subdivision, Assam". *Bull. Bot. Surv. India* 11(3&4): 403-413.

Abst.- An account of the vegetation with an enumeration of 604 species of vascular plants from North Lakhimpur subdivision in Upper Assam, based on a fortnight's collection of the junior author in May 1966 and three previous collections by authors. The account emphasises the aquatic vegetation of the area.

300. Rao, A.S. & Verma, D.M. 1970. "Materials towards a monocot flora of Assam (Hydrocharitaceae & Burmanniaceae)". *Bull. Bot. Surv. India* 12(1-4): 139-143.

Abst.- Preliminary taxonomic studies on 2 (two) families of monocotyledons of Assam (Hydrocharitaceae and Burmanniaceae) are presented here. These studies will form the materials for a Monocot flora of Assam.

301. Rao, A.S. & Verma, D.M. 1971. "*Curcumorpha*- A new genus of Zingiberaceae". *Bull. Bot. Surv. India* 13(3&4): 339-341.

Abst.- A new genus *Curcumorpha* belonging to the family Zingiberaceae has been described from Gharbhanga forest near Gauhati. A new combination *Curcumorpha longifolia* (Wall.) A.S.

Rao & D.M. Verma has also been made.

302. Rao, A.S. & Verma, D.M. 1972. "Materials towards a monocot flora of Assam-II (Zingiberaceae & Marantaceae)" *Bull. Bot. Surv. India* 14(1-4): 114-143.

Abst.- The families Zingiberaceae and Marantaceae in the above series are presented in this paper.

303. Rao, A.S. & Verma, D.M. 1973. "Materials towards a monocot flora of Assam-III (Taccaceae, Dioscoreaceae and Stemonaceae)". *Bull. Bot. Surv. India* 15(3&4): 189-203.

Abst.- In continuation with the previous publications in the bulletin, preliminary taxonomic studies on three more families of monocotyledons of Assam region (Taccaceae, Dioscoreaceae and Stemonaceae) are presented here.

304. Rao, A.S. & Verma, D.M. 1974. "Materials towards a monocot flora of Assam-IV (Pontederiaceae, Xyridaceae and Commelinaceae)". *Bull. Bot. Surv. India* 16(1-4): 1-20.

Abst.- In continuation to the previous publications on the monocot flora of Assam, this paper deals with the families Pontederiaceae, Xyridaceae and Commelinaceae.

305. Rao, A.S. & Verma, D.M. 1976. "Materials towards a monocot flora of Assam-V". *Bull. Bot. Surv. India* 18(1-4): 1-48.

Abst.- Further to earlier contributions in previous issues of this bulletin, twelve more families of the monocotyledons of Assam: Flagellariaceae, Juncaceae, Typhaceae, Sparganiaceae, Arecaceae, Lemnaceae, Triuridaceae, Alismataceae, Butomaceae, Aponogetonaceae, Potamogetonaceae and Eriocaulaceae are presented here. The account includes keys to identification, description, distribution and notes for 36 genera and 106 species, as materials towards a monocot flora of Assam.

306. Rao, A.S. & Verma, D.M. 1980. "Notes on Cyperaceae of Assam". *Bull. Bot. Surv. India* 22(1-4): 80-90.

Abst.- The paper includes, as addition to the Indian flora, *Carex eleusinoides* Turcz. ex Kunth, *Fimbristylis fimbristyloides* (F.v. Muell.) Druce and *F. yunnanensis* Clarke. Six species have been recorded as new to the Assam region. On examination of mature specimens, *Carex fuscifructus* Clarke has been proved to be a distinct species. Mistakes have been pointed out on the reported occurrence in India of *Carex lachenalii* Schkuhr, *C. prainii* Clarke and *Juncellus stylosus* Clarke. Doubts have been raised on the distinctivity of several taxa, and biosystematic studies have been suggested to solve some of the complexes. A list of twelve species and one variety endemic to Assam region, and miscellaneous notes on some other taxa have also been included.

307. Rao, G.V.S. 1963. "A new species of *Polygonum* from Assam". *Bull. Bot. Surv. India* 5(3 & 4): 257.

Abst.- A new species of *Polygonum* named *P. glandulosum* Subba Rao, collected from the sandy bank of Sarbhanga river, Goalpara, Assam by Shri R.S. Rao (*Rolla Seshagiri Rao* 7162 A) has been described with the illustrations.

308. Saharia, U.K. & Sen, S.K. 1990. "Growth and yield of cane (*Calamus tenuis* Roxb.) in Assam". *Indian Forester* 116(4): 303-305.

Abst.- There is significant difference in the total number as well as the total length of cane (*Calamus tenuis* Roxb.) obtained from per unit area at different harvesting cycle. Maximum number as well as length of cane could be obtained from two years harvesting cycle. Cane attains its maximum growth within two years and after that growth rate deteriorates considerably.

309. Saikia, B. 2006. "Ethnomedicinal plants from Gohpur of Sonitpur district, Assam". *Indian J. Traditional Knowledge* 5(4): 529-530.

Abst.- The paper describes the traditional knowledge related to ethnomedicine of different communities of Gohpur of Sonitpur district of Assam state. Population of the study area is

mainly dominated with *Assamese, Bodo, Mishing, Napali* and *Santhal* communities. Information was collected on the basis of interview and observation with local healers, generally known as *Bej* (*Vaidya*). All together 22 prescriptions were recorded from 20 plant species belonging to 17 families.

310. Saikia, L.R. & Sarma, S.K. 1996. "Phytosociological investigation of the rice field weeds of Duliajan (Assam)". *Indian J. Forest.* 19(1): 40-44.

Abst.- A phytosociological study of summer and winter weeds conducted in the rice fields of Duliajan during May, 1985 to April, 1987 and Importance Value Index (IVI) determined for all these. There were 93 species in summer and those having IVI values more than 10 were *Ageratum conyzoides* (21.44), *Polygonum hydropiper* (18.97), *Ludwigia parviflora* (17.61), and *Paspalum scrobiculatum* (13.37) and 16 species were having IVI values less than 2. Out of 74 species found in winter those having IVI values more than 10 were *Ischaemum albens* (18.55), *Aeschynomene aspera* (14.83), *L. parviflora* (11.63), *Heliotropium indicum* (11.38), *Digitaria sanguinalis* (10.66), *Hydrocotyle rotundifolia* (10.51), *P. hydropiper* (10.41) and *Scirpus* sp. (10.30). There were 24 species in winter having IVI values less than 2.

311. Saikia, Nabin & Nath, S.C. 2003. "Ethnomedicinal observations of some species of the genus *Curcuma* Linn. growing in Assam". *J. Econ. Taxon. Bot.* 27(2): 430-433.

Abst.- The genus *Curcuma* Linn. is ethnomedicinally more important. Mainly, the rhizome part of the plant is used largely as medicines and nutrients. The present paper deals with the ethnomedical significance of six species of *Curcuma* growing in Assam.

312. Saikia, Nabin & Nath, Subhan C. 2003. "Indigenous practice of treating dental disorders in Assam". *J. Econ. Taxon. Bot.* 27(2): 496-499.

Abst.- The paper deals with ethno-medicinal use of 22 plant species occurring in Assam and used by local people as traditional medicine for dental disorders. The method of preparation and doses of administration of crude drugs as suggested by traditional practitioners are mentioned.

313. Saikia, Nabin & Nath, Subhan C. 2003. "Traditional use of some plants in religio-cultural purposes by 'Koch' community in Assam, India". *J. Econ. Taxon. Bot.* 27(4): 997-1001.

Abst.- The present communication is based on the plants associated with religio-cultural purposes of the 'Koch' community of Assam. 38 plants related to the various religious and cultural traditions are described following their botanical, family and vernacular names; religious values and parts used. Various plant parts like bark, wood, branch and leaf, flower, fruit and seed are used for various purposes. The medicinal values of the plants are also described along with their active principle.

314. Sarma, S.K. 1990. "Floristic composition and phytosociological studies of a herbaceous community at Dibrugarh". *Indian J. Forest.* 13(4): 273-280.

Abst.- In the present paper 68 angiospermic species have been reported from a herbaceous plant community. Of the total species 70.5 percent are annual and 29.4 percent perennial species. Flowering takes place in maximum species (41.1 percent) in rainy-wet period. But fruiting period in maximum species (45.5 percent) extends from rainy-wet to dry period. In 16.1 percent species both flowering and fruiting takes place throughout the year. Propagation only by seeds takes place in 73.5 percent species whereas dual method of production, i.e., by seeds and vegetative method takes place in 22.0 percent species. In the study site *Eupatorium odoratum* L. is the most dominant species. Species having dual method of reproduction are more dominant in the site.

315. Sarma, S.K., Bevi, B. & Bhattacharjya, D.K. 2006. "Ethnomedicinal uses of plants by the Sarania tribe of Nalbari district of Assam". *J. Econ. Taxon. Bot.* 30 (Suppl.): 133-139.

Abst.- The paper presents 51 species of medicinally important plants most commonly used by the Sarania tribe in different localities of Nalbari district, Assam. In the enumeration, the plant species used against different physical ailments are enlisted alphabetically with their respective

families in parenthesis, followed by local names, localities, voucher specimen numbers, plant parts used and also forms of preparation, methods of use and prescribed doses for curing different human ailments. It has been observed that no ethnobotanical work has been done on the Sarania tribe of Assam so far.

316. Sarma, S.K., Bhattacharjya, D.K. & Devi, B. 2002. "Traditional use of herbal medicines by Madahi tribe of Nalbari district of Assam". *Ethnobotany* 14(1&2): 103-111.

Abst.- Ethno-medicinal plants used by Madahi tribe of Nalbari district in Assam are recorded in this paper along with their uses against different diseases. The medicinal utilities of the plants described and used by the Madahi tribe are not recorded earlier from the present study site.

317. Satyanarayan, G. 1962. "Hydrophyte vegetation of Jhalukbari". *Bull. Bot. Surv. India* 4(1-4): 217-218.

Abst.- A study of hydrophyte vegetation of Jhalukbari village, situated on the Assam Trunk Road between Maligaon and Hatmari is made and the plants are enumerated and arranged under the system of classification of Bentham and Hooker.

14 dicot families with 27 species and 12 monocot families with 38 species are presented. In all monocots exceed the dicots in number, though more dicot families are present. Among the monocots Cyperaceae is the largest with 9 species, while Nymphaeaceae and Scrophulariaceae rank first and second among the dicots with 6 and 5 species respectively.

318. Sharma, G.D., Bhattacharjee, S., Sinha, M. & Das, A.K. 2002. "Status of plant bio-diversity of Cachar district & its' conservation". *J. Econ. Taxon. Bot.* 26(1): 94-101.

Abst.- A study was carried out to investigate the status and richness of plant bio-diversity of Cachar district. A large varieties of higher and lower plant species were collected from natural habitats which exhibited various kinds of diversities. The bioplant diversities included species diversities, genetic diversity and ecosystem diversity which were influenced by various biotic and abiotic factors.

Among the microbial groups *Nostoc, Anabaena, Oscillatoria, Spirogyra, Cladophora, Zygnema* and *Oedogonium* were dominant in fresh water. The agricultural crops and vegetables of Cachar district also showed a rich varieties of certain pathogenic fungi such as *Colletotrichum falcatum, Phytopthora infestans, Pyricularia oryzae, Puccinia graminis, Alternaria solani* and *Peronospora parasitica*.

Among bryophytes most dominant genera were *Riccia, Marchantia, Porella, Polytrichum* and *Taxithalium*. Survey works have also been taken up on fern vegetation among pteridophytes and most common species were *Pteris semipinnata, Angiopteris evecta, Adiantum* sp. and *Pyrrosia adnascens, Dicranopteris linearis, Lygodium flexuosum*. Among angiospermic plants, family like Asteraceae, Leguminosae (Fabaceae) and Malvaceae were the most dominant compared to others.

Certain medicinal plants used by the ethnic groups of Cachar district were also studied. Human activities like deforestation, construction of roads and disturbances of wetlands were main cause to affect the bio-diversity.

319. Sharma, U.K. 1999. "Folk and herbal medicine among Nepalese of Assam". *J. Econ. Taxon. Bot.* 23(2): 599-603.

Abst.- Thirty six native plant remedies are reported for the treatment of different diseases prevalent among the Nepalese of Assam during the ethnobotanical survey conducted during 1994-1996 along with the local names of the plants and the methods.

320. Singh, J., Barua, Kuntala N. & Hazarika, P. 2004. "Analysis of plant communities during secondary succession after "Jhum" at Karbi Anglong district of Assam, North-East India". *India J. Forest.* 27(1): 83-87.

Abst.- The present study highlights the community diversity and dominance spectrum of species in four abandoned shifting cultivation fallows in Karbi Anglong (Assam) of north-east India. In

the study area 51 species belonging to 24 families were recorded as a component of fallow lands. *Lantana camara* and *Chromolaena odorata* showed their dominance in 5 and 10 years fallow with highest Importance Value Index (136.52 and 33.37 in 5 years, 18.97 and 53.52 in 10 years fallow, respectively). Gradual elimination of *Imperata cylindrica* from higher age fallows was noticed. Bamboo species, *Dendrocalamus hamiltonii* and *Melocanna baccifera* expressed their dominance in 15 to 20 years fallows. The fallow vegetation was replaced by shade intolerant broad-leaved species like *Actinodaphne obovata, Artocarpus* spp., *Callicarpa arborea, Dysoxylum procerum, Erythrina stricta* etc. during 10 to 20 years period as a form of secondary forest. Species diversity increased from 5 years fallow onward with maximum in 15 years fallow and declined later on. The highest similarity was observed in the fallow pair of 15-20 years.

321. Singh, J., Bhuyan, T.C. & Ahmed, A. 1996. "Ethnobotanical studies on the Mishing tribes of Assam with special reference to food and medicinal plants-I". *J. Econ. Taxon. Bot.*, *Addl. Ser.* 12: 350-356.

Abst.- In this paper 65 species of plants of ethnobotanical importance used by the Miris of the Mishing tribes of Jorhat district in Assam as food and medicine are being incorporated. The Miris are the distinct group of Tibeto-Burman family of Mongolian group distributed along the river Brahmaputra and its tributaries in the Upper Assam. The valuable information regarding utilities of plants together with botanical names, local names and field numbers are also given.

322. Singha, A.K., Talukdar, R.K. & Singha, J.K. 2006. "Maintenance behaviour of forest resources by the people of forest villages in Assam". *Indian J. Forest.* 29(1): 47-54.

Abst.- The study was conducted in Golaghat Forest Division of Assam with 203 respondents selected from all the 14 forest villages under the division by using proportionate random sampling. The study reveals that majority (81.77%) respondents had low level of participation in selected maintenance practices of forest resources. People in forest villages had commonly involved in maintenance practices like soil working, weeding and cleaning. The study further shows that the variables-education, family size, localiteness-cosmopoliteness, economic motivation, decision making ability, interest of forestry, information seeking behaviour, forestry knowledge and attitude towards forest resource conservation had shown positively significant relationship with the extent of participation in maintenance practices of forest resources.

323. Tamuli, P. & Saikia, R. 2004. "Ethno-medico-botany of the Zeme tribe of North Cachar Hills district of Assam". *Indian J. Traditional Knowledge* 3(4): 430-436.

Abst.- Folklore medicinal uses of 33 plant species belonging to 22 families for various ailments among the Zeme Nagas, one of the prominent ethnic tribes of North Cachar Hills district of Assam, India is reported. The study was undertaken during 1999-2000 covering the area of Zeme inhabiting villages of N.C. Hills district of Assam.

324. Teron, Robindra. 2005. "Bottle Gourd: Part and parcel of Kabri culture". *Indian J. Traditional Knowledge* 4(1): 86-90.

Abst.- Bong, gourd shell (*Lagenaria siceraria* Standl.) is essentially an integral part of Karbi culture and regularly used during Adam-asar or marriage and worships. The seeds of bottle gourd are believed to have been gifted by a Karbi God, Songsar Recho, the creator to the ancestor of the Karbis and till today gourd seeds are considered as one of the assets of the tribe. Songsar Recho is also considered as the custodian of all crops. Investigation further revealed that before the introduction of Bong into Karbi society, a fruit of Nong-nong (*Thunbergia grandiflora* Roxb.) was used as Bong for storing *Horlank* or rice beer and leaves of Phle-phle (*Premna latifolia* Roxb.) were rolled into cones and used as *Lankponk* (traditional drinking pot made out of bamboo) during marriage. Probably it was a symbolic exercise performed by a learned Karbi to demonstrate the use of *Bong* during marriage. The present work enumerates data collected from Chinthong region particularly around Baithalangso where gourd shells are believed to have taken its root.

325. Uddin, Amad & Phukan, Sandhyajyoti. 2007. "Notes on *Begonia arborensis* Dunn.- A new record from Assam, India". *J. Econ. Taxon. Bot.* 31(1): 160-162.

Abst.- *Begonia arborensis* Dunn. (Begoniaceae) is reported from Assam for the first time, hitherto known as endemic to the Abor Hills, Arunachal Pradesh. Critical taxonomic notes, illustration and its distinction from the allied species *Begonia silletensis* (A. DC.) C.B. Clarke are provided.

MANIPUR

326. Ahmed, M.M. & Singh, P.K. 2007. "Traditional knowledge system of the Muslim community in Manipur". *Indian J. Traditional Knowledge* 6(2): 383-389.

Abst.- The Muslim of Manipur state is commonly known as *Pangal* or *Meitei-Pangal*. Prefixing of *Meitei* to the word *Pangal* exemplifies the strong relationship between the two communities. The paper provides information on the use of plants and plant parts, which carry ethnobotanical significance in respect of common socio-religious activities of this minority community encompassing from the birth till death. It deals with 17 plant species belonging to 15 genera and 11 families closely associated with 9 categories of the formalities of socio-religious functions, customs, etc. The present investigation aims at the validity of the Traditional Knowledge System practiced and also focused on the activism concerning conservation of plants through the practices of socio-religious functions of *Pangal* community.

327. Akimpou, G., Rongmei, K. & Yadava, P.S. 2005. "Traditional dye yielding plants of Manipur, North East India". *Indian J. Traditional Knowledge* 4(1): 33-38.

Abst.- Manipur is one of the richest states in plant biodiversity in the North Eastern states of India. Different ethnic groups, residing in Manipur before the introduction of the chemical dyes into the state, used the dyes extracted from the plants. The survey was undertaken during 2002-2003 in different parts of Manipur. Eighteen traditional dye yielding plants belonging to sixteen families have been reported, which different ethnic communities of Manipur use for dyeing the cloth and other items.

328. Chakraborty, Paritosh. 1999. "A brief account on floating National Park- The Keibul Lumjao in Manipur". *J. Econ. Taxon. Bot.* 23(3): 729-732.

Abst.- The paper presents a brief account on the Keibul Lumjao National Park of Manipur state which is the only floating National Park in India. Flora and fauna of the National Park have been presented in brief.

329. Chakraborty, Paritosh. 2002. "Wild edible plants sold in the daily market in and around of Imphal, Manipur". *J. Econ. Taxon. Bot.* 26(3): 657-661.

Abst.- Ethnobotanical information of 47 wild species of edible plants sold in different markets of Manipur in spring and autumn are treated in this paper.

330. Chakraborty, Paritosh. 2003. "Wild edible plants sold in the daily market in and around of Imphal, Manipur". *J. Econ. Taxon. Bot.* 27(2): 481-485.

Abst.- Ethnobotanical information of 47 wild species of edible plants sold in different markets of Manipur in spring and autumn are treated in this paper.

331. Choudhury, Dutta M. & Shil, Sanjib. 2006. "Some traditional anti-hepatitis plants used by the people of Manipur". *J. Econ. Tax. Bot.* 30 (Suppl.): 289-293.

Abst.- India is known as the house of variety of traditional healing practices. Different indigenous systems of medicine of the country, viz. Ayurvedic, Siddha and Unani, have been in existence for several centuries. These systems of medicine satisfy the needs of around 70% population of the country residing in the villages and remote areas, and the root of all these three systems is the traditional knowledge of the people about medicinal plants. In the present study 28 species used as anti-hepatitis, belonging to 28 genera and 23 families, are recorded on the basis of the report of the traditional medical practitioners of Manipur.

332. Deb, D.B. 1961. "Monocotyledonous plants of Manipur territory". *Bull. Bot. Surv. India* 3(2): 115-138.

Abst.- This paper gives an account of the monocotyledonous plants growing in Manipur. In all 426 (+8 varieties) representing 219 genera and distributed over 33 families have been dealt

with. Hutchinson's system has been followed in arranging the families. Efforts have been made to find out the correct names in accordance with the latest International Code of Botanical Nomenclature. Only relevant and commonly used synonyms have been cited wherever required, immediately below the valid names. Citation of the original publication of the valid name has been made excepting several cases where the original paper concerned was not available to the author, for scrutiny.

A short description indicating the characteristic of the species has been given. A short ecological note has been added. In citation of the herbarium specimens, preference has been given to the author's personal collection. Other's collections have not been cited completely. Species recorded by earlier workers from Manipur, but not examined by the author have also been cited in this paper.

333. Deb, D.B. 1961. "Dicotyledonous plants of Manipur Territory". *Bull. Bot. Surv. India* 3(3&4): 253-350.

Abst.- This paper gives an account of the dicotyledonous plants occurring in Manipur. In all 1535 (+40 varieties) representing 743 genera distributed over 165 families have been dealt with. Hutchinson's system has been followed in arranging the families whereas the genera and species within the family have been arranged in alphabetical order. Efforts have been made to find out the correct names in accordance with the latest International Code of Botanical Nomenclature. Only commonly used synonyms have been cited wherever required. Citation of the original publication of the valid name has been made excepting cases where the original paper concerned was not available to the author, for scrutiny.

A short note indicating the characteristics of the species has been given. A short ecological note has been added. In citation of the herbarium specimens, preference has been given to author's personal collection. Other's collections have not been cited completely. Species recorded by the earlier workers from Manipur, but not examined by the author have also been cited in this paper.

334. Devi, Padmabati S. & Singh, P.K. 2007. "Rattan of Manipur: Three new records for the state". *J. Econ. Taxon. Bot.* 31(2): 460-463.

Abst.- Additional distribution records of three *Calamus* L. species from Manipur state are presented in the paper. The species are *Calamus guruba* Buch.-Ham. from Imphal district, *Calamus longisetus* Griff. and *C. viminalis* Willd. from Churachandpur district. The study comprises detail description, distribution, importance value index (IVI), phenology and taxonomy of the newly recorded cane species from Manipur.

335. Dixit, R.D. & Ghosh, J.P. 1978. "*Diplazium pin-faense* Ching- A new record of fern for India". *Bull. Bot. Surv. India* 20(1-4): 160-161.

Abst.- The paper records for the first time the occurrence of *Diplazium pin-faense* Ching in India from Manipur.

336. Dixit, R.D. & Ghosh, R.K. 1978. "Three species of fern genus *Colysis* Presl (Polypodiaceae) new to India". *Bull. Bot. Surv. India* 20(1-4): 100-102.

Abst.- Three species of fern genus *Colysis* Presl viz., *C. digitata* (Bak.) Ching, *C. longisora* (Bak.) Ching and *C. pentaphylla* (Bak.) Ching have been collected from Manipur and are being reported for the first time from India. A revised key to the Indian species of the genus *Colysis* Presl section *Dictyogramme* Presl, has been provided.

337. Elangbam, J.S., Yadava, P.S. & Thingbaijam, B.S. 1989. "Ethnobotanical study of the Tangkhul Naga tribe of Ukhrul, Manipur". *J. Econ. Taxon. Bot.* 13(1): 11-16.

Abst.- This paper deals with the ethnobotanical survey of Tangkhul Naga tribe of Ukhrul district of Manipur state, India. Location, climate, ethnology, history of ethnobotanical studies and methodology are mentioned. The 36 species which are being used by the tribe in their daily life such as medicine, food, fibres and shelter have been described and discussed in details.

338. Ghora, Chhabi. 2007. "*Sorbus sujoyi* Ghora (Rosaceae)- A new species from North East

India". *Bull. Bot. Surv. India* 49(1-4): 199-200.

Abst.- The new species *Sorbus sujoyi* Ghora has been described from Naga Hills, Manipur, North East India.

339. Ghosh, B. & Dixit, R.D. 1985. "*Lindsaea chienii* Ching: a fern new to India". *Bull. Bot. Surv. India* 27(1-4): 243.

Abst.- Based on the recent collection from Manipur in the year 1984, *Lindsaea chienii* is reported here as a new record for India.

340. Ghosh, S.R. & Ghosh, Basab. 1984. "*Diplazium cordifolium* Bl.- A new fern record for India". *J. Econ. Taxon. Bot.* 5(4): 980.

Abst.- The occurrence of *Diplazium cordifolium* Bl. in Manipur constitutes a new record for India.

341. Jain, Alka, Roshnibala, S., Kanjilal, P.B., Singh, R.S. & Singh, Birkumar H. 2007. "Aquatic/semi-aquatic plants used in herbal remedies in the wetlands of Manipur, Northeast India". *Indian J. Traditional Knowledge* 6(2): 346-351.

Abst.- This paper reports on aquatic/semi-aquatic plants from the wetlands of Manipur valley in Northeastern India, which are used to cure various diseases. Empirically formulated and accepted prescriptions by the various ethnic communities of Manipur for curing 45 ailments by using 43 aquatic-semi-aquatic plant species are presented along with method of preparation, prescribed doses and administration, which were recorded from the local healers and responses obtained by the patients. Out of the 43 aquatic/semi-aquatic medicinal plants recorded, 20 plants are regularly used as vegetables in Manipur and among them 13 are sold in the market. Some of the healers sell their formulated herbal products in the market.

342. Khan, M.R., Yadava, P.S. & Kikim, A. 2007. "Addition to the flora of Manipur". *Bull. Bot. Surv. India* 49(1-4): 215-218.

Abst.- The present paper deals with 15 plant species (sedges and grasses) collected from different parts of Imphal Valley during field explorations from 1997-1998 and from 2003-2004. These plants have not been reported earlier. Locality, altitude, date of collection, field number and local name in Manipur have been provided against each species.

343. Khan, Mohd. Habibullah & Yadava, P.S. 2007. "Ethnomedicinal plant species belonging to the family Asteraceae used in Thoubal district of Manipur in North-East India". *Envis Centre Manipur Newslett.* 4(3): 6.

Abst.- The ethnic communities of Thoubal district (latitude 23º45´ N and 24º45´ N and longitude 93º45´ E and 94º15´ E) in Manipur state such as the Meitei, Meitei-Pangal, Naga, Kuki, Lois, Yaithidi etc. have been utilizing commonly available various plant species as a traditional medicine for curing various diseases and ailments. The paper presents the medicinal uses of 29 plant species belonging to the family Asteraceae alike *Ageratum conyzoides* Linn.; *A. nilagirica* (C.B. Clarke) Pamp; *Blumea densiflora* DC.; *Blumeopsis flava* DC.; *Eclipta alba* (Linn.) Hassk.; *Elephantopus scaber* Linn.; *Eupatorium adenophorum* Spreng.; *Helianthus annus* Linn.; *Tagetes erecta* Linn.; *Xanthium strumarium* (Roxb.) Linn. etc. Their botanical name, local name, English name, parts used and mode of application is discussed.

344. Khumbongmayum, Ashalata Devi, Khan, M.L. & Tripathi, R.S. 2005. "Ethnomedicinal plants in the sacred groves of Manipur". *Indian J. Traditional Knowledge* 4(1): 21-32.

Abst.- Ethnobotanical studies carried out in the four sacred groves of Manipur revealed therapeutic applications of 120 plant species representing 106 genera and 57 families. Tree species contributed the maximum having 42% while herbs recorded 33% of the total medicinal plants. These plants are used for a wide range of common ailments like skin disorders, ulcer, rheumatism, bronchitis etc. Majority of the preparations are taken orally in the form of juice extracted from the freshly collected plant parts. Leaves are the major plant parts used for the preparation of medicine by the medicine-men (*Maibas*). Most of the plant parts are harvested from the wild. It has been observed that the species that are scarce locally in the forest due to

various developmental activities, deforestation, over-exploitation, etc. are abundant in the 'sacred groves'. Information on medicinal claims was collected from the elderly people residing in the vicinity of sacred groves and also from the traditional healers called '*Maibas*'. The study described details of botanical identity, family, local name, parts of the plant used, therapeutic uses, and mode of application of the drug.

345. Lal, Jagadish. 1979. "*Frullania tuyamae* Hatt. & Thaith. (Hepaticae) from Manipur (Eastern India)- New to India". *Bull. Bot. Surv. India* 21(1-4): 81-83.

Abst.- While investigating the Hepaticae of Manipur state (23º47´ -25º41´ N and 93º61´ -94º43´ E) collected during February-March 1978, the presence of an interesting species of *Frullania* was noticed. The point of interest centered round the numerous gemmae borne on the margins of dorsal leaf-lobes, a rare feature for the genus *Frullania*. This plant resembles *Frullania tuyamae* Hatt. & Thaith., a species recently instituted by Hattori and Thaithong (1978) from Laos. The species so far known as endemic to Laos is being reported for the first time from India. The present species of *Frullania* is distinctive from all other known species from India in having numerous gemmae restricted to the margins of leaf-lobes and leaf-lobules. The relevant taxonomic features of the plant are also given.

346. Malick, K.C. 1974. "*Melocalamus compactiflorus* Benth. & Hook.f. - New record of flowering in India". *Bull. Bot. Surv. India* 16(1-4): 166-167.

Abst.- On the way from Jakuradhar to Gotaikhal in Manipur the author collected the flower of *Melocalamus compactiflorus* Benth. & Hook.f. Present collection of this bamboo in flowering condition is the second record after 100 years of its first collection from Burma and incidentally the first in India.

347. Malick, K.C. & Safui, B. 1987. "Additions to the flora of Manipur state". *J. Econ. Taxon. Bot.* 10(1): 1-19.

Abst.- This paper records 173 species and 3 varieties in 133 genera under 73 families as addition to the flora of Manipur after Deb (1961). It includes 101 species and 3 varieties in 89 genera under 41 families of dicot, 39 species in 30 genera under 12 families of monocot, 1 species of conifer and 32 species in 23 genera under 19 families of fern and fern allies.

348. Mao, A.A. 1999. "Some symbolic and superstitious botanical folklore about Mao Naga tribe of Manipur (India)". *J. Econ. Taxon. Bot.* 23(2): 625-628.

Abst.- Five plants with symbolic uses and six plants with superstition beliefs in the Mao Naga tribe of Manipur, India, are described for the first time in this paper.

349. Mao, Ashiho A. 1998. "Ethnobotanical observation of rice beer 'Zhuchu' preparation by the Mao Naga tribe from Manipur (INDIA)". *Bull. Bot. Surv. India* 40(1-4): 53-57.

Abst.- Ethnobotanical observation of the preparation of 'Zhuchu'- a local rice beer by the Mao, a Naga tribe from Manipur (India) is being reported. Pounded germinated paddy (Khekhrii) is used as starter for brewing the 'Zhuchu' a popular harmless drink of the Mao Naga tribe.

350. Mao, Ashiho A. & Bhaumik, M. 2007. "Notes on *Lilium davidii* Duchartre- A rare beautiful lily from Manipur, India". *J. Econ. Taxon. Bot.* 31(2): 436-438.

Abst.- A detailed description with citation, illustration and distribution of *Lilium davidii* Duchartre- a rare beautiful lily from Manipur, India is provided herewith to facilitate identification and location of the species elsewhere in the country.

351. Naithani, H.B. & Deva, Som. 1983. "*Pecteilis henryi* Schlechter - Orchid new for India". *Indian J. Forest.* 6(3): 242-243.

Abst.- The paper records for the first time the occurrence of *Pecteilis henryi* in India from Kwakta, Manipur.

352. Naithani, H.B. & Deva, Som. 1984. "*Habenaria mandersii* Collet & Hemsley (Orchidaceae)- A new record for India". *Indian J. Forest.* 7(3): 249-250.

Abst.- The paper records for the first time the occurrence of *Habenaria mandersii* in India from Kwakta, Manipur.

353. Panda, S. 2006. "Notes on *Vaccinium lamellatum* P.F. Stevens (Ericaceae)- An endemic, rare and little known species from Manipur and Nagaland, India". *Indian J. Forest.* 29(4): 399-401.

Abst.- *Vaccinium lamellatum* P.F. Stevens has been rediscovered from the type locality after a lapse of 55 years. The species is recorded for the first time from Nagaland. A detailed description along with its illustration is provided.

354. Potsangbam, Lunalisa, Ningombam, Swapana & Laitonjam, Warjeet S. 2008. "Natural dye yielding plants and indigenous knowledge of dyeing in Manipur, Northeast India". *Indian J. Traditional Knowledge* 7(1): 141-147.

Abst.- The people of Manipur, which lies under the Indo-Burmese region, have been using indigenous dyestuffs from plants since time immemorial, in handicrafts, handlooms, fine arts, etc. There are more than 50 plants species in Manipur, which are used as dyes right from ancient times, before chemical dyes were introduced in the state. *Strobilanthus flaccidifolius* is one such plant being traditionally used by the people of the state for preparing dye. Many tribes and Meitei community of Manipur have been using species like *Parkia javanica, Melastoma malabathricum, Pasania pachyphylla, Solanum indicum, Bixa orellana, Tectona grandis*, etc. The *Maring* tribes still uses the fruit of *Melastoma malabathricum* for staining teeth in dark blackish red; it strengthens the teeth and protects from gum diseases and cavities. These plants are used traditionally in combination with other plants for extraction and preparation of dyes utilizing indigenous processes. The compounds isolated from these dye yielding plants and the indigenous knowledge on dye preparation in Manipur is reported.

355. Rajendran, A. & Daniel, P. 1990. "*Premna nana* Collett & Hemsley- An addition to the Verbenaceae of India". *Bull. Bot. Surv. India* 32(1-4): 172-174.

Abst.- *Premna nana* Collett & Hemsley, collected from Manipur constitutes a new addition to the Verbenaceae of India.

356. Sharma, Manoranjan H., Devi, Radhapyari A. & Sharma, Manihar B. 2003. "Ethnomedicinal uses of monocotyledonous plants by the Meiteis of Manipur". *J. Econ. Taxon. Bot.* 27(2): 473-480.

Abst.- The Meiteis are the largest ethnic community of Manipur, a hilly state in the remote north-eastern corner of India. Besides the Meiteis, Manipur is also inhabited by Manipuri Muslims, 29 tribal communities, 7 scheduled caste communities and people from other parts of India. The Meiteis extensively used plants as medicine since time immemorial. Elder members of each and every Meitei household do possess some knowledge about the use of plants as medicines. This paper describes the culture and environment of the Meiteis and their use of medicinal plants. In all 29 cultivated and wild monocotyledonous plants and their medicinal uses are described in this paper. Local names are also provided for all the species. Efforts have also been made to find out the correct names in accordance with the latest International Code of Botanical Nomenclature.

357. Sharma, Manoranjan H., Devi, Radhapyari A. & Sharma, Manihar B. 2005. "Vegetable dyes used by the Meitei community of Manipur". *Indian J. Traditional Knowledge* 4(1): 39-46.

Abst.- The paper described 34 plant species, belonging to 30 families, used in the extraction of dyes by the Meitei community of Manipur. The plant parts used in the extraction of dyes along with the method of extraction and their uses have also been described in detail. Besides these dye-yielding plants, another 19 plant species belonging to 14 families, used as dye mordants have also been included. The people of the state still use these dyes for dyeing of their handloom products, which are famous all over the world.

358. Sharma, Manoranjan H., Sharma, Manihar B. & Devi, Radhapyari A. 1997. "Contributions to the flora of Manipur". *J. Econ. Taxon. Bot.* 21(1): 233-238.

Abst.- The paper enumerates 35 species of flowering plants belonging to 30 genera reported as new records for the state of Manipur. *Belamcanda, Gardenia, Helichrysum, Kigelia, Lawsonia, Mikania, Spathodea, Stemodia* and *Tithonia* are the new genera for the state.

359. Sharma, Manoranjan H., Sharma, Manihar B. & Devi, Radhapyari, A. 1999. "Contribution to the edible fruits of Manipur". *J. Econ. Taxon. Bot.* 23(2): 615-623.

Abst.- This paper gives an account of some of the edible fruit plants of Manipur (India). The total number of flowering plants described from this state is about 2153 species belonging to some 1000 genera which are distributed over 202 families. Even though many of them do bear edible fruits, many of these are used as vegetables. Only a few are eaten as fruits. In this paper 66 species of edible fruit plants representing 53 genera distributed over 34 families are described. These fruits are eaten by the people of Manipur in different ways. This paper describes each individual fruit plant along with the salient features and the manner of consumption of the same. Local names are also given for all the species.

360. Sharma, Manoranjan H., Sharma, Manihar B. & Devi, Radhapyari A. 2000. "Additions to the flora of Manipur". *J. Econ. Taxon. Bot.* 24(3): 663-668.

Abst.- In this paper 27 species of flowering plants belonging to 26 genera which are distributed over 17 families have been described as new records for the state of Manipur. *Axonopus, Celtis, Centaurea, Cocos, Epiphyllum, Haemanthus, Jacobinia, Melinis, Meriandra, Pachystachs, Pachystoma, Parthenium, Ravenala, Rhoeo, Skimmia, Trigonella* and *Wedelia* are the new genera for the state.

361. Singh, Birkumar H. & Singh, Brojendro Th. 2005. "Plants used for making traditional rosaries in Manipur" *Indian J. Traditional Knowledge* 4(1): 15-20.

Abst.- The uses of rosaries made from various plant parts by the Meitei community in Manipur are the symbol of tradition and culture and are used as ornaments or related to health and/ or religious practices. Out of the 20 plants, reported to be used for rosaries, 18 plants belonging to 15 families, are used to cure 29 diseases or complicacies such as fever, gout, urinary disorder, rheumatism, tuberculosis, heart diseases, liver complaint, bronchitis, etc. Some of the rosaries are also sold in the local markets and fetch good price. Here is scope for promotion of traditional rosaries as cottage industry in the state.

362. Singh, Birkumar H. & Sundriyal, R.C. 2003. "Common spices and their use in traditional medicinal system of ethnic groups of Manipur state, North eastern India". *Indian J. Traditional Knowledge* 2(2): 148-158.

Abst.- This investigation reports on most commonly used spices and their utility in traditional medicinal system based on household and market surveys in Manipur. A total of 38 plant species were recorded to be used as spices; of which 42% species were used as daily kitchen food spices. Out of the total species recorded, 13 species are cultivated while 8 species were directly collected from wild habitats only, and remaining 17 species are either cultivated or collected from natural habitats. The highest market price was fetched by *Piper nigrum, Curcuma caesia* and *Cinnamomum zeylanicum*. A total of 23 spices were used to cure 21 diseases in traditional medicinal system, mainly for cough (11 spp.), fever (6 spp.), paralysis (4 spp.), infertility and urinary troubles (3 species each), toothache, menstrual disorder, snake-bite and vertigo (2 species each) and many other diseases. The production potential of cultivated spices was fairly good for *Coriandrum sativum, Allium odoratum, Zingiber officinale*. Some of the spices such as *Allium hookeri, A. odorum* and *A. porum* are not commonly grown in any other part of the country. It is emphasized that these species should be protected in natural habitats, and multiplied for large-scale use at household level to avoid pressure in wild areas.

363. Singh, E.J., Yadava, P.S. & Singh, Th. B. 1993. "A contribution to the flora of Shiroy Hills, Ukhrul, Manipur". *Bull. Bot. Surv. India* 35(1-4): 99-105.

Abst.- The paper deals 49 species of flowering plants belonging to 32 families which are reported as new records from Shiroy Hills. Forest vegetation at the ranges of altitudes and a short description of the species, locality, date of collection, field number and altitude were described.

364. Singh, Hijam Bikramjit. 1990. "Aquatic angiosperms of Manipur (Monocotyledonous Plant)". *J. Econ. Taxon. Bot.* 14(3): 659-661.

Abst.- This paper gives an account of the aquatic monocotyledonous plants growing in Manipur. In all 35 species, representing 28 genera and distributed under 16 families. Efforts have been made to find out the correct names in accordance with the latest International Code of Botanical Nomenclature. Only relevant and commonly used synonyms have been cited wherever required immediately below the valid names.

365. Singh, Ibotombi K., Singh, P. Kumar & Singh, S. Shyamjai. 2001. "An ethnobiological approach to the indigenous soaps and detergents of *Meitei* community of Manipur". *J. Econ. Taxon. Bot.* 25(3): 547-552.

Abst.- The paper deals with 16 plant species belonging to 16 genera and 15 families and 2 animal species, their products belong to 2 genera, 2 families and minerals products, which are used by the traditional *Meitei* community as a cultural practice in making indigenous soaps and detergents. Still some of the operations are existing and going on whereas, others are only in the folklore. Botanical and zoological names, local names, common names, family, parts used and also methods of application of these types are studied. Plants are intimately associated with the *Meitei* community as their indispensable components. The traditional knowledge system and technology practiced by the community is also discussed.

366. Singh, Jai Prakash, Kumar, Suchita, Devi, Puinyabati Th. & Kumar, Sudhir. 1992. "Medicinal plants of Manipur-1". *J. Econ. Taxon. Bot., Addl. Ser.* 10: 233-239.

Abst.- The state of Manipur is a repository of valuable medicinal plant wealth. The present paper deals with plants used by the inhabitants for various diseases and ailments. These plants can be valuable resources for herbal drug industry and can add to the economic resources of the state.

367. Singh, K.P. 1978. "Two Parmeliae (Lichens) new to India". *Bull. Bot. Surv. India* 20(1-4): 173.

Abst.- During the investigation of lichen collections from Manipur two species of *Parmelia* viz., *P. brevirhiza* and *P. goebelii* have been found to be new to the Indian lichen flora.

368. Singh, K.P. 1979. "Some new records of lichens from India". *Bull. Bot. Surv. India* 21(1-4): 221-223.

Abst.- During the taxonomic studies on the lichen flora of Manipur, 6 taxa viz., *Collema glaucophthalmum* var. *implicatum* (Nyl.) Degel., *Heterodermia japonica* (Sato) Swinsc. *&* Krog, *Parmelia usambarensis* Steiner & Zahlbr., *Pyxine copelandii* Vain, *P. coralligera* Malme and *Stricta limbata* (Sm.) Ach. have been found to be occurring in India for the first time.

369. Singh, K.P. & Singh, S.R. 1984. "On the species of *Buellia* and *Diplotomma* from Manipur, India". *Bull. Bot. Surv. India* 26(1-2): 62-64.

Abst.- The paper reports the occurrence of 15 species of *Buellia* and 5 species of *Diplotomma* from Manipur, India. Out of these, 2 species viz. *Buellia conspirans* and *Diplotomma chlorophaea* are new records for India and therefore, are described in detail. A new combination *Diplotomma chlorophaea* has been made. A key to the all species is also provided to facilitate their identification in the area.

370. Singh, P. Kumar & Singh, Ibotombi K. 2003. "First-aid remedies: an ethno-medico-botanical study of the Meitei community of Manipur". *J. Econ. Taxon. Bot.* 27(2): 466-472.

Abst.- Meitei community of Manipur state used some commonly available medicinal plants as a traditionally popular medicine for various diseases and ailments. Thus, an integrated study of these common diseases has a wider understanding of the conceptual context needed for the characterization of their therapeutic resources. This paper deals with the first-aid remedies of the Meitei community and includes 33 plants belonging to 21 families. Their botanical name, local name, English name, family, parts used and mode of application are discussed.

371. Singh, P. & Singh, Ibotombi K. 2003. "Mother and child health: 1- An ethnobotanical study of the Meitei community of Manipur state, India". *J. Econ. Taxon. Bot.* 27(2): 457-465.

Abst.- This paper deals with women and child health of Meitei communities of Manipur state and includes 36 plants belonging to 25 families. They used some commonly available medicinal plants as a traditional medicine for various diseases and ailments. The details of preparation and use of folk medicines, having herbal origin, collected from the people have been presented in this paper. Traditional knowledge systems and cultural practices, which are very popular, are discussed. An integrated study of these common diseases has a wider understanding of the conceptual context needed for characterization of their therapeutic resources. The active principles present in these plants, if scientifically analyzed and properly used, may prove to be useful for human welfare by way of controlling popularization explosion. The folk medicines recorded here are very efficacious and free from side effects.

372. Singh, P. Kumar, Elangbam, Vinita Devi & Singh, Huidrom B.K. 1999. "Ethnomedicinal studies of some plants used to enhance vocalism by the traditional Meitei singers of Manipur". *J. Econ. Taxon. Bot.* 23(2): 629-635.

Abst.- The paper deals with the study of 25 plants belonging to 13 families ranging from a mushroom to higher Angiospermic plants, used by the traditional *Meitei* singers of Manipur to enhance their vocalism. The paper gives only a preliminary report and leaves room for further scientific and analytical research to evaluate the validity of the claims.

373. Singh, P. Kumar, Singh, N. Irabanta & Singh, L. Janmejay. 1988. "Ethnobotanical studies on wild edible plants in the markets of Manipur-II". *J. Econ. Taxon. Bot.* 12(1): 113-119.

Abst.- The present paper deals with 46 wild edible plants belonging to 30 families used by different ethnic groups of Manipur. Plants are categorized into four groups viz: (i) fruit and seed edible plants, (ii) tuber and rhizome edible plants, (iii) more than one plant parts edible plants and (iv) edible algae and fungi.

374. Singh, Raghumani S. & Singh, N.I. 1985. "A preliminary ethnobotanical studies on wild edible plants in the markets of Manipur-I". *J. Econ. Taxon. Bot.* 6(3): 699-703.

Abst.- The present paper deals with 30 wild plants belonging to 24 families used by the indigenous people of Manipur as their vegetable or allied purposes.

375. Singh, Romeo M. & Gupta, Asha. 2006. "Cultivation and conservation practice of *Euryale ferox* Salisb. in Manipur". *Indian J. Traditional Knowledge* 5(1): 143-144.

Abst.- *Euryale ferox* Salisb. is a subtropical plant available in most of the Asian countries. *Euryale ferox* Salisb. fruits, due to its use in local delicacies and for medicinal values, have demand in local market. The paper highlights the management and conservation practices of *Euryale ferox* Salisb. in Manipur with a note on cultivation. Some traditional medicinal uses of the plant are also mentioned.

376. Singh, Romeo M. & Gupta, Asha. 2007. "Home gardens of Kakching, Manipur- A diverse and sustainable agroecosystem". *J. Econ. Taxon. Bot.* 31(2): 402-410.

Abst.- Home gardens are the areas surrounding the houses which are planted with a mixture of many plant species of multiple utility and cultural significance. These agroecosystems have great importance for subsistence of the indigenous people and conservation of depleting plant resources. Home gardens maintained by Lois community of Kakching (Thoubal district), Manipur are highly diverse and complex. The flora of the home gardens include herbs, shrubs, trees and climbers which are used for a variety of purposes like food, fodder, timber, fuel, etc. Some are used for medicinal, ornamental and socio-cultural purposes only. The paper lists 120 species of diverse growth forms belonging to 49 families from four home gardens of Kakching.

377. Singh, V. 1997. "A new species of *Leucas* R. Br. from India". *J. Econ. Taxon. Bot.* 21(3): 743-745.

Abst.- A new species of *Leucas* viz., *L. manipurensis* (Lamiaceae) has been described and

illustrated from Kangchup forest near Imphal, Manipur, India.

378. Srinivas, C. & Yadava, P.S. 1999. "Phytosociological study of four forest sites: correlation of tree species". *Indian J. Forest*. 22(3): 232-240.

Abst.- Phytosociological studies were taken up in four oak forest sites with various levels of disturbances in Manipur, N.E. India. The most dominant species was found to be *Quercus serrata* and co-dominant was *Q. dealbata*. Different plant species were subjected to interspecific correlation studies. The plant species have exhibited positive correlation among them in four forest sites. The correlation co-efficient values were used in grouping and ordering of species into five correlation classes. Analysis for correlation has been attempted.

379. Uddin, Amad, Gogoi, R., Mao, A.A. & Phukan, S. 2008. "Collection of *Begonia adscendens* C.B. Clarke (Begoniaceae) after more than 100 years from Esii Hill, Manipur, India". *Rheedea* 18(1): 53-55.

Abst.- *Begonia adscendens* C.B. Clarke is collected after a gap of 116 years from Esii Hill, near Dzuko Valley, Manipur. This collection is the only one after the type specimen collected by C.B. Clarke in 1887. This species occurs in small patches in Manipur-Nagaland along India-Myanmar border and is endemic. It is described and illustrated.

380. Verma, D.M. 1987. "*Scleria borii*, a new species of Cyperaceae from Manipur". *Bull. Bot. Surv. India* 29(1-4): 14-16.

Abst.- A new species of *Scleria* viz. *S. borii* (Cyperaceae) has been described from Kangpokpi, Manipur.

MEGHALAYA

381. Awasthi, Alka. 1999. "Plant diversity of Meghalaya and some issues for concern". *Indian J. Forest.* 22(1): 14-21.

Abst.- Meghalaya has been acknowledged to be the richest botanical region in India. The diversity of vegetation types, wild species, agricultural forms and their wild relatives has been described. Various issues affecting plant diversity in this region like extraction for local use, commercial exploitation of medicinal and ornamental plants, effect of eroding traditions on protection of sacred groves, developmental activities, shifting agriculture, problems of forest management, mining, status of floristic studies and the need for inter-institutional linkage have been discussed. This paper presents the different viewpoints held by group involved in research, utilization and management of plant diversity and also attempts to present the problems faced by them in their conservation effect.

382. Balakrishnan, N.P. 1974. "Notes on some interesting plants from Jowai, Meghalaya". *Bull. Bot. Surv. India* 16(1-4): 169-173.

Abst.- In the present paper, 11 plant species have been first recorded in India from Jowai and 3 plant species have been found to grow in new phytogeographical areas. Two new variety have also been described.

383. Balakrishnan, N.P. & Swaminathan, M.S. 1983. "*Carissa paucinervia* A. DC. (Apocynaceae)- An addition to the flora of India". *J. Econ. Taxon. Bot.* 4(1): 165-166.

Abst.- *Carissa paucinervia*, so far known only from Peninsular India, is reported for the first time from Meghalaya with detailed description.

384. Bhaumik, G.H. & Das, G.C. 1983. "*Clitoria arborescens* R. Brown (Fabaceae)- A new record and rare plant from India". *J. Econ. Taxon. Bot.* 4(2): 607-608.

Abst.- *Clitoria arborescens* R. Brown is reported for the first time from Khasi Hills Distt., Meghalaya, India. A detailed description of the taxon with citation and synonymy is given.

385. Biswas, Anjali. 1983. "*Microlepia calvescence* (Wall. ex Hook.) Presl var. *intramarginalis* (Tagawa) Shieh- A new record of fern for India". *J. Econ. Taxon. Bot.* 4(1): 315.

Abst.- The author has recorded *Microlepia calvescence* (Wall. ex Hook.) Presl var. *intramarginalis*

(Tagawa) Shieh from Khasi hills, Meghalaya, a Taiwanian species, hitherto not known to occur in the Indian region.

386. Biswas, Sas & Bhuyan, T.C. 1983. "On the identity of some food plants of Garo Hills, Meghalaya". *Indian J. Forest.* 6(3): 208-213.

Abst.- The paper deals with some edible plants of Garo Hills (Meghalaya). 28 species are enumerated along with their vernacular names, important field characters, parts used and distribution. The present study is an attempt to identify the various food plants of the forest dwelling tribals of the North-Eastern region.

387. Chauhan, A.S. 1984. "*Vanda jainii* Chauhan- A new orchid species from Meghalaya". *J. Econ. Taxon. Bot.* 5(4): 977-979.

Abst.- A new species of *Vanda* viz., *V. jainii* has been described from Sonapahar, West Khasi Hills district of Meghalaya.

388. Chauhan, A.S. 1985. "Notes on two rare orchids of Meghalaya". *Bull. Bot. Surv. India* 27(1-4): 126-128.

Abst.- *Vanda alpina* Lindl. and *V. pumila* Hook.f. have been collected from the forests of Sonapahar (Khasia hills). Studies show that these two species are rare and recorded here for their extended distribution.

389. Chauhan, A.S. 1986. "A new species of *Gomphostemma* Wall. (Lamiaceae) from Meghalaya, India". *Bull. Bot. Surv. India* 28(1-4): 182-184.

Abst.- A new species of *Gomphostemma nayarii* Chauhan has been described from Meghalaya.

390. Chhetri, R.B. 2006. "Trends in ethnodomestication of some wild plants in Meghalaya, Northeast India". *J. Traditional Knowledge* 5(3): 342-347.

Abst.- Tribals in Meghalaya not only cultivate variety of crops but also domesticate quite a lot of wild plant species in their courtyard, orchards, kitchen garden, flower garden and sedentary agricultural fields. Present study has explored as many as 62 wild plant species under 59 genera belonging to 44 families domesticated by *Khasis, Garos* and *Jaintias* of Meghalaya.

391. Chhetri, R.B., Kataki, S.K. & Boissya, C.L. 1992. "Ethnobotany of some ichthyotoxic plants in Meghalaya, North-eastern India". *J. Econ. Taxon. Bot., Addl. Ser.* 10: 285-288.

Abst.- The present paper documented 33 species of ichthyotoxic plants used by Khasis, Jaintias and Garos of Meghalaya for poisoning the fishes. The perennial rivers, rivulets, streams and streamlets are sustaining different species of fishes that highly encourage the ethnofishing practices in this state.

392. Dam, D.P. & Dam, N. 1992. "A new *Amomum* (Zingiberaceae) from Jaintia hills, Meghalaya". *Bull. Bot. Surv. India* 34(1-4): 212-214.

Abst.- A new species of *Amomum*, viz., *A. deorianum* (Zingiberaceae) is described and illustrated from Dawki, south-west of Jaintia hills, Meghalaya.

393. Deori, Chaya, Sarma, S.K., Hynniewta, T.M. & Phukan, S.J. 2006. "A new species of *Dendrobium* Sw. (Orchidaceae) from Meghalaya, India". *Rheedea* 16(1): 55-58.

Abst.- A new species, *Dendrobium maghalayense* C. Deori *et al*., is described and illustrated from Khasi and Jaintia Hills district, Meghalaya. It differs from its allied species *D. longicornu* Lindl., and *D. wattii* (Hook.f.) Reichb.f. in having an unlobed rhomboid lip, emarginated-mucronate and dentate-serrate at apex, leaf apices obtusely bilobed and petals margins subserrate towards apex.

394. Deori, N.C. 1978. "*Pantlingia serrata* Deori sp. nov. (Orchidaceae)- A second species of the genus from Meghalaya". *Bull. Bot. Surv. India* 20(1-4): 175-176.

Abst.- A new species of *Pantlingia* viz., *P. serrata* Deori has been described from Shillong peak in Meghalaya.

395. Deori, N.C. & Bhaumik, G.H. 1976. "Notes on rare plants from Khasi Hills, Meghalaya". *Bull. Bot. Surv. India* 18(1-4): 225-227.

Abst.- During a collection trip to Khasi Hills district, Meghalaya, the authors collected two rare plant viz. *Salvia saxicola* Wall. ex Benth. and *Potamocalpa ramosum* (Lindl.) Summerhayes. These species are reported from Meghalaya after 100 years. Description of the species along with correct nomenclature, flowering time, distribution, specimens examined and notes have been given for easy identification.

396. Dixit, R.D. 1984. "*Scleroglossum* v. Ald. v. Ros.- A fern genus new to India". *Bull. Bot. Surv. India* 26(1-4): 112-113.

Abst.- A new species of *Scleroglossum* viz., *S. sulcatum* (Kuhn) v. Ald. v. Ros. has been described and illustrated from Meghalaya. This genus was not known to occur in India, so far.

397. Dixit, R.D. & Panigrahi, G. 1983. "*Selaginella mittenii* Bak.- New record for India". *Indian J. Forest.* 6(3): 253-254.

Abst.- In the course of taxonomic studies on the genus *Selaginella* P. Beauv. in India, the authors first recorded the occurrence of *S. mittenii* from Cherrapunji in Meghalaya which also constitutes a new record for India.

398. Dolui, A.K., Sharma H.K., Marein, Theresia Breen & Lalhriatpuii, T.C. 2004. "Folk herbal remedies from Meghalaya". *Indian J. Traditional Knowledge* 3(3): 358-364.

Abst.- Traditional methods of treatment using plants and animals are predominant in rural societies of Meghalaya, a north-eastern state of India. As a result of an ethnobotanical survey conducted during 1999-2002, information on 46 such plant species belonging to 44 genera and 34 families are presented.

399. Garg, V.K. & Singh, P.K. 2005. "Status of available nutrients in some soils and plants from East Khasi district of Meghalaya". *Indian J. Forest.* 28(4): 411-415.

Abst.- A study was conducted with objectives to know the status of nutrients in some soils and plants growing abundantly in the East Khasi district of Meghalaya state. Results showed that the soils of cultivated site were highly acidic, rich in organic carbon and N, low to medium in available P and medium in K supply. Micronutrients in forest area were in sufficient quantity. The available Zn was low and Fe was at toxic level in cultivated soil. Plants were richer in macronutrients concentration growing in cultivated than forest soils. The concentration of leaf Fe in ginger and turmeric was extremely higher indicated its toxicity. There was a greater accumulation of Mn and Zn by *Eupatorium odoratum* and Cu by *Litsea cubeba* growing in the forest soils.

400. Ghora, L.K. & Ghora, C. 1993. "A new species of *Impatiens* L. (Balsaminaceae) from Meghalaya". *J. Econ. Taxon. Bot.* 17(1): 139-140.

Abst.- A new species of *Impatiens* L. viz. *I. majumdarii* has been described and illustrated from Shillong pologround, Meghalaya.

401. Giri, G.S. 1983. "A new species of *Osbeckia* L. (Melastomataceae) from India". *J. Econ. Taxon. Bot.* 4(2): 609-611.

Abst.- A new species of *Osbeckia* L. viz. *O. nayarii* Giri is described from Assam and Meghalaya with illustration. A diagnostic key is also provided for identification.

402. Gupta, R.K. 2002. "A check list of algal flora of Shillong, Meghalaya". *J. Econ. Taxon. Bot.* 26(2): 464-468.

Abst.- In this paper 108 taxa belonging to Cyanophyceae (13), Chlorophyceae (52), Bacillariophyceae (20), Euglenineae (21) and Chrysophyceae (2) are being reported for the first time from Shillong.

403. Haridasan, K., Kumar, Y. & Rao, R.R. 1981. "Enumeration of some important forest weeds of Meghalaya with special emphasis on their role and distribution". *J. Econ. Taxon. Bot.* 2: 161-171.

Abst.- The present study forms a significant contribution towards the knowledge of certain weeds in Meghalaya. It is suggested that man is greatly responsible in favouring the spread of these weeds by creating a suitable habitat for them. The role of shifting cultivation or 'jhumming' in the weed spread is also discussed.

The harmful role played by three major groups of forest weeds namely Parasites, Lianas and Climbers and Weeds of forest undergrowth is also discussed. This is followed by an alphabetical enumeration of certain dominant weeds in forests of Meghalaya.

404. Haridasan, K., Kumar, Y. & Rao, R.R. 1981. "*Chirita hamosa* R. Br. (Gesneriaceae)- An interesting plant record form Meghalaya". *J. Econ. Taxon. Bot.* 2: 241-242.

Abst.- During the course of a botanical exploration in Balphakram Sanctuary in Garo hills, Meghalaya, the authors collected *Chirita hamosa* R. Br. (Gesneriaceae) from the limestone beds and it is a new record for the state.

405. Jeeva, S., Mishra, B.P., Venugopal, N., Kharlukhi, L. & Laloo, R.C. 2006. "Traditional knowledge and biodiversity conservation in the sacred groves of Meghalaya". *Indian J. Traditional Knowledge* 5(4): 563-568.

Abst.- The people of Meghalaya believe that the sacred groves (forest) are the abode of deities. It bestows the welfare of people, their cattle & land, and keeps the evil spirits away. Those who do not obey the traditional norms of these groves may have to face the wrath of the deity. A religious belief is one of the major factors for conservation of plant resources in such groves. Local people belief that the Sylvan deities would be offended if trees are cut and twigs, flowers, fruits, etc are plucked. These groves are considered as one of the most species-rich areas for plants, birds and mammals. The mythological stories and indigenous knowledge associated with the groves have been the principal factor in preserving the sacred groves in the immaculate condition.

406. Joseph, J. 1970. "Notes on some rare plants from Nongpoh, K. & J. Hills, Meghalaya". *Bull. Bot. Surv. India* 12(1-4): 73-76.

Abst.- Description of 11 rare species- *Solanum aphylla* Griff., *Cotylanthera tenuis* Bl., *Oberonia parvula* K. et P., *Dendrobium terminale* Par. et Reichb.f., *Eria fragrans* Reichb.f., *E. biflora* Griff., *Bulbophyllum listeri* K.et P., *B. triste* Reichb.f., *Polystachya flavescens* Bl., *Taeniophyllum crepidiforme* (K.et P.) K. et P. and *Peristylis parishii* Reichb.f. gathered for the first time from Khasia and Jaintia Hills of Meghalaya, have been described along with geographical distribution.

407. Joseph, J. & Abbareddy, N.R. 1982. "Report of a bulbil bearing orchid from Khasi and Jaintia hills, Meghalaya". *Bull. Bot. Surv. India* 24(1-4): 213-214.

Abst.- An interesting bulbil bearing orchid has been collected from Laithlyngkot, about 20 miles from Shillong towards Pynursla in Meghalaya.

408. Joseph, J. & Abbareddy, N.R. 1983. "*Evrardia asraoa* Joseph et Abbareddy- A new orchid species from Khasi Hills, Meghalaya, with incidental first record of the genus for India". *Bull. Bot. Surv. India* 25(1-4): 232-234.

Abst.- A new species of *Evrardia* viz., *E. asraoa* has been described from the Khasia Hills, Meghalaya. The genus was not known to occur in India, so far.

409. Joseph, J., Abbareddy, N.R. & Haridasan, K. 1980. "*Gastrodia exilis* Hook.f.- A rare and interesting orchid from Khasi and Jaintia hills, Meghalaya, India". *Bull. Bot. Surv. India* 22(1-4): 203-205.

Abst.- *Gastrodia exilis* Hook.f. has been recorded from Khasi and Jaintia hills of Meghalaya and it constitutes a new record for the state. Morphological description, correct nomenclature and phonological data are provided.

410. Joseph, J. & Mani, J. 1982. "One new species and one new record from India in the genus *Utricularia*". *Bull. Bot. Surv. India* 24(1-4): 108-111.

Abst.- The paper deals with *Uticularia tayloriana* Joseph et Mani, a new species and *U. stanfieldii* P. Taylor, a new record from India.

411. Joseph, J. & Mani, J. 1983. "*Uticularia khasiana* (Lentibulariaceae)- An interesting new species and insectivorous plant from Shillong, Khasia hills, Meghalaya, India". *Bull. Bot. Surv. India* 25(1-4): 192-194.

Abst.- A new species of *Utricularia* viz. *U. khasiana* Joseph et Mani has been described from Shillong, Khasia hills, Meghalaya.

412. Kamble, S.Y. 1996. "A new species of *Asparagus* Linn. (*sensu lato*), (Asparagaceae) from Khasia Hills". *J. Econ. Taxon. Bot.* 20(3): 685-688.

Abst.- The present paper describes a new species of the genus *Asparagus* Linn. (*sensu lato*) *A. hajrae* Kamble, collected from Khasia Hills, Assam.

413. Kumar, Y., Haridasan, K. & Rao, R.R. 1980. "Ethnobotanical notes on certain medicinal plants among some Garo people around Balphakram Sanctuary in Meghalaya". *Bull. Bot. Surv. India* 22(1-4): 161-165.

Abst.- 54 medicinal plants used by the tribals of Balphakram Sanctuary in Meghalaya are reported in this paper. In the enumeration all the species are arranged alphabetically and family names and local names (Garo names) are also given. Detailed uses of these plants as suggested by the natives are mentioned. It is, however, suggested to carry out chemical screening to identify the active principles in these plants before concluding any thing on their uses.

414. Kumar, Yogendra & Rao, R.R. 1985. "*Drosera indica* L. (Droseraceae) - A new distributional record for North-East India". *J. Econ. Taxon. Bot.* 7(2): 425-426.

Abst.- During the course of botanical exploration in Balphakram Wildlife Sanctuary, Garo Hills, Meghalaya, the author collected a rare and interesting carnivorous plants viz. *Drosera indica* from an interior grassy area which is a new distributional record from North-East India.

415. Kumar, Yogendra, Scarlet, Fancy & Rao, R.R. 1987. "Further contribution to the ethnobotany of Meghalaya: Plants used by 'War Jaintia' of Jaintia Hills district". *J. Econ. Taxon. Bot.* 11(1): 65-70.

Abst.- 'War Jaintia' is a distinct tribe inhabiting the southern-most portion of Jaintia Hills district of Meghalaya in North-East India. In the present paper 74 plant species used by Jaintias in and around Sohkha village are discussed. Intrusion of modern civilization in these remote areas coupled with the dwindling plant resources are responsible for people to gradually shift over to modern amenities of life forgetting their age-old plant folklore. It is, therefore, suggested to carry out ethnobotanical studies to record use of plants in similar areas before the valuable information are lost forever.

416. Kumari, Pushpa & Singh, Paramjit. 2007. "*Chimonobambusa quadrangularis* (Franceschi) Makino: a new bamboo record for India". *Bull. Bot. Surv. India* 49(1-4): 235-237.

Abst.- During the study of Bamboo of Meghalaya, the authors collected and described a bamboo species namely *Chimonobambusa quadrangularis* (Franceschi) Makino from Mawklot and Upper Shillong, Khasi Hills, Meghalaya which is a new record for India. Correct nomenclature along with detailed description, notes, illustration and photograph from natural habitat has also been given to facilitate easy identification.

417. Myrthong, S. & Rao, R.R. 1982. "Contribution towards a sedge flora of Meghalaya". *J. Econ. Taxon. Bot.* 3(1): 129-139.

Abst.- The paper deals with sedge flora of Meghalaya state. A check list of sedge with critical notes on habitat, distribution, etc. based on first hand field information is given.

418. Negi, G.S. 1984. "Landsat data in study of forest recession due to shifting cultivation- A case study in Garo hills of Meghalaya". *Indian J. Forest.* 7(4): 273-280.

Abst.- Shifting cultivation a prevalent practice among hills tribes, is one of the major hazards causing loss to the flora and fauna by way of ruthless destruction of the forests. To control this menace is a challenging job to the administrators as well as the custodian of the forests, the foresters. With increase in tribal population more and more wooded areas are being annually cut for jhuming purpose. It is estimated that the forest area thus affected by shifting cultivation in North-Eastern region of the country is of the order of 2.7 million hectors (Anon, 1976). The change in the land use pattern of this region are so fast that the conventional survey methods and information gathering system cannot keep pace with it. Planned, systematic and repetitive surveys are required to know the land resources and their location for development planning. Pre-investment survey of Forest Resources Organization (now Forest Survey of India) had carried out the resources survey in North-Eastern region during the period 1974 to 1978.

The present study is aimed at estimating the rate of forest recession in Garo hills of Meghalaya which are prone to heavy jhum activity by using remote sensing techniques, viz. aerial photographs and Landsat Data subsequently pertaining to year 1973 and 1977. The study revealed that annually 4.5 percent area under tree forest recedes by way of shifting cultivation activity alone. Landsat data provide repetitive coverage periodically which helps in monitoring changes in the land use pattern in less time and at low cost. Application of Landsat data is recommended for such type of studies to have accurate data for state, regional development planning.

419. Paul, T.K. & Nayar, M.P. 1985. "A new *Holboellia* (Lardizabalaceae) from Meghalaya, India". *Bull. Bot. Surv. India* 27(1-4): 105-106.

Abst.- A new species of *Holboellia* viz., *H. khasiana* has been described from the state of Meghalaya.

420. Phukan, Sandhyajyoti. 2005. "*Bulbophyllum ambrosia* (Hance) Schltr.: an addition to India Orchid flora". *J. Orchid Soc. India* 19(1-2): 27-28.

Abst.- *Bulbophyllum ambrosia* (Hance) Schltr. has been described from Experimental Botanic Garden of Botanical Survey of India, Eastern Circle at Barapani, Shillong, Meghalaya which is a new record for India.

421. Prakash, Ved. 1979. "First record of *Isachne kinabaluensis* Merr. (Poaceae) in India". *Bull. Bot. Surv. India* 21(1-4): 180-182.

Abst.- *Isachne kinabaluensis* Merr. has been collected from Cherrapunji in Meghalaya and it constitutes a new record for India.

422. Prakash, Ved & Mehrotra, B.N. 1987. "Taxonomic notes on the flora of Meghalaya". *J. Econ. Taxon. Bot.* 11(1): 195-199.

Abst.- The paper deals with the critical notes on the identity and nomenclature of *Syzygium reticulatum* (Wight) Walp., *Diploclisia glaucescens* (Blume) Diels and *Osbeckia criniata* Benth, and their occurrence in Meghalaya.

423. Prakash, Ved & Mehrotra, B.N. 1990. "On the occurrence of some rare and less known plants in Meghalaya- A plea for conservation". *Indian J. Forest.* 13(3): 226-229.

Abst.- The present communication reports the occurrence of six species viz., *Diospyros grata* Wall. ex DC., *D. nigricans* Wall. ex Clarke (Ebenaceae), *Trivalvaria kanjilalii* D. Das (Annonaceae), *Beilschmedia brandisii* Hook.f. (Lauraceae), *Apodytes beddomei* Mast. (Icacinaceae) and *Docymia hookeriana* Decne. (Rosaceae) which were collected from Meghalaya, India after a lapse of several decades.

424. Rao, A.S. & Deka, G.K. 1970. "Two new adventives to the Shillong flora". *Bull. Bot. Surv. India* 12(1-4): 263-264.

Abst.- *Sauromatum guttatum* (Wall.) Schott and *Tagetes minuta* L. are reported here as new adventives to the flora of Shillong.

425. Rao, A.S. & Hajra, P.K. 1975. "*Polypleurum wallichii* (R. Br. ex Griff.) Warming and

***Zeylanidium lichenoides* (Kurz) Engler- Two interesting Podostemonaceae from Meghalaya". *Bull. Bot. Surv. India* 17(1-4): 207-209.**

Abst.- Two species of Podostemonaceae viz. *Polypleurum wallichii* (R. Br. ex Griff.) Warming and *Zeylanidium lichenoides* (Kurz) Engler have been collected from Meghalaya which are new records for the state.

426. Rao, A.S. & Hajra, P.K. 1976. "*Ensete glaucum* (Roxb.) Cheesm. in the Khasi Hills, Meghalaya, India". *Bull. Bot. Surv. India* 18(1-4): 207-210.

Abst.- The species *Ensete glaucum* (Roxb.) Cheesm. appears to be first record in the wild in the forests of the Khasia Hills, Meghalaya. The morphological description, literature citations and distribution of the species has been given.

427. Rao, Nageswara A. & Mani, K.J. 1985. "*Jejosephia* Nageswara et Mani (Orchidaceae)- A new genus from Meghalaya, India". *J. Econ. Taxon. Bot.* 7(1): 216-217.

Abst.- In the present study the authors have found *Trias pusilla* to be distinctly differing from *Trias* in the character of lip, column and pollinia and so it has been considered under a new genus i.e. *Jejosephia*.

428. Rao, R.R. & Baishya, A.K. 1981. "Some ecological and phytogeographical observations on the pteridophytic flora of Meghalaya (India)". *J. Econ. Taxon. Bot.* 2: 31-39.

Abst.- A detailed account of pteridophytic vegetation in Meghalaya, based on first hand information gathered through field studies is discussed in this paper. It is observed that the 3 broad ecological groups, i.e. terrestrials, epiphytes and lithophytes, show definite habitat preference and a distinct phenological behaviour with respect to the different seasons. Most of the ferns flourish during rainy season and with the advent of winter these ferns die off, excepting the underground or creeping rhizomes. With the early heat of spring and pre-monsoon showers these rhizomes put forth numerous fresh fronds and form a striking feature of vegetation at this period.

Out of 250 species of ferns and fern-allies collected so far from Meghalaya, 133 species (53.2%) are found to be common to South Indian Hills. Similarly, 140 species (56%) are common to hills in and adjacent to West Himalayas, indicating a close similarity with fern-floras of South India and West Himalayas.

Araiostegia pulchra (Don) Copel., *Asplenium normale* Don, *Cheilanthes albomarginata* (Burm.) Sw., *Coniogramme caudata* (Wall. ex Eltingsch) Ching, *Dennstaedtia scabra* (Wall.) Moore, *Dryopteris odontoloma* (Moore) Ching, *Lepisorus loriformis* (Wall.) Ching, *L. nudus* (Hk.) Ching, *Microlepia trapeziformis* (Roxb.) Kuhn, *Osmunda japonica* Thunb., *Pteris wallichiana* Ag., *Thelypteris xylodes* (Kunze) Ching and *Vandenboschia auriculata* (Bl.) Copel., supposed to have not been recorded so far from this region (Kachroo, 1975) are reported in this paper, and some of them are quite common in the area.

429. Rao, R.R. & Haridasan, K. 1985. "A survey of wild plants of horticulture importance from Meghalaya, N.E. India". *J. Econ. Taxon. Bot.* 6(3): 529-537.

Abst.- During the course of a study on the forest flora of Meghalaya, the authors have recorded 90 wild plants of horticulture value. An account of these 'wild beauties' are enumerated here, with a hope that these would receive the attention of nurserymen, horticulturists and town planners, who can play a significant role in popularizing these wild plants by introducing them in our gardens.

430. Rao, R.R. & Neogi, B. 1980. "Observation on the ethnobotany of the Khasi and Garo tribes in Meghalaya". *J. Econ. Taxon. Bot.* 1: 157-162.

Abst.- The present paper deals with 65 plant species used by the Khasi and Garo tribes of Meghalaya for medicines, food, as fish poison or for fishing and other miscellaneous uses.

431. Roy, A.R., Patel, R.S., Patel, V.V. & Yadav, D.S. 2007. "Medicinal orchids of Meghalaya". *J. Orchid Soc. India* 21(1-2): 15-17.

Abst.- Orchids represent the largest and most important group of flowering plants in Meghalaya. Besides ornamental importance, some of them are used as medicinal plants. Many of these orchids plants are used to cure a variety of diseases and disorders like stomachache, diarrhoea etc. Local people use these medicinal orchids as ayurvedic and Unani treatment of many diseases. It is necessary to conserve these species for sustainable utilization and also for saving them from extinction.

432. Roychowdhury, K.N. 1973. "Unrecorded species of lichens from India". *Bull. Bot. Surv. India* 15(1&2): 132-136.

Abst.- Eleven (11) species of lichen have been collected from Shillong and the neighbouring areas of Khasia hills and they constitute new records for India.

433. Samati, Hajal & Begum, Sofika Samim. 2006. "Plant indicators for agricultural seasons amongst *Pnar* tribe of Meghalaya". *Indian J. Traditional Knowledge* 5(1): 57-59.

Abst.- The work relates to *Pnar* tribe of Jaintia Hills district, Meghalaya, whose main occupation is agriculture. Even today they depend on the plant species as indicators, such as *Butea buteiformis* (Voigt) Grier & Long, *Castanopsis indica* A. DC., *C. tribuloides* (Sm.) DC., *Phoenix humilis* Royle ex Becc. & Hook. f., *Pinus kesiya* Royle ex Gord., *Quercus serrata* Thunb., *Schima wallichii* (DC.) Korth. for systematizing steps they followed season wise for achieving the best productivity of rice and other agricultural crops. Each plant indicator is provided with vernacular name, relevant plant parts indicative of agricultural seasons and their significant role in agricultural productivity.

434. Sehgal, R.N. & Mehra, P.N. 1984. "Distribution pattern of orchids in Khasi and Jaintia hills". *Indian J. Forest.* 7(2): 114-119.

Abst.- Distribution pattern of the orchids is reported under seven altitudinal zones in the Khasi and Jaintia hills. Names of all the species in each zone are given along with their mode of occurrence, i.e. epiphytic, terrestrial, saprophytic or lithophytic. Their occurrence depends upon rainfall, altitude, aspect of the slope and biotic factors. Biotic interferences greatly reduce their occurrence in otherwise favourable habitats. The importance of such studies is stressed to make plans for the conservation of their habitat as many of the species are fast disappearing.

435. Sharma, J.R. & Wright, J.E. 1989. "A new species of Polypores from India". *Bull. Bot. Surv. India* 31(1-4): 182-183.

Abst.- A new species of Polypores viz. *Coltricia pusilla* has been described from Raliang forest, Khasi hills, Meghalaya.

436. Shukla, U. 1982. "Grasses of Meghalaya". *J. Econ. Taxon. Bot.* 3(1): 47-54.

Abst.- The paper presents an enumeration of 284 species belonging to 121 genera of grasses occurring in the state. This includes 8 new records by † mark and 11 endemic taxa indicated by *. 9 species indicated by + were reported in earlier works but their occurrence seems to be doubtful.

437. Singh, Ajit Pratap, Nath, Virendra & Asthana, A.K. 2008. "Studies on the genera *Calypogeia* Raddi emend. Nees and *Metacalypogeia* (Hatt.) Inoue from Meghalaya, Eastern Himalayas - India". *J. Econ. Taxon. Bot.* 32(3): 562-576.

Abst.- Genus *Calypogeia* Raddi emend. Nees and *Metacalypogeia* (Hatt.) Inoue of the family Calypogeiaceae have been studied from Khasi and Jaintia Hills, Meghalaya. *Calypogeia* Raddi is represented in above region by six species i.e. *Calypogeia marginella* Mitt., *C. khasiana* sp. nov., *C. azurea* Stotler *et* Crotz., *C. fissa* (L.) Raddi, *C. lunata* Mitt and *C. arguta* Nees *et* Mont. Amongst which, *C. khasiana* sp. nov. is a new species from Khasi Hills, Meghalaya. This taxon is characterized by long (60 mm) plants, larger leaves, narrowed apex, subacute to acute (very rarely emarginate); bisbifid underleaves, acute-acuminate, lobes not divergent. However, genus *Metacalypogeia* (Hatt.) Inoue is represented by single species: *Metacalypogeia alternifolia* (Nees) Grolle. An illustrated account with key to the species of the genus *Calypogeia* is provided.

438. Singh, Basant Kumar & Debnath, Himadri Sekhar. 2008. "Wild plants used by the tribes

of Nokrek Biosphere Reserve, Meghalaya and their conservation". *J. Econ. Taxon. Bot.* 32 (Suppl.): 364-367.

Abst.- Systematic survey was conducted on some wild plants used by the tribal people living in Nokrek Biosphere Reserve of Meghalaya. Although 21 plants were recorded to have medicinal, edible and constructional values and widely used by the tribes of Nokrek Biosphere Reserve. At the same time, it also throws light on need on conservation of these plants.

439. Singh, D.K. 1983. "*Trichocolea udarii* Singh- A new Hepatic from Jaintia hills (Meghalaya) India". *Bull. Bot. Surv. India* 25(1-4): 177-180.

Abst.- A new species of *Trichocolea* viz. *T. udarii* Singh belonging to the order Jungermanniales has been described from Jarain, Jaintia Hills district of Meghalaya.

440. Singh, J.N. & Mudgal, V. 1998. "Studies on forest regeneration pattern and natural soil conservation of Nokrek Biospehere, Meghalaya". *Indian J. Forest.* 21(4): 373-376.

Abst.- Vegetation sequences and soil's physico-chemical conditions of forest land have been assessed during transitory periods from jhooming to forest natural regeneration till it attained succession. From the results it is held that during 'jhooming', soil's physico-chemical qualities are reduced to its skeleton but gradually revamped during forest regeneration. The findings from the present investigation have been concluded with possible suggestions.

441. Singh, J.N. & Mudgal, V. 1998. "Studies on chemical nature of the natural waters of Nokrek Biosphere (south part), Meghalaya- its possible utility in wildlife management". *Indian J. Forest.* 21(4): 377-384.

Abst.- Thirty eight water bodies mainly comprised of streams, rivers and a lonely lake, situated in south part of the Nokrek Biosphere have been studied for their chemical characteristics/ compositions. The various parameters of these waters have been discussed; from the results, it is held that barring Nangirang Stream, almost all the waters are bereft of dissolved minerals in per unit volume irrespective of their sources and locations. Results further reflect that streams waters are chemically superior over river and lake water. The paper has been concluded with possible suggestions.

442. Singh, J.N. & Mudgal, V. 1999. "Mineral potentialities of a few forage grasses- Their relationship with hydro-edaphic nature of Nokrek Biosphere (Meghalaya)". *Indian J. Forest.* 22(1): 78-84.

Abst.- The present investigation is aimed at an assessment of the mineral potentialities of five constituent grass species of Nokrek Biosphere in Meghalaya. The edaphic nature and free waters chemical behaviour of the area have been incorporated to focus upon soil-water-plant relationship of the biosphere. Results reveal the mineral richness of the grasses which play a key role in the rejuvenation of the soil conditions on one hand, and compensate the mineral deficiency inherent in the usable water of the biosphere for the sustenance of herbivorous animals on other.

443. Singh, Nameitrakpam I. 1983. "Pollen grains identified from the air of Shillong". *J. Econ. Taxon. Bot.* 4(1): 197-199.

Abst.- The present paper deals with 60 pollen types identified from the air of Shillong during March 1974 to February 1976.

444. Singh, Nameirakpam I. 1984. "Pollen flora of intramural air". *J. Econ. Taxon. Bot.* 5(2): 293-296.

Abst.- Pollen flora of indoor air at Shillong have been investigated using gravity slide method. A total of 117 and 18 slides coating glycerine jelly were exposed for the hospital ward and the cinema hall respectively. In all, 35 and 37 pollen types were identified from the air of hospital ward and cinema hall respectively.

445. Srivastava, R.C. & Baishya, A.K. 1984. "Convolvulaceae of Khasi and Jaintia Hills (Meghalaya)". *J. Econ. Taxon. Bot.* 5(4): 815-826.

Abst.- An account of the member of the family Convolvulaceae recorded from various localities of Khasi and Jaintia Hills districts of Meghalaya state is given. The family is represented in the area by 8 genera and 29 species viz. *Argyreia argentea, A. barbigera, A. capitata, A. hookeri, A. nervosa, A. roxburghii, A. sikkimensis, A. splendens, Erycibe glaucescens, E. paniculata, E. peguensis, E. subspicata, Evolvulus nummularius, Ipomoea alba, I. barbata, I. eriocarpa, I. micrantha, I. nil, I. obscura, I. pileata, I. purpurea, Merremia hirta, M. tridentata, M. umbellata, M. vitifolia, Operculina turpethum, Porana paniculata, P. racemosa* and *Rivea ornata* var. *griffithii*.

446. Tiwari, K.C., Joshi, G.C., Pande, N.K. & Pandey, G. 1992. "Some rare folk tribal medicines from Garo hills in North Eastern India". *J. Econ. Taxon. Bot., Addl. Ser.* 10: 319-322.

Abst.- Garo hills of Meghalaya (India) was surveyed in the year 1980-84 for ethno-medico-botanical purpose with special references to folk and tribal medicines and treatment. It was observed that still a number of people get their treatment from ojhas, baizs and gaonburas who use locally available plants, minerals etc. in medicine. Information was collected for the diseases and ailments like ringworm, headache, malarial fever, post natal fever, bone fracture, vomiting, abdominal pain, blisters, general debility, pain around umbilicus, conjunctivitis, diarrhoea and rheumatism. Some birth control measures were also noted. Some of the plants used in folk tribal medicines of Garo hills are *Drymaria cordata* Willd., *Hedyotis scandens* D. Don, *Maesa indica* Wall., *Hydrocotyle asiatica* Linn., *Justicia gendarussa* Burm., *Artemisia vulgaris* L., *Mimosa pudica* Linn., *Clerodendrum infortunatum* Linn., *Bryophyllum pinnatum* Kurz, *Balamcanda chinensis* DC., *Ocimum sanctum* Linn., *Psidium guajava* Linn., *Zingiber officinale* Rosc., *Piper nigrum* Linn. and *Cyperus rotundus* L. etc.

447. Tiwari, K.C., Sharma, B.N., Majumdar, R.N. & Pandey, G. 1993. "Studies on medicinal plants of Khasi and Jaintia hills in North Eastern region of India". *J. Econ. Taxon. Bot.* 17(2): 275-281.

Abst.- Natural forests, a rich resource of herbal medicinal wealth are vanishing fast in Meghalaya. Recent survey conducted during 1982-84 of a few hill ranges of Khasi and Jaintia have shown still a significant number of important plants flourish there. Some of which form important constituent of ayurvedic medicines and can be collected at commercial levels. The present studies are the brief account of medicinal flora and a discussion on protection and utilization of this wealth in systematic manner by the state agencies.

448. Udar, Ram & Awasthi, U.S. 1983. "A new species of *Lopholejeunea* (Spruce) Schiffn. from India". *Bull. Bot. Surv. India* 25(1-4): 174-176.

Abst.- A new species of *Lopholejeunea,* viz., *L. indica* has been described from Jowai, Meghalaya.

MIZORAM

449. Bharswaj, Sujata & Gakhar, S.K. 2005. "Ethnomedicinal plants used by the tribals of Mizoram to cure cuts & wounds". *Indian J. Traditional Knowledge* 4(1): 75-80.

Abst.- Results of ethnobotanical studies carried out in the state of Mizoram are presented. The usage of wild plants by the native people for the cure of cuts and wounds is described. The use of 17 species, belonging to 14 families together with their local names and other uses have been enumerated. The plants not only contain antiseptic value but also have regenerative and healing properties. Sticking property of paste of bark was also observed in *Laki* tree. In addition, blood-clotting properties of some plants has also been reported.

450. Deb, D.B. & Dutta, R.M. 1987. "A contribution to the flora of Mizoram". *J. Econ. Taxon. Bot.* 10(1): 21-61.

Abst.- The paper presents a brief description of the vegetation with an enumeration of 585 species of 380 genera and 122 families from Pteridophyta to Angiospermae, which were not reported from Mizoram state earlier and some of these reported without mentioning the locality of occurrence. The paper is based on three explorations by the authors for about three months in two seasons.

451. Deori, Chaya & Phukan, Sandhyajyoti. 2004. "Rediscovery of *Dendrobium pychnostachyum* Lindl. from Mizoram, India". *J. Orchid Soc. India* 18(1-2): 53-57.

Abst.- *Dendrobium pychnostachyum* Lindl. has been reported after 62 years from Mizoram, India.

452. Gogoi, R. & Shanpru, R. 2006. "*Neoalsomitra clavigera* (Wall.) Hutch. (Cucurbitaceae): An addition to the flora of Mizoram". *J. Econ. Taxon. Bot.* 30(4): 851-853.

Abst.- *Neoalsomitra clavigera* (Wall.) Hutch. (Cucurbitaceae) is added to the flora of Mizoram. A detailed description along with illustration of the plant is provided in the present paper.

453. Gurung, P.B., Kumar, Y. & Tripathi, R.S. 1989. "New distributional record of *Bulbophyllum wallichii* (Lindl.) Rechb.f. from North East India". *J. Econ. Taxon. Bot.* 13(1): 89-91.

Abst.- During the course of a botanical exploration in Mokokchung district of Nagaland, the author collected *Bulbophyllum wallichii* (Lindl.) Rechb.f. which is a new record from N.E. India. Detailed description and illustrations are provided to facilitate its easy identification.

454. Kataki, S.K. & Krishna, B. 1970. "*Dendrobium bensoniae* Reichb.f.- A new find from Mizo (Lushai) Hills, Mizoram". *Bull. Bot. Surv. India* 12(1-4): 260-261.

Abst.- *Dendrobium bensoniae* Reichb.f., collected from Mizo (Lushai) Hills, Mizoram constitutes a new record for the state.

455. Lalfakzuala, R., Lalramnghinglova, H. & Kayang, H. 2007. "Ethnobotanical usage of plants in western Mizoram". *Indian J. Traditional Knowledge* 6(3): 486-493.

Abst.- Ethnobotanical survey among the tribals inhabiting western part of Mizoram brought to light a number of wild plant species used as edibles and as herbal medicine. There are 23 plants species, which were common throughout the study area. The tribals utilized 89 plant species for herbal medicine, 44 plant species consumed as wild edible fruits, 33 plant species as wild edible plants, 8 plant species for pig food, 11 plant species for fire wood & for charcoal making and 23 plant species for timber. The paper enumerates and discusses various ethnobotanical aspects of the plants used by the tribals of Mizoram.

456. Lalramnghinglova, H. 1999. "Ethnobotanical and agroecological studies on genetic resources of food plants in Mizoram state". *J. Econ. Taxon. Bot.* 23(2): 637-644.

Abst.- Mizoram experiences its economic-transitional period between the old traditional method of cultivation and the modern agricultural practices. The rural poor people depend largely upon wild food plants while the urban population derived their food items from the local markets of agricultural products as well as the marketed wild food plant resources. An enumeration of food plant resources was held during 1993-1994 and 1995-1997, respectively. The agroecological knowledge and agroecosystems in Mizoram are presented along with 116 genetic resources of food plants.

457. Lalramnghinglova, H. 2002. "Ethnobotanical study on the edible plants of Mizoram". *Ethnobotany* 14(1&2): 23-33.

Abst.- Wild edible plants play a significant role in the sustenance of rural life in Mizoram. An enumeration of 78 wild edible and famine food plants consumed by the local people of Mizoram is presented. Of these, 23 species are recorded as new edible plants used in Mizoram.

458. Lalramnghinglova, J.H. 1996. "Ethnobotany of Mizoram- A preliminary survey". *J. Econ. Taxon. Bot., Addl. Ser.* 12: 439-459.

Abst.- Mizoram is, perhaps, the least known state in India, and even unknown to the many people outside world. The land is occupied by hill tribal people and the population is constituted by fifteen ethnic groups, viz; *Lusei, Hualngo, Tlau, Thado, Ralte Biate, Hmar, Paihte, Mara* (Lakher), *Lai* (Pawi) *Riang* (Bru), *Chakma, Bawm, Pang* and *Magh* (Dutta, 1992). The last nine ethnic population maintained their own languages and cultural identity, while the first six groups are inseparable ethnoculturally and linguistically. Majority of the population are living in rural areas and depend upon agriculture and forest products. Some distinct holistic groups (*e.g.*

Chakma, Bru, Bawm, etc.) have adopted their way of traditional health care systems. Nevertheless, no scientific exploration has been done so far. The present paper is the first hand information dealing with an enumeration of medicinal plants used by the local people of Mizoram in the primary health care systems.

459. Lalramnghinglova, J.H. & Jha, L.K. 1997. "Ethnomedicine from Mizoram - North East India". *Ethnobotany* 9(1&2): 105-111.

Abst.- A brief account is given of recent field studies carried out in Mizoram - North East India. Ethnomedicine comprises mineral products, medicinal plants, including veterinary plants used in combination for the treatment of bone-setting, bleeding, cancer, etc., and combinations of plants and animals which are used traditionally by different ethnic communities, viz. *Chakma, Mizo, Mara, Lai, Bru, Bawn* and *Pang*.

460. Lalramnghinglova, J.H. & Jha, L.K. 1999. "New records of ethnomedicinal plants from Mizoram". *Ethnobotany* 11(1&2): 57-64.

Abst.- Ethnobotanical research was carried out in Mizoram during 1995-1997. Out of 230 plants studied, 61 were recorded for the first time as having ethnomedicinal uses.

461. Shukla, U., Baishya, A.K. & Ali, S. 1978. "Observations on some economic plants of Mizoram". *Bull. Bot. Surv. India* 20(1-4): 48-52.

Abst.- A note on the bamboos particularly flowers of *Bambusa tulda* which threatens a famine next year, and another 59 species of flowering plants of economic importance are dealt. About a dozen genera having interesting distribution are discussed. *Mantisia* with 3 species seems confined to this state. *Drosera peltata* Smith an insectivorous plant and *Monotropa uniflora* L. a root parasite also occur here.

462. Tripathi, Sunil & Prakash, Ved. 1999. "Studies on Zingiberaceae of N.E. India: VI. *Kaempferia pulchra* Ridl. a new record for India". *J. Econ. Taxon. Bot.* 23(3): 748-750.

Abst.- *Kaempferia pulchra* Ridl. hitherto known to exist only in Malaysia, Thailand and Singapore, is reported here for the first time from Mizoram, India. It is characterized by horizontal leaves, lilac flower, white labellum at base and narrow spathulate anther-crest.

463. Vaid, K.M. & Naithani, H.B. 1980. "Occurrence of *Elytranthe albida* (Bl.) Bl. in Mizoram". *Indian J. Forest.* 3(4): 365-366.

Abst.- During the course of a botanical exploration in Lushai hills, Mizoram, the authors collected a plant name *Elytranthe albida* (Bl.) Bl. which is a new record for this state as well as for India.

NAGALAND

464. Barua, K.N., Bora, I.P. & Singh, J. 2008. "Traditional inventory of some potential economic plants related to Angami tribe in Nagaland". *J. Econ. Taxon. Bot.* 32 (Suppl.): 417-424.

Abst.- Indigenous knowledge is the total achievement traditionally attained by the local people in its place. The folk culture and knowledge is still vital in Nagaland and the Angami tribe expressed itself and the sign of culture through it. The present study deals with the utility of plant resources practiced by Angami tribe and a total of 75 species belonging to 59 genera and 41 families are enumerated. These includes 31 species of edible food, 19 species of natural dyes, 11 species of fodder, 6 species of timber, 4 species of fish poison, 2 species of fibre and 2 species of gum and oil yielding that grow in the forests or found as weed in the cultivated or open fields.

465. Chandra, S. 1975. "*Ilex longecaudata* Comber (Aquifoliaceae)- A new record for India". *Bull. Bot. Surv. India* 17(1-4): 199-201.

Abst.- During a scrutiny of herbarium specimens *Ilex longecaudata* has been found to be occurring in Nagaland which is a new record for India. A detailed description and illustrations of the species are given for easy identification.

466. Changkija, Sapu & Kumar, Y. 1992. "*Panax schinseng* Nees (Araliaceae): A new

distributional record for India". *Indian J. Forest.* 15(1): 85-87.

Abst.- During the courses of botanical explorations and expeditions (1982-89) conducted in connection with ethnobotanical studies in Nagaland the authors collected an important medicinal plant namely *Panax schiseng* Nees from forest of Patkoi range in Nagaland which is a new distributional record from India.

467. Deb, C.R., Sungkumlong & Temjensangba. 2007. "A note on orchid additions to Nagaland flora". *J. Orchid Soc. India* 21(1-2): 69-70.

Abst.- Two species of orchid *i.e. Epipogium indicum* Chowdhery, Pal & Giri and *Malaxis acuminata* D. Don var. *biloba* Hook.f. are reported as new addition to the orchid diversity of Nagaland, India.

468. Dixit, R.D. & Hynniewta, T.M. 1999. "Recollection of endemic fern *Vittaria wattii* Dixit et Nair from Nagaland, India". *J. Econ. Taxon. Bot.* 23(3): 679-680.

Abst.- *Vittaria wattii* Dixit et Nair, an endemic fern of Eastern India has been recollected after a lapse of more than 25 years from Nagaland and reported with brief description in the present note.

469. Hore, D.K. & Sharma, B.D. 1993. "Crop germplasm resources collection from Nagaland state, India". *Indian J. Forest.* 16(4): 372-377.

Abst.- Three exploration trips were conducted in the state of Nagaland in order to collect the germplasm diversity on different cultivated crops and other important economic plants. A total 1014 accessions have been collected during these trips. Extent of diversity of these collections have been summarized. The important observations were also highlighted.

470. Hynniewta, T.M. 1994. "Botany of Mt. Saramati and its environs". *Bull. Bot. Surv. India* 36(1-4): 178-188.

Abst.- The paper gives a brief account of botany of Mt. Saramati in Nagaland, India which represents the state's highest mountain peak (3841 m), the remotest and the botanically unexplored area. A brief note on topography, geology, climate and vegetation together with a comprehensive analysis of the floristic compositions of the vegetation types and is followed by enumeration of the species of angiosperms and gymnosperms. Analysis of the species collected established the following five families as the richest ones on the basis of the number of the species. Orchidaceae (25), Poaceae (24), Asteraceae (17), Ericaceae (13) and Cyperaceae (9). These together represent about 40% of the total number of species collected.

All the species recorded in this paper, except *Deyeuxia pulchella* (Griseb.) Hook. f. (Poaceae) are new addition to the Kanjilal's Herbarium (ASSAM) from the area. There is also no record of any representation of plant species from there by Clarke (1886, 1889), Hooker (1872-97), Kanjilal *et al.* (1934-40), Bor (1942), Jamir and Rao (1988). The present paper, therefore, represents the first source of information regarding botany of the Mt. Saramati.

471. Jamir, N.S. 1997. "Ethnobiology of Naga tribe in Nagaland: I- medicinal herbs". *Ethnobotany* 9(1&2): 101-104.

Abst.- The state of Nagaland is situated in the north-eastern region of India, which is inhabited by 14 major tribes. The state is perhaps endowed with the richest flora and fauna in the country. The biodiversity in the state is being utilized by these tribal people for their existence and livelihood, including multipurpose uses as herbal medicine. *Panax pseudo-ginseng* is used as tonic and to dissolve tumours. *Viscum articulate* is used for rheumatism, *Clerodendrum colebrookianum* for reducing high blood pressure, *Bambusa tulda* for abortion, *Laggera alata* for stomach ulcer and tumor, and so on.

The author stress the crying need for survey and conservation of these valuable plants, because many of them are on the verge of extinction due to rampant deforestation and denudation of land.

472. Jamir, N.S. & Rao, R.R. 1985. "A contribution towards a pteridophytic flora of Nagaland".

***J. Econ. Taxon. Bot.* 7(2): 277-297.**

Abst.- During the study of pteridophytic flora of Nagaland, the authors have recorded 302 species of ferns and fern-allies in which 180 species are terrestrial, 101 species are epiphytes, 17 species are lithophytes and 4 are aquatic. These 302 species belong to 101 genera and 40 families.

473. Jamir, N.S., Rao, R.R. & Chaudhury, Usha. 1985. "*Polystichum prolificans* v. A. v. R. (Aspidiaceae) a new record for India". *Indian J. Forest.* 8(2): 157-158.

Abst.- During the course of a botanical exploration in Nagaland, the senior author collected an interesting specimen of *Polystichum*, viz. *P. prolificans* which is so far reported from Malaya and Sumatra and therefore constitutes a new record for India.

474. Jana, T.K., Ghosh, S.N. & Das, A.K. 2007. "Meliolaceae of Nagaland, India-IV". *J. Botan. Soc. Bengal* 61(2): 123-130.

Abst.- Two new meliolaceous fungi viz., *Appendiculella nagalandis* and *Meliola kohimanensis* causing leaf spots on *Mangifera* sp. and *Eugenia oblate* Roxb. respectively were collected from Zunheboto and Kohima districts of Nagaland. These are described and illustrated in this paper.

475. Kemp, Rushulo. 2003. "Ethno-medicinal plants used by the Rengma tribe in Dimapur district, Nagaland (India)". *J. Econ. Taxon. Bot.* 27(2): 485-488.

Abst.- The paper describes nine most commonly used ethno-medicinal plants found in the present study plots in the areas inhabited by the Rengma tribe in Dimapur district, Nagaland. The plants have been used for the treatment of various ailments on which so far no ethnobotanical studies have been carried out.

476. Krishna, B. & Sastry, A.R.K. 1972. "*Cymbidium tigrinum* Parish ex Hook.- A new record from Nagaland, India". *Bull. Bot. Surv. India* 14(1-4): 179-180.

Abst.- *Cymbidium tigrinum* Parish ex Hook. has been recorded here for the first time from Nagaland.

477. Megoneitso & Rao, R.R. 1983. "Ethnobotanical studies in Nagaland-4. Sixty two medicinal plants used by the Angami-Nagas". *J. Econ. Taxon. Bot.* 4(1): 167-172.

Abst.- The present paper contain 62 medicinal plants used by Angami Nagas which have not been recorded so far in the common published literature on medicinal plants.

478. Nayar, M.P. & Giri, G.S. 1975. "A new species of *Measa* (Myrsinaceae) from Nagaland (India)". *Bull. Bot. Surv. India* 17(1-4): 182-184.

Abst.- A new species of *Measa* viz., *M. wardii* Nayar et Giri has been described from Nagaland.

479. Panda, S. 2006. "*Lyonia macrocalyx* (J. Anthony) Airy Shaw (Ericaceae)- A new record for India from Arunachal Pradesh and Nagaland". *Bull. Bot. Surv. India* 48(1-4): 207-210.

Abst.- During a field trip to Saramati Mt. in Tuensang district of Nagaland, the author collected *Lyonia macrocalyx* (J. Anthony) Airy Shaw on the way to Thanamier village from Penkim village, which is a new record for India. A detailed description along with citation, distribution, flowering and fruiting period, habitat and specimens examined has been given.

480. Phukan, S. & Odyuo, N. 2006. "Addition to Indian Orchid flora- *Cleisostoma duplicilobum* (J.J. Sm.) Garay from Nagaland". *Bull. Bot. Surv. India* 48(1-4): 219-222.

Abst.- During a plant collection trip to Mt. Saramati, Nagaland the authors collected an interesting orchid viz. *Cleisostoma duplicilobum* (J.J. Sm.) Garay which is a new record for India from Nagaland. A detailed description along with correct nomenclature, illustration, flowering time, distribution and specimens examined has been given for easy identification.

481. Rao, R.R. & Jamir, N.S. 1982. "Ethnobotanical studies in Nagaland II. 54 medicinal plants used by *Nagas*". *J. Econ. Taxon. Bot.* 3(1): 11-17.

Abst.- In present paper 54 medicinal plants used by various subtribes of *Nagas* have been described which have not been recorded so far in the common published literature on medicinal plants.

482. Rao, R.R. & Jamir, N.S. 1985. "A new species of *Cyathea* (Cyatheaceae) from Nagaland, India". *J. Econ. Taxon. Bot.* 6(1): 207-209.

Abst.- A new species of *Cyathea* viz. *C. holttumiana* R.R. Rao et N.S. Jamir has been described from Changki, Mokokchung dist., Nagaland.

483. Rao, R.R. & Jamir, N.S. 1990. "Ethnobotany of the Ao and Angami Nagas of Nagaland". *J. Econ. Taxon. Bot.* 14(3): 593-604.

Abst.- In the present study, wild edible as well as other useful plants used by the Ao and Angami tribes of Nagaland are discussed. The species are arranged alphabetically with local names, family and detailed uses, as suggested by the local informants.

484. Singh, G.P. & Singh, K.P. 1989. "Two new records of lichens from India". *J. Econ. Taxon. Bot.* 13(1): 103-105.

Abst.- The paper deals with two foliose species of lichens- *Lobaria crassior* Vain. and *Parmelia rhyndodes* (Hale) Singh, from Nagaland as new records for Indian lichen flora.

485. Verma, D.M. 1985. "*Carex asraoi* -A new species of Cyperaceae from Nagaland, India". *J. Econ. Taxon. Bot.* 7(3): 605-608.

Abst.- A new species of *Carex* viz., *C. asraoi* belonging to the family Cyperaceae has been described from Nagaland.

TRIPURA

486. Chakraborty, N.K. 1989. "Useful plants of Tripura jute fields". *J. Econ. Taxon. Bot.* 13(2): 357-366.

Abst.- The paper presents 81 weed species from jute fields of Tripura state. Various uses of these plants have been compiled from published literature. Out of 81 weed species from different districts of Tripura, 67 possess economic importance in one way or other. The various uses of weeds may benefit manufactures of plant products, crude drug dealers or persons interested in beneficial aspects of plants.

487. Deb, D.B. 1961. "New record of plants for India from Tripura-I". *Bull. Bot. Surv. India* 3(1): 87-89.

Abst.- The paper records for the first time the occurrence of *Psidium guineense* in India from Tripura. It further records, probably for the first time, the transition from stamens to petals in the family Myrtaceae. The plant is exotic in and about Agartala, Tripura. It does not seem to be spreading. How and when the immigrant entered Tripura could not be traced. The paper contains a detailed description of the species and the distinguishing characters by which it differs from *Psidium guajava* Linn.

488. Deb, D.B. 1963. "Bibliographical Review on the Botanical Studies in Tripura". *Bull. Bot. Surv. India* 5(1): 49-58.

Abst.- This paper 'Bibliographical Review on the Botanical Studies in Tripura' presents most probably all the literature that refers to the plant life in Tripura. No work of any appreciable size was ever published on any aspect of plants in this territory. In absence of such a work the author had to go through the chronological narratives on the rulers of the land, historical accounts,

administrative reports and literacy publication on Tripura for materials on botanical aspects. Such a research resulted in finding out several interesting records of Tripura plants. All these isolated references, however trivial may be, have been referred to in this paper. The views expressed by the author in course of the review of references, are based on his constant field and herbarium study on the vegetation and flora of Tripura for five years. For this reason he could not agree with the views expressed by the casual observers on the vegetation of Tripura.

489. Halam, R., Saha, Reema & Datta, B.K. 2008. "An ethnobotanical study of Halam tribe of Dhalai district, Tripura, India". *J. Econ. Taxon. Bot.* 32 (Suppl.): 8-12.

Abst.- The present paper deals with the traditional uses of medicinal plants by the Halam tribal community inhabiting the forest outskirts of Dhalai district of Tripura. The particulars of the plant parts used, local name, mode of preparation and administration are given. In all 31 plant species belonging to 28 families used in primary health care are mentioned.

490. Majumdar, Koushik, Saha, Reema, Datta, B.K. & Bhakta, T. 2006. "Medicinal plants prescribed by different tribal and non-tribal medicine men of Tripura state". *Indian J. Traditional Knowledge* 5(4): 559-562.

Abst.- The paper deals with 33 medicinal plants along with their local names, parts and ethnomedicinal uses prescribed by tribal and non-tribal medicine men of Tripura state. The ethnobotanical field survey was conducted around the tribal areas of the state during 2002-2003 to highlight the ethnomedicinal uses and the herbal formulation/ preparations of various traditional medicines. The survey comprised of the medicinal use of 33 species of 31 genera belonging to 25 families of flowering plants used for the treatment of various ailments either single or in combinations. The study provides immense scope for the active principles analysis and clinical studies of these plants for future drug development.

491. Malhotra, C.L. & Deori, N.C. 1973. "*Acriopsis indica* Wight (Orchidaceae)- from Tripura". *Bull. Bot. Surv. India* 15(1&2): 151-153.

Abst.- In the course of a botanical exploration in the state of Tripura the authors collected *Acriopsis indica* Wight, an interesting and rare orchid which constitutes a new record for Tripura and India as well.

492. Shil, Sanjib & Sharma, G.D. 2003. "A few medicinal plants from Reang tribals of North Tripura". *J. Econ. Taxon. Bot.* 27(2): 451-456.

Abst.- India is a versatile reservoir of medicinal plants of the world. The spectrum of medicinal flora is distributed in the terrestrial forest ecosystem, the alpine, the coastal region as well as the sea depth. Since centuries, the medicinal plants of forest have been invariably utilized by the humanity for the cure of various ailments. These plants are extensively used in traditional system of medicine. In this present work 34 species of medicinal plant belonging to 27 family are listed from Reang tribes of North Tripura. These plants are reported to be effective for a number of diseases. The plants in this work are listed only on the basis of oral information. No pharmacological investigation of the plants mentioned here was carried out and as such this project does not suggest to use them.

493. Singh, Birkumar H., Hynniewta, T.M. & Bora, P.J. 1997. "Ethno-medico-botanical studies in Tripura, India". *Ethnobotany* 9(1&2): 56-58.

Abst.- The paper provides first hand information on 30 medicinal plants used by the Tripuri tribes of Tripura for the treatment of different ailments.

494. Singh, Birkumar H., Hynniewta, T.M. & Bora, P.J. 1999. "An ethnobotanical note on wild edible plants of Tripura, India". *Ethnobotany* 11(1&2): 26-28.

Abst.- An account is given of 37 wild plants used by the Tripuri tribes of Tripura. The Tripuri tribes have a fair knowledge of plants and their utilization. Wild edible plants of the surrounding forest supplement their main diet. The present account supplements the existing information in terms of species identity and parts used in north-east India.

TWO OR MORE AFOREMENTIONED STATES/ N.E. INDIA

495. Baruah, Akhil & Nath, Subhan C. 2001. "*Cinnamomum assamicum* S.C. Nath & A. Baruah- A new species of Lauraceae from Northeastern India". *J. Econ. Taxon. Bot.* 25(1): 27-32.

Abst.- *Cinnamomum assamicum* S.C. Nath & A. Baruah, a new species from Northeastern part of India, has been described and illustrated with a note on its occurrence and conservation measure.

496. Baruah, Akhil & Nath, Subhan C. 2005. "A systematic census on the *Cinnamomum* Schaeffer (Lauraceae) member growing in North-East India". *J. Econ. Taxon. Bot.* 29(2): 294-327.

Abst.- A systematic census of *Cinnamomum* members growing in North-east India was carried out during 1994-1997. Twenty six taxa with variable phenotypic and odoriferous characters were collected for the study. Intensive laboratory studied based on macromorphology, foliar epidermal and venation patterns, and aromatic characters have lead to the discovery of certain new entities deserving taxonomic recognition, and some require nomenclatural changes. The present paper provides a taxonomic key, correct nomenclature, synonym, detailed description with information on essential oil characters, phenology and notes on ecology and distribution of the taxa.

497. Baruah, Akhil & Nath, Subhan C. 2006. "Ethnobotanical evaluation of *Cinnamomum* species used as spices and condiments in north-east India". *Ethnobotany* 18(1&2): 27-36.

Abst.- The present communication deals with 27 taxa belonging to 13 species of *Cinnamomum*, which are used as spices and condiments by the people of north-east India. Among these, 14 taxa, representing seven species, have been known and used as 'cinnamon', eight taxa representing three species as 'tejpat' and six taxa representing four species as 'camphor' and other culinary products.

498. Baruah, Akhil & Nath, Subhan C. 2007. "Systematics and diversities of *Cinnamomum* species used as "Cinnamon" spice in North-East India". *J. Econ. Taxon. Bot.* 31(4): 872-887.

Abst.- A systematic census of *Cinnamomum* species used as "cinnamon" spice in Northeast India was conducted during 1994-1997. Fourteen taxa with variable phenotypic and odoriferous characters were collected. On critical study with emphasis to their morphology, foliar epidermal and venation characters these taxa revealed to be comprising of seven species namely *C. assamicum* Nath & Baruah, *C. bejolghota* (Buch.-Ham.) Sweet, *C. cassia* Blume, *C. iners* Reinw. *C. pauciflorum* Nees, *C. sulphuratum* Nees and *C. verum* Presl. For each taxon latest botanical names alongwith its synonyms, taxonomic citations, morphological descriptions (variant, if any), phenology, occurrence, distribution, uses and significant foliar epidermal and venation characters have been appended. A taxonomic key to differentiate the taxa, formulated on the basis of evaluated characters, has also been provided.

499. Baruah, Akhil, Nath, Subhan N. & Boissya, Champok L. 2000. "Systematics and diversities of *Cinnamomum* species used as "Tejpat" spice in North-East India". *J. Econ. Taxon. Bot.* 24(2): 361-374.

Abst.- A systematic census of *Cinnamomum* species used as "Tejpat" in North-East India was conducted during 1994-1997. Eight taxa with variable phenotypic characters, collected as a result of the census, on critical study with emphasis to their morphology, foliar venation and epidermal characters revealed to be five distinct species namely *C. tamala* Nees, *C. impressinervium* Meissn., *C. bejolghota* (Buch.-Ham.) Sweet and *C. sulphuratum* Nees with one species of unknown identity. However, while considered the morphology of leaves of *C. tamala* growing in the region, its population could be categorized as four distinct variants. These are, one with strictly ovate-lanceolate leaves, sharply acute to acuminate apex and acute to obtusely acute base (Variant I); one with elliptic-lanceolate to ovate-lanceolate leaves, acuminate apex and acute base (Variant II); one with broadly elliptic to elliptic-lanceolate leaves,

acuminate apex and acute to decurrently acute base (Variant III); while the remaining taxon was found to be with narrowly elliptic to oblong-lanceolate leaves, acuminate at apex and acute base (Variant IV). A taxon namely *C. sulphuratum* which has however, been preserved at Central National Herbarium, Howrah (CAL) as a variety of *C. tamala* viz. *C. tamala* Nees var. *genuinum* Meissn. (G. King's collection, dated 12.12.1875, Herbarium sheets nos. 383541 and 383542) has been found to be significantly different from *C. tamala*, indicating the necessity of its correct nomenclature. For each taxon described latest botanical names along with their synonyms, taxonomic citations, morphological descriptions, phenology, distribution, ecology, use, and significant foliar epidermal and venation characters have been provided. A taxonomic key to identify the taxa, based on the evaluated characters has also been formulated.

500. Baruah, Parukutty & Sarma, Gajen Chandra. 1987. "Studies on the medicinal uses of plants by North East tribes-III". *J. Econ. Taxon. Bot.* 11(1): 71-76.

Abst.- A preliminary survey of the medicinal plants used by the Boro and Rava tribals of Assam and Apatani, Monpa, Lepcha tribals of Arunachal Pradesh has been undertaken with special reference to purgative, local liquor production, blood purifier, cough syrup, tanning leather, rheumatism, jaundice and worm control. The present communication deals with fifty one plants giving details of the parts used, their local names and methodology of treatment.

501. Basak, Sandip Kumar & Maiti, G.G. 1999. "A new *Primula* (Primulaceae) from the Eastern Himalaya". *J. Econ. Taxon. Bot.* 23(3): 699-702.

Abst.- The new species *Primula nanocapitata* Balf. f. et W.W. Sm. ex Basak & Maiti, sp. nov. was typified by G. King's collector from the Eastern Himalaya dating back to 1882 is described and illustrated, and the characters distinguishing it from the related species *P. capitata* Hook. are discussed.

502. Basak, Sandip Kumar & Maiti, G.G. 2000. "Seed morphology in *Primula capitata* Hook. complex (Primulaceae) from the Eastern Himalaya". *J. Econ. Taxon. Bot.* 24(1): 107-114.

Abst.- The members of *Primula capitata* complex are more or less identical both in vegetative and floral features but differ in seed morphology. Based on seed shape and details of testal surface, especially examined under SEM, this complex is encouraged to revive the earlier taxonomic status. Moreover, the characters like seed size, colour and more vivid observation of surface ornamentation are used for delimitation of four subspecies of *P. capitata* and reinstate the specific status of subsp. *crispata* to *P. crispata*. A key is provided to facilitate the identity.

503. Basnet, Dewan B. 1999. "*Edgeworthia gardneri* Meissn.- A source of raw material of eco-friendly traditional hand-made paper of Eastern Himalaya". *Ethnobotany* 11(1&2): 115-118.

Abst.- *Edgeworthia gardneri* Meissn. is a source of raw material for the unique traditional hand-made paper of Central and Eastern Himalaya. The present paper gives a brief botanical account, its distribution and eco-friendly traditional and improved methods of paper processing. Due to the wide range of domestic and international markets of paper products and paper processed from the raw material and its ecological importance, it not only provides employment opportunities to the village people but also helps in preserving the eco-friendly age-old cultural heritage of Central and Eastern Himalaya.

504. Basu, D. 1985. "*Elaeagnus loureirii* Champion- A new record for India". *Bull. Bot. Surv. India* 27(1-4): 255-257.

Abst.- *Elaeagnus loureirii* Champion, a species so far known only from Hongkong and China has been reported here from Manipur and Meghalaya and it is a new record for India.

505. Biswas, S.N. 1994. "An interesting new variety of *Edgaria darjeelingensis* C.B. Clarke (Cucurbitaceae) from Eastern Himalayas (Darjeeling & Sikkim)". *J. Econ. Taxon. Bot.* 18(1): 173-176.

Abst.- A new variety of *Edgaria darjeelingensis* C.B. Clarke (var. *clarkiana* S.N. Biswas *var. nov.*) has been proposed, along with description, with latin diagnosis, detailed distributional

notes, typification and line drawings with analysis of floral parts of the new taxon have been appended.

506. Chaudhury, Dipesh & Neogi, B. 1999. "Ethnobotany of Khasi and Chakma tribes of North East India". *J. Econ. Taxon. Bot.* 23(2): 583-589.

Abst.- The present paper deals with the ethnobotany of Khasi and Chakma tribes living in Meghalaya and Mizoram respectively. These tribal communities use different plant species for their very existence. They use locally available plant species as preventive and curative agents for various ailments.

In this paper 37 such taxa belonging to 34 genera and 15 families have been discussed. It is estimated that out of 37 species, 28 species are used for medicinal purpose. It is observed that plant parts like leaf and root are the most important for medicinal uses Fig.2. Each species has been provided with Khasi and Chakma vernacular name(s). The voucher specimens have been deposited at the herbarium of North Eastern Hill University (NEHU), Shillong.

507. Chauhan, A.S. 1994. "Green heritage in N.E. region and its conservation". *Bull. Bot. Surv. India* 36(1-4): 135-141.

Abst.- Large variation in altitude, soil, temperature and rainfall of the North-Eastern region has contributed immensely to the rich biological diversity. The region is also considered to be home of several primitive angiosperms, centre of speciation, with substantial endemics and progenitors of many cultivated and other economic plants viz. *Amomum, Cardamum, Dioscorea, Musa, Piper, Prunus, Pyrus, Rubus, Trichosanthes, Zingiber* and orchid etc. It is appropriately considered as a cradle of plant evolution. However, the man himself disrupting the natural ecosystems at a terrifying rate and in many parts of the region, these limits have already been transgressed resulting in the depletion of generic wealth considerably. As a result, several plant species have already dwindled in natural habitats, while a few are on the verge of extinction.

In the present paper the rich bio-diversity met within this region along with its threat has been highlighted. Conservation strategy for their survival has also been discussed.

508. Choudhury, H.K. & Biswas, Sas. 1987. "Potential forest resources for pulp and paper in North-Eastern India with particular reference to the exploration and exploitation". *Indian J. Forest.* 10(4): 304-309.

Abst.- North-Eastern India covering Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura is not only a good source of forest based industries but also forms a living emporium of germplasm for genetic variability of various economic and industrial potential species. In fact, ca 50% of the total Indian flora is represented in this region. Broadly the forest can be classified into (i) tropical, (ii) temperate and (iii) alpine types. The states of North-Eastern India possessing a high developmental potential and comparatively well developed forest structure particularly for the establishment of pulp and paper industries, systematic management and intensive exploration and identification of such area are required to be given due emphasis. The main hardwood and coniferous pulpwood species and species of bamboos are reeds and grasses typical of the region have been enumerated with note on the distribution of the species. The factors considered for the management of potential resources for pulp and paper industries have been comparatively dealt in the paper.

509. Das, Debika. 1968. "Two new species of Annonaceae from Eastern India". *Bull. Bot. Surv. India* 10(3&4): 263-266.

Abst.- Two undescribed species of Annonaceae e.g. *Trivalvaria kanjilalii* D. Das *spec. nov.* and *Fissistigma santapaui* D. Das *spec. nov.* are described with illustrations. The specimen of the former species was collected by U.N. Kanjilal in 1917 from Wah-Maw-long in the Khasia Hills, Assam and of the latter was collected by G. Panigrahi in 1962 from Dulong Reserve Forest, Assam. These were wrongly placed under different genera.

510. Deb, D.B. & Mondal, D.C. 1984. "Endemic species of *Ophiorrhiza* L. (Rubiaceae) from Eastern India". *Bull. Bot. Surv. India* 26(3&4): 231-234.

Abst.- Two endemic species of *Ophirrhiza* viz., *O. subcapitata* and *O. wattii* which are represented in the herbaria by few collections are described here.

511. Deka, P.C., Baruah, Gayatri & Devi, Mala. 1990. "A preliminary investigation of disease of bamboo in North-East region of India". *Indian Forester* 116(9): 714-716.

Abst.- Disease occurred in different bamboo species of North-East India were recorded and identified. Various symptoms related to the specific disease were studied. Gray leaf spot of *Bambusa nutans* caused by *Hendersonula toruloidea*, brown leaf spot of *Melocanna humilis* and *Fusarium* leaf spot of *Teinostachyum dullooa* caused by *Fusarium pallidoroseum* and chlorosis of *Dendrocalamus hamiltonii* caused by *Paecilomyces lilacinus* has been identified and studied.

512. Deori, N.C. & Das, G.C. 1976. "Notes on rare orchids from North Eastern India-II". *Bull. Bot. Surv. India* 18(1-4): 233-235.

Abst.- This paper includes *Dendrobium parihii* Reichb. f., *Saccolabium himalaicum* Deb, Sengupta & Malik and *Katherinea navicularis* Balakr. & Chowdhury as new record for India. *Panisea tricallosa* Rolfe, *Cremastra appendiculata* (D. Don) Makino and *Biermannia bimaculata* (King & Pantl.) King & Pantl. are reported here as rare and interesting orchids.

513. Deori, N.C. & Das, G.C. 1976. "New and rare plant from North Eastern India". *Bull. Bot. Surv. India* 18(1-4): 238-241.

Abst.- *Codonopsis purpurea* Wall. (Campanulaceae), *Polygonum dumetorum* Linn. (Polygonaceae) and *Oberonia demissa* Lindl. (Orchidaceae), recorded earlier from Nepal, Kumaon, Kashmir, Himachal Pradesh and Sikkim, but nowhere from North Eastern India, are described here with analytical drawing to facilitate their further discovery and identification in the field.

514. Deori, N.C. & Malhotra, C.L. 1973. "*Cleisostoma paniculatum* (Ker.-Gawl.) Garay (Orchidaceae)- A new record for India". *Bull. Bot. Surv. India* 15(3&4): 274.

Abst.- *Cleisostoma paniculatum* is recorded here from India for the first time.

515. Dixit, R.D. & Ghosh, B. 1985. "On the rediscovery of four rare species of ferns from India". *Bull. Bot. Surv. India* 27(1-4): 116-119.

Abst.- *Ctenitis manipurensis* (Bedd.) Ching, *Lindsaea javanensis* Bl., *L. lucida* Bl. and *L. orbiculata* var. *commixta* (Tagawa) Kram. have been rediscovered after a lapse of about one hundred years during special collection tours to Manipur in February 1978, 1984 and to Arunachal Pradesh and Meghalaya in May 1982.

516. Dixit, R.D. & Panigrahi, G. 1969. "Studies in Indian Pteridophytes-III. The family Marattiaceae (*sensu* Copeland, 1947) in India". *Bull. Bot. Surv. India* 11(3&4): 367-371.

Abst.- The family is represented by 6-7 living genera and about 100-214 spp. in the world flora. With a view to bringing out an illustrated manual on the systematics of the family Marattiaceae in India, the three living genera *Angiopteris* 1 sp. (3 spp. according to Nishida, 1966), *Marattia* 1 sp., and *Christensenia* 1 sp. occurring in India have been dealt with. It shows that while *Angiopteris* is distributed throughout India, *Marattia* and *Christensenia* are restricted to the southern and the Eastern India respectively.

517. Dutta, B.K. & Dutta, P.K. 2005. "Potential of ethnobotanical studies in North East India: an overview". *Indian J. Traditional Knowledge* 4(1): 7-14.

Abst.- North East India has a valuable heritage of herbal remedies. Its rural people and tribals living in remote/forest areas still depend to a great extent on the indigenous systems of medicine/ cultivation. So far studies in this regard have been reported from a very limited number of the tribes of North East region, viz. Ler, Mikir, Karbis, Miris, Khasi and Jaintia, Garo, Monpas, Nishi, Apatani, Reangs, etc. A wide range of plants with ethnobotanical value against some very important diseases have been reported but much larger numbers of folk medicines have remained endemic to certain tribal pockets in North East India. Therefore, further detailed

studies on the ethnobotanical aspects in the region may provide meaningful ways for the promotion of traditional herbal medicinal plants/land races of crop plants for the benefit of mankind at large. In the present paper, the work that has been reported and the potentials of the ethnobotanical studies with particular reference to biodiversity conservation of the important medicinal/crop plants in the North Eastern region have been highlighted and discussed.

518. Gantait, S., Kundu, S.K. & Giri, G.S. 2006. "Some important medicial plants of North-East India". *J. Econ. Taxon. Bot.* 30 (Suppl.): 283-288.

Abst.- Blessed with the wide range of physiography and eco-climatic conditions, the North-Eastern region of India comprising seven sister states has adequately expressed in giving rise a rich gene pool, both wild and cultivated. Spreading over an area of approximately 2,50,000 sq. km. only, the region is estimated to harbour about 7000-8000 flowering plants, nearly 50% of Indian flora, including many potential groups under, rare, endangered and endemic categories. It is imperative to mention here that this region has always served as a store house of medicinal plants which has had been used by the tribal populations inhabiting in different parts of this region as the sole source for cure from various diseases and ailments since time immemorial. Even in the recent times, where there is considerable influx and encroachment of modern civilization with advance medical facilities, these tribal people still hold their greater faith on indigenous type of medication and conserve their traditional knowledge of using plants and plant parts as the main source of cure. In the present paper an effort has been made to give an outline of 34 species of important medicinal plants of the region, belonging to as many genera and 27 families, emphasizing their local uses with a view to draw attention for protection of these potential genetic resources *in situ* and the traditional knowledge of herbal therapy as well.

519. Ghosh, R.B. & Samaddar, U.P. 1989. "The Rhododendrons of the North-East India". *J. Econ. Taxon. Bot.* 13(1): 205-220.

Abst.- The present paper deals with taxonomy and systematics of the genus *Rhododendron* L. in N.E. India where 63 taxa have been found to occur. The original reference with other necessary citations, nomenclature and synonymy, if any, diagnostic characters, flowering and fruiting period, distribution range of each taxon and specimen examined are also appended.

520. Gogoi, R. & Bhaumik, M. 2006. "Two naturalized species of *Alternanthera* Forssk. in North-East India". *J. Econ. Taxon. Bot.* 30(4): 984-988.

Abst.- *Alternanthera brasiliana* (L.) Kuntze and *A. bettzichiana* (Regel) G. Nichols.- two Brazilian taxa are recorded in wild for the first time from North East India.

521. Hore, D.K. 1998. "Genetic resources among bamboos of Northeastern India". *J. Econ. Taxon. Bot.* 22(1): 173-181.

Abst.- The paper analyses bamboo genetic resources of Northeastern states of India. Distribution of bamboo taxa in northeastern states along with a list of rare taxa is provided. Over exploitation of bamboo species have been discussed with suggestions for conservation of these genetic resources.

522. Islam, M. 1984. "Certain fibre yielding plants in the North-Eastern region, India". *J. Econ. Taxon. Bot.* 5(4): 767-783.

Abst.- A brief account of certain fibre yielding plants, occurring in both plains and hilly areas of the North-eastern region, India has been made with their phytogeographical status, nature of growth, frequency of distribution and different nature of uses in day to daily life. Only three Gymnospermic and one hundred and sixty two Angiospermic species, included in two and forty two families respectively have been recorded as fibre yielding plants, in the present survey of the work.

523. Islam, M. 1986. "Certain poisonous plants of the North Eastern region, India". *J. Econ. Taxon. Bot.* 8(1): 51-63.

Abst.- A brief account on the occurrence of certain poisonous plants in the plains and hilly

areas of the north-eastern region of India has been given with their phytogeographical status, nature of growth and frequency of distribution. 101 dicotyledonous species embracing 78 genera and 22 families are recorded in the present work. The different harmful effects caused by different parts of the plants on the different organisms, as men, livestock, fishes and insects have also been presented.

524. Islam, M. 1991. "Certain fodder plants of North-Eastern region, India". *J. Econ. Taxon. Bot.* 15(2): 355-370.

Abst.- A brief account of certain fodder plants, grasses and non grasses-herbaceous, has been given with their nature of growth and occurrence in plains and hilly areas of the North-eastern region and the different parts of the plants used by livestocks in different times. 165 species included in 30 families have been recorded in the present study.

525. Islam M. 1992. "Certain spice and condiment yielding plants of North-Eastern region, India". *J. Econ. Taxon. Bot.*, *Addl. Ser.* 10: 267-273.

Abst.- A comprehensive account on the occurrence of certain spice and condiment yielding plants in plains and hilly areas of the North-Eastern region, India has been made with their nature of growth, frequency of distribution and the nature of utilization of different parts. 68 species embracing 46 genera and 23 families are recorded, in the present survey of the work.

526. Islam M. 1996. "Ethnobotany of certain underground parts of plants of North-Eastern region, India". *J. Econ. Taxon. Bot., Addl. Ser.* 12: 338-343.

Abst.- The paper deals with the certain underground parts as rhizomes, tubers, bulbs etc. of different plants used by aboriginal tribes and other indigenous inhabitants of different localities of the North-Eastern region, India, for their food, traditional medicines and other purposes. Forty species included in 17 families have been recorded in the present survey of the work and most of the species are useful both for food and medicine.

527. Islam, M. 1997. "Studies on certain laticiferous plants of the north eastern region, India". *J. Econ. Taxon. Bot.* 21(1): 1-11.

Abst.- A brief account of certain laticiferous plants occurring in the plains and hilly areas of the North-eastern Region, India has been made along with their phytogeographical status, nature of growth and frequency of distribution. 99 species embracing 63 genera and 15 families are recorded. The uses of latex distributed in different parts of the plants have been discussed.

528. Islam, M. 2000. "Ethnobotany of bark of certain plants of North-East India". *J. Econ. Taxon. Bot.* 24(2): 419-432.

Abst.- Bark like other plant parts/organs is ethnobotanically important to both Tribal and Non-tribal inhabitants of the North-East India in different aspects of their life. Bark of 213 species belonging to 143 genera and 60 families have been recorded in the present report for their ethnobotanical importance and most of the species belong to dicots and a very few are monocots and gymnosperms.

529. Joseph, J. & Abbareddy, N.R. 1980. "*Peristylis richardianus* Wt. and *Liparis wrayii* Hook. f.- Two ground orchids new to North Eastern India". *Bull. Bot. Surv. India* 22(1-4): 182-183.

Abst.- In a general exploration and study of orchids in north-eastern India, *Peristylis richardianus* Wt, so far known from the South Indian hills and Nepal only, and *Liparis wrayii* Hook.f. unknown in India, but known from Burma to New Guinea, were discovered from Khasi hills of Meghalaya and Tirap district of Arunachal Pradesh, respectively. In view of the phytogeographical interest, and in the thought that this would stimulate finding them elsewhere, a detailed description with illustration for each species, with some ecological notes is provided.

530. Kanjilal, P.B., Kotoky, Rumi, Pathak, M.G., Singh, R.S., Nath, T., Mazid, E. & Hazarika, K. 2001. "Fatty acid composition of certain tree borne oil seeds of Leguminosae family from North East India". *J. Econ. Taxon. Bot.* 25(1): 63-67.

Abst.- To explore the potentiality of tree borne oil seeds of 17 tree species belonging to family Leguminosae were collected and identified from the states of Arunachal Pradesh, Assam, Meghalaya and Nagaland. Distribution, availability and fatty acid content of these seeds were determined. Physico-chemical characteristics of these oils were analysed along with their fatty acid composition. The results indicate variation in oil content among seeds studied which ranges from 2 to 16.5%. Most of these oil contain palmitic acid, stearic acid, oleic acid, linoleic acid, and arachidic acid. The highest palmitic acid content is recorded in *Cassia siamea* (25.3), stearic acid in *Dalbergia sissoo* (23.2), linoleic acid in *Caesalpinia bonducella* (68.1) and arachidic acid in *Dalbergia sissoo* (18.3).

531. Konwer, D., Kataki, R. & Deka, D. 2001. "Fuel-wood characteristics of some indigenous tree species of North-East India". *Indian J. Forest.* 24(3): 316-319.

Abst.- Fuel-wood characteristics of seven indigenous tree species of North-East India, viz., *Machilus bombycina* King, *Castanopsis indica* (Roxb.) A. DC., *Litsea monopetala* (Roxb.) Pers., *Litsea glutinosa* (Lour.) Robinson, *Lagerstroemia speciosa* (Linn.) Pers., *Derris indica* (Lamk.) Bennet and *Cassia fistula* L. were determined. Among all the tree species *Machilus bombycina* was found to be the best fuel-wood species followed by *Litsea glutinosa* and *Castanopsis indica*.

532. Mahata, A.N., Mukherjee, A. & Mondal, M.S. 1998. "North East Indian species of Pandanaceae". *Bull. Bot. Surv. India* 40(1-4):82-90.

Abst.- The Pandanaceae R. Br., is represented in North East India by 4 species of the only genus *Pandanus* Parkinson among which *P. unguifer* Hook.f. is endemic to this region and the Eastern Himalaya. This work provides informations about morphology, chromosome number, distribution and uses of the concerned taxa. *P. unguifer* Hook.f. and *P. furcatus* Roxb. have so far remained unrepresented in taxonomic literature on Meghalaya.

533. Maiti, G.G. 1982. "Gentianaceae of Eastern India". *J. Econ. Taxon. Bot.* 3(2): 541-547.

Abst.- Plants belonging to family Gentianaceae occurring in Eastern India have been enumerated along with its distribution and economic uses.

534. Mao, A.A. 2004. "Notes on habitat and distribution of *Bulbophyllum rothschildianum* (O'Brien) J.J. Sm.- A rare and beautiful orchid of North East India". *J. Orchid Soc. India* 18(1-2): 69-74.

Abst.- The paper presents notes on natural habitat, distribution, and flowering pattern of *B. rothschildianum*, a rare, endemic, and beautiful orchid of North East India as observed under cultivation.

535. Mehra, P.N., Bawa, K.S., Khosla, P.K. & Hans, A.S. 1983. "Floristic account of some forest types of the Eastern Himalayas". *Bull. Bot. Surv. India* 25(1-4): 1-18.

Abst.- Detailed floristics of some forest types broadly classified as, i) moist tropical, ii) montane subtropical and iii) montane wet temperate, of a limited area in the Eastern Himalayas are described. Rainfall, temperature, altitude, and profile of the mountains are the determining factors governing the types of forests in the area.

536. Mukherjee, A., Gantait, S. & Gupta, S. 1998. "Census of Valerianaceae Batsch. in eastern Himalaya". *Geobios, New Rep.* 17(1): 27-30.

Abst.- Valerianaceae, a Magnoliopsida family, is represented in the Eastern Himalaya by *Patrinia monandra, Nardostachys grandiflora, Valeriana hardwickii, V. jatamansi* and *V. roylei*. These are distributed in the temperate to alpine regions mostly of Sikkim. These species are quite uncommon and the Red Data Book of Indian Plants includes *N. grandiflora* as a vulnerable species. The paper ascertains *V. roylei* as a new record from the Eastern Himalaya.

537. Naik, V.N. & Panigrahi, G. 1961. "Genus *Hedychium* in Eastern India". *Bull. Bot. Surv. India* 3(1): 67-73.

Abst.- This paper re-evaluates the various morphological characters of taxonomic interest in

the genus *Hedychium*, suggests recognition of only 17 species in Eastern India within the limits of 19 species studied, proposes a key for their easy recognition and presents an enumeration of the species together with field data on the habit and habitat of each species. It seems that the edges of the tropical and subtropical evergreen forests provide 'natural home' for the genus *Hedychium*, although *H. aurantiacum* and *H. densiflorum* ascend higher to temperate altitude. *H. aureum*, *H. gratum*, *H. greenii*, *H. hookeri* and *H. marginatum* and a new varieties of *H. coronarium* turn up as endemics to Eastern India.

H. luteum Herb. Calcut. as a biotype of *H. coronarium* and *H. griffithianum* Wall. as synonymous to *H. venustum* Wight and finally, *H. coronarium* var. *elwesii* (Baker) Naik *comb. nov*. and *H. coronarium* var. *subditum* (Turrill) Naik *comb. nov*. as two new combinations are proposed.

538. Nayar, M.P. & Giri, G.S. 1982. "A new species of *Lonicera* L. (Caprifoliaceae) from Eastern Himalaya". *J. Econ. Taxon. Bot.* 3(2): 593-595.

Abst.- The paper presents description of *Lonicera magnibracteata sp. nov.* with illustration. A new combination is proposed and a key is also presented.

539. Panigrahi, G. 1960. "Pteridophytes of the Eastern India. I. Enumeration of the species collected and their nomenclature". *Bull. Bot. Surv. India* 2(3&4): 309-314.

Abst.- Beddome's Handbook of Ferns of British India with supplement though published in 1892, and contains outmoded classifications and out of date nomenclature, still serves as the standard source of reference for all the workers of the fern flora of the country.

In this communication Copeland's (1947) classification has been followed in presenting 16 of his families occurring in India. Thirty two of the 47 genera have been tabulated according to their respective position in the classifications of Copeland and Beddome to illustrate the striking changes brought about in the concept of fern systematics between 1892 to 1947.

About 150 species collected from parts of Orissa, Bihar, Assam and N.E.F.A.-Agency have been listed with correct nomenclature followed by basionym and important synonyms. Species names used by Beddome (1892) are indicated by the abbreviation 'Bedd' followed by a numerical to facilitate reference back to the respective page in his Handbook and supplement.

540. Panigrahi, G. & Dixit, B.K. 1979. "A note on *Potentilla wallichiana* Del. ex Lehm. var. *ternate* Wolf (Rosaceae) from Eastern India". *Bull. Bot. Surv. India* 21(1-4): 135-138.

Abst.- *Potentilla wallichiana* Delile ex Lehm. (1831) is established as a later homonym of *P. wallichiana* Ser. (1825). Consequently, *P. wallichiana* var. *ternata* Wolf (1908), *non P. ternata* C. Koch. (1847), a legitimate infra-specific taxon of an illegitimate name, is raised to the species rank and is described here as *P. khasiana* C.B. Clarke ex B.K. Dixit et Panigrahi. A key to distinguish it from the allied taxon, *P. sundaica* (Bl.) O. Kuntze is provided.

541. Panigrahi, G. & Dixit, R.D. 1968. "Notes on three species of *Gleichenia* in India". *Bull. Bot. Surv. India* 10(3&4): 337-340.

Abst.- This note deals with nomenclature of *Gleichenia laevissima* Christ, *G. blotiana* C. Chr. and *G. volubilis* Jungh., of which the first two are new records of species for India; the third one was reported without any description, only lately, from Darjeeling Himalayas (cf. Hiroshi Hara, 1966).

542. Panigrahi, G. & Joseph, J. 1966. "A botanical tour to Tirap Frontier Division, NEFA (INDIA)". *Bull. Bot. Surv. India* 8(2):142-157.

Abst.- A botanical tour in the southern parts of Tirap Frontier Division lying to the south-east of the Margherita-Nampong-Pangsupass line and bordering upon Burma and Manipur, undertaken over a period of 20 days during August-September, 1958, yielded 518 species of angiosperms and 120 species of Pteridophytes amongst others. This paper presents the ecology, topography, soil and vegetation together with a comprehensive analysis of the floristic composition of the vegetational types and is followed by enumeration of the species of angiosperms in the appendix.

Analysis of the species collected and belonging to angiosperms established the

following ten families as the richest ones on the basis of the number of species. Orchidaceae (50), Rubiaceae (29), Gramineae (28), Urticaceae (27), Leguminosae (21), Compositae (19), Cyperaceae (19), Gesneraceae (17), Verbenaceae (12) and Labiatae (12). These together represent about 45% of the species collected. About 68 species not recorded by Kanjilal *et al.* (1934-1940) have been reported as additions to the dicotyledonous flora of Assam and NEFA. Several are reported here as new records of species for India.

543. Panigrahi, G. & Naik, V.N. 1966. "New records of plants for India-III". *Bull. Bot. Surv. India* 8: 89-90.

Abst.- During the course of our investigation of the monocotyledonous flora of Assam and NEFA, the five species viz. *Dioscorea pyrifolia* Kunth var. *ferruginea* Pr. & Burk., *D. cumingii* Pr. & Burk. var. *inaequifolia* (Elmar ex Pr. & Burk.) Burk., *Rhaphidophora korthalsii* Schott., *Amomum fulviceps* Thw. and *Arisaema amurense* Maxim. have been found from India for the first time. Detailed description of these species together with critical notes to distinguish them from their nearest allied species have also been given.

544. Pradeep, S.V. 2006. "*Centrosema pubescens* Benth. (Leguminosae-Phaseoleae)- A new record for North East India". *J. Econ. Taxon. Bot.* 30(2): 280-282.

Abst.- *Centrosema pubescens* Benth. is newly recorded from the North-Eastern India. Since its first appearance in India in 1961, the species is widespread in Western Ghats area of S. India.

545. Pradhan, G., Gurung, P.B. & Kumar, Y. 1989. "*Ageratum houstonianum* Mill. (Asteraceae)- A new distributional record from North East India". *J. Econ. Taxon. Bot.* 13(2): 413-415.

Abst.- During the course of a botanical exploration in Mokokchung district of Nagaland and population studies of *Ageratum* in Khasi Hills, Meghalaya, the authors collected a dominant weed along road-sides namely *A. houstonianum* Mill. which is a new record from N.E. India.

546. Purohit, K.M. & Panigrahi, G. 1984. Nine new species of *Spiraea* (Rosaceae) from the Himalayas". *Bull. Bot. Surv. India* 26(1-2): 76-91.

Abst.- Nine new species of *Spiraea* viz., *S. nayarii, S. tanguensis*, *S. subrotundifolia* from Sikkim, *S. darjeelingensis*, *S. arunachalensis*, *S. rhamniphylla*, *S. panchananii*, *P. emarginata* and *S. subdioica* have been described from the Himalayan region.

547. Rajendran, A. & Daniel, P. 1992. "*Premna debiana* Rajendran & Daniel (Verbenaceae)- A new species from Northeastern India". *Bull. Bot. Surv. India* 34(1-4): 177-179.

Abst.- *Premna debiana*, a new species from Northeastern India, is described and illustrated. Material of *Premna* L. in Indian herbaria was studied for a taxonomic revision as part of the revision of the Indian Verbenaceae. It was found that some specimens at ASSAM gathered from Arunachal Pradesh in northeastern India though apparently resembled *P. racemosa*, a critical study proved that they belonged to an undescribed species which is described here with an illustration. Comparison is made with the closely related *P. racemosa*.

548. Rao, R.R. & Haridasan, K. 1991. "Ethnobotanical survey of medicinal and other useful plants from North-east India". *J. Econ. Taxon. Bot.* 15(2): 423-436.

Abst.- An ethnobotanical survey was conducted in some parts of Meghalaya (Khasi, Garo and Jaintia tribes), Nagaland (Ao and Angami tribes) and Manipur (Manipuris). In all 107 useful plants are reported of which 81 are medicinal and 30 are edible and other plants are of miscellaneous uses. Apart from field study, a scrutiny of ethnobotanical notes incorporated on herbarium sheets housed in North-Eastern Hill University herbarium has also been done.

549. Rao, R.R. & Murti, S.K. 1990. "North-east India- A major center for plant diversity in India". *Indian J. Forest.* 13(3): 214-222.

Abst.- North-east India (22º-29.4ºN and 88º-97.4ºE), predominantly covered under humid tropics, exhibits maximum diversity of plant-wealth, perhaps in the whole of Indian sub-continent. The distribution of different vegetation types in the region is highlighted. The region forms the major diversity center for orchids, ferns, bamboos, *Musa* spp., *Rhododendron* spp., *Hedychium* spp.

and wild relatives of cultivated plants. A statistical analysis showing the total number of species in the world, India and North-east India is provided for some important groups, which testifies the richness and diversity of North-east Indian flora. The region, with about 190 species of wild relatives of cultivated plants, exhibits the maximum genetic variability. Further, out of about 800 species of food-plants of India, about 300 species are reported from this region. As account of endemics, monotypics, and primitive flowering plants is also provided in support of the richness and diversity of the flora of this region. Finally, the authors emphasize the need for further plant-exploration in the region, as much of the area still remains underexplored.

550. Rao, R.S. & Ahuja, K.K. 1968. "New and noteworthy plant records from India". *Bull. Bot. Surv. India* 10(3&4): 360-366.

Abst.- During the studies on the flora of different parts of India, particularly the two heavy rainfall zones of the country, i.e. Kerala and North East Frontier Agency (NEFA), 6 species have been recorded either new to the country or with interesting distribution. 5 of those species are recorded from NEFA and the remaining species from Kerala.

551. Sahni, K.C. 1979. "Endemic, relict, primitive & spectacular taxa in Eastern Himalayan flora & strategies for their conservation". *Indian J. Forest.* 2(2): 181-190.

Abst.- The Eastern Himalaya is an outstanding landmark on the globe being one of the major features of world relief with the tallest peak, great river gorges and rare flora; it is also the habit of the tallest trees in India.

The vegetation in unique-characterized by one of the richest flora in the world teeming with plant life in all its variety. It is in fact a veritable treasure house of rare, most spectacular, endemic and primitive flora which are highlighted in the paper. The area particularly the lower reaches is considered unique because it is regarded as a natural sanctuary of ancient angiosperm taxa and fauna which were spared devastation of successive ice ages. Factors which are responsible for species extinction are enumerated. Methodology aimed at in preserving/enriching the environment and conservation of rare flora is discussed.

552. Sarma, G.C. & Baishya, Sarma R. 1992. "Studies on the medicinal uses of plants by the North-east tribes-IV". *J. Econ. Taxon. Bot., Addl. Ser.* 10: 177-184.

Abst.- A preliminary survey of the medicinal plants used by the Boro, Rava and Garo tribals of Assam and Apatani, Monpa and Lepcha tribals of Arunachal Pradesh has been undertaken with special reference to purgative, local liquor production, piles, abortion, blood purifier, cough syrup, rheumatism, jaundice, worm control, antidote to snake poison and different type of dye. The present communication deals with forty-eight plants giving details of the part used, their local names, methodology of treatment.

553. Sharma, B.D. & Hore, D.K. 1993. "Germplasm resource potential of North-Eastern India". *Indian J. Forest.* 16(1): 15-19.

Abst.- Wide diversity is found in North-eastern India not only for flora (7000 species) and fauna (160 species), but also for ethnic races (67 tribal communities), physico-geographical as well as agro-ecological conditions. Impressive diversity is found for crops like rice (6,730 land races), maize (15 races), beans (60-70 varieties). Even the region is a rich resource of wild banana (18 species), aroids (15 species), citrus (17 species), bamboo (61 species), orchids (700 species) and different medicinal plants. However, the potential diversity resources are threatened because of modernization of agriculture, changing local culture and various developmental activities.

554. Sharma, B.D., Hore, D.K. & Pandey, G. 1992. "Genetic resources of bamboos in the North-Eastern region of India". *Indian J. Forest.* 15(1): 44-51.

Abst.- This paper attempts to present the existing scenario of bamboo genetic resources in North Eastern region with other related aspects of utilization of resources and need of their conservation *in situ* and *ex situ*.

555. Shukla, U. 1978. "Notes on the grasses of Eastern India-2". *Indian J. Forest.* 1(4): 293-296.

Abst.- The present paper, based on critical study of the herbarium material and relevant literature, deals with 14 taxa of *Digitaria* and 2 of *Garnotia* found in eastern India. A revised key for both the genera is also provided to facilitate identification of species of these genera.

556. Shukla, U. 1993. "Notes on the grasses of North Eastern region-III". *J. Econ. Taxon. Bot.* 17(2): 433-436.

Abst.- In the present communication it is proposed to merge *Erianthus* Michx. and *Narenga* Bor as synonym of *Saccharum* L.; *Cephalostachyum* Munro and *Teinostachyum* Munro are considered congeneric with *Schizostachyum* Nees and *Eccoilopsis* Steud. is treated synonym of *Spodiopogon* Trin. The varieties of *Alloteropsis semialata* (R. Br.) Hitchc. are also considered as mere variants and are merged. *Sclerostachya milroyi* Bor is considered a synonym of *S. fusca* (Roxb.) A. Camus. *Setaria palmifolia* is a *complex*; 2 forms of *Melocanna baccifera* Kurz and gregarious flowering of *Dendrocalamus hamiltonii* Nees & Arn. have also been observed.

557. Shukla, U. 1993. "History of botanical works in the North-Eastern India". *J. Econ. Taxon. Bot.* 17(3): 537-554.

Abst.- In this paper an attempt has been made to trace the history of botanical works in north-eastern region comprising the seven states namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. A list of more than 300 important published or unpublished works is also provided under bibliography.

558. Shukla, U. & Das, Doli. 1981. "On the occurrence of some medicinal grasses in Eastern India". *Indian J. Forest.* 4(4): 273-279.

Abst.- The paper deals with 52 species of grasses reported to have medicinal properties. The medicinal uses and distribution of these plants in India and their occurrence in eastern India are discussed.

559. Singh, S.P., Tripathi, S. & Shukla, R.S. 2003. "Ethnomedicinal heritage for bioprospecting and drug development in North Eastern states of India". *J. Econ. Taxon. Bot.* 27(2): 384-395.

Abst.- There is vast expanse of ethnomedicinal heritage in north eastern region of India for bioprospecting of the green medicine based on ethno therapeutics practiced among the local tribals, healers for meeting health care and promotion of health. The tribals like Mikir, Naga, Manipuri, Apatani, Garo etc. collect many plants and plant produce for treatment of various diseases and disorders in their community from the ambient vegetation.

The present paper highlights some of the important species of ethnomedicinal value used by the tribal healers for treating diseases and disorders like malarial fever, diarrhoea and dysentery, skin diseases, jaundice, arthritis, venereal diseases etc. Based on the locally available herbal wealth, there is enormous scope for commercial cultivation of some useful herbs and production of safe green medicines by establishing plant based industries in the tribal tracts for the ecodevelopment and sustainable utilization of medicinal plant genetic diversity and their conservation for the human welfare.

560. Sinha, G.P., Singh, K.P. & Wadhwa, B.M. 1994. "Studies on the Lichen genus *Parmotrema* Massal. from North-East India". *J. Econ. Taxon. Bot.* 18(1): 61-69.

Abst.- The paper reports the occurrence of 21 taxa of genus *Parmotrema* Massal., based on recent collection from North-East India and seven taxa marked by an asterisk (*) are new reports for this region. Key to the identification and short notes about each species are given.

561. Srivastava, R.C. 1987. "Status of family Malpighiaceae in North Eastern India". *J. Econ. Taxon. Bot.* 11(1): 161-171.

Abst.- Present status and pattern of distribution of the family Malpighiaceae in the North Eastern India, have been discussed in this paper with reference to previous records and concepts. Artificial keys to species occurring in N.E. India are also provided.

562. Sundriyal, R.C. & Sundriyal, Manju. 2003. "Species area richness and economic value of

small representative-landscapes in the Eastern Himalaya: its implications for conservation reserve". *Indian J. Forest.* 26(3): 235-253.

Abst.- In the Himalaya, the area under conservation network has increased over the years. However, the basis of declaring an area under such network has been very poorly documented. Realizing that the study of the entire flora present in a forest stand is difficult, and needs much time, effort and expertise, small representative vegetation type and habitats that provide a replica, in broader sense, of the total vegetation, are to be identified and studied for evaluating the status of the vegetation. The present paper highlights species area relationship, growth form spectra and economic value as the quick measures, based on a study made in the Sikkim Himalaya (Eastern Himalaya). It is expected that the study formulates a useful tool for managers, planners and policy makers to undertake such simple methods for assessing the biodiversity of any potential area for conservation in any region.

563. Tripathi, Sunil & Prakash, Ved. 1998. "Studies on Zingiberaceae Lindley of N.E. India: I. On the re-discovery of *Rhynchanthus longiflorus* Hook.f.". *Indian J. Forest.* 21(4): 333-336.

Abst.- The North-eastern region of India has maximum diversity of Zingiberaceae in having 19 genera and about 90 species from among 22 genera and 180 species known from India. The present communication on the genus *Rhynchantus* Hook.f., is the outcome of our critical taxonomic studies initiated recently on this family. The genus is known in India by only its type species (viz. *R. longiflorus* Hook.f.) from the Mizoram after Fischer's report (1932) and is based on our collection after more than six decades, which represents to be the first one for Indian herbaria. The genus is characterized by a boat-shaped stamen, obsolete or minute labellum and absence of lateral staminodes. The study further reveals the interesting characters of the genus and its closely affinity with Hedychieae rather than with the Alpinieae to which it is generally assigned. It is described here with illustration.

564. Tripathi, Sunil & Singh, K.K. 2006. "Taxonomic revision of the genus *Zingiber* Boehm. in North-East India". *J. Econ. Taxon. Bot.* 30(3): 520-532.

Abst.- The North-East India maintains maximum diversity in Zingiberaceae (next to Malaysia) in having 20 genera and about 122 species, out of total 22 genera and 180 species known from India (Karthikeyan *et al.* 1989). In Malaysia, the family is represented by 24 genera and about 750 species (i.e. 50% of the total found in the world). The present communication of the genus *Zingiber* Boehmer is the outcome of our critical taxonomic studies of the seven species growing in N.E. India. The genus *Zingiber* Boehmer is, however, represented by eighteen species in India. A key to the species, up-to-date nomenclature and detailed description are provided along with other relevant notes on phenology, phytogeography, ecology, etc.

LIST OF PERIODICALS REFERRED TO

Ancient Sci. Life	-	Ancient Science of Life
Bull. Bot. Surv. India	-	Bulletin of the Botanical Survey of India
Envis Centre Manipur Newslett.	-	Envis Centre Manipur Newsletter
Ethnobotany	-	Ethnobotany
Geobios, New Rep.	-	Geobios, New Report
Indian Forester	-	The Indian Forester
Indian J. Forest.	-	Indian Journal of Forestry
Indian J. Traditional Knowledge	-	Indian Journal of Traditional Knowledge
J. Bombay Nat. Hist. Soc.	-	Journal of the Bombay Natural History Society
J. Botan. Soc. Bengal	-	Journal of the Botanical Society of Bengal
J. Econ. Taxon. Bot.	-	Journal of Economic and Taxonomic Botany
J. Orchid Soc. India	-	The Journal of the Orchid Society of India
Rheedea	-	Rheedea

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