

**Dr. M. PALANISAMY, Scientist 'D',
BSI, SRC, Coimbatore.**

Ph.D. Title : “*Studies on Ecology, Biochemical and Heavy Metal Constituents of Marine Algae of Thirumullaivasal and Cuddalore Estuaries of Tamil Nadu, India*”.

Supervisor: Prof. R. Selvaraj, Dept. of Botany, Annamalai University, 608 002, TN.

Submitted : April 1998

Awarded : June 1999

Research Associate : IWST, Bangalore Sept. 1998 -- August 2001
Research Associate : CSMCRI, Bhavnagar Sept. 2001 -- June 2002

**Direct Recruitment
through UPSC**

- **Scientist - B**
- **July 2002**



BY FCS

- **Scientist – C**
- **July 2005**



BY FCS

- **Scientist – D**
- **January 2014**

ANNUAL ACTION PLAN PROJECTS CARRIED OUT SINCE 2002

Total Projects : 9 Nos.

- Action Plan Projects = 7;
- Other project (Antarctica) = 1;
- Funded Project = 1

➤ **Completed : 7 Nos.**

➤ **Ongoing : 2 No.**

Completed Projects : 7 Nos.

Annual Action Plan Projects:

1. **Herbarium data collection at Central National Herbarium, Howrah for database development of CAL. July 2002 -- March 2003**
2. **Flora of Andaman & Nicobar Islands Vol.2 (6 Families) April 2003 – March 2005**
3. **Seaweeds of MGMN Park, S. Andaman. April 2004 – March 2007**
4. **Seaweeds of Chidiyatapu, North Bay & Viper Island, S. Andaman. April 2007-- 2008**
5. **Seaweeds of Tamil Nadu coast , India. April 2008 -- March 2011**
6. **Seaweeds of Southwest coast of Kerala, India. April 2011 – March 2014**

7. **Other Project: Diatom Flora of Schirmacher Oasis, East Antarctica. 2003 – 04 & 2005 – 06**

On-Going Projects : 2 Nos.

Action Plan Project Ongoing :

- 1. Seaweeds of Karnataka, Southwest coast of India. April 2014 –March 2017**

Funded Project Ongoing :

- 1. Study of Diversity of Marine Macro Algae of Andhra Pradesh, India
AICOPTAX Project -- Funded by MOEF & CC, New Delhi . Dec.2016- 2019**

Project 1.: Herbarium data collection at Central National Herbarium, Howrah .

Tenure : July 2002 -- March 2003

- **During July 2002 -- March 2003 data were recorded from herbarium sheets deposited at CNH, Howrah .**
- **Collected information's i.e. Name of State flora, Districts, Plant name, Field No., place of collection, elevation, associated plant, abundant, habit, habitat, flowering and fruiting seasons, plant collector name, collection date, identified by, brief notes on plants during collections, etc.**
- **Recorded information's of herbarium were entered into BRAHMS database software at CNH , Howrah.**

PROJECT 2. : FLORA OF ANDAMAN & NICOBAR ISLANDS VOL.2
SIX FAMILIES

Executing Scientist: DR. M. PALANISAMY

Tenure: April 2003 – March 2005

Families	Genera	Species
Campanulaceae	1	2 Species: <i>Lobelia alsinoides</i> Lam. <i>Lobelia heyneana</i> Roem.& Schult.
Goodeniaceae	1	1 species: <i>Scaevola taccada</i> (Gaertn.)Roxb.
Cuscutaceae	1	1 species: <i>Cuscuta campestris</i> Yuncker
Avicenniaceae	1	2 Species <i>Avicennia marina</i> (Forssk.) Vierh. <i>Avicennia officinalis</i> L.
Polygonaceae	2	6 species <i>Anticonon leptopus</i> Hook. & Arn. <i>Polygonum</i> 5 spp.
Sapotaceae	6	11 species

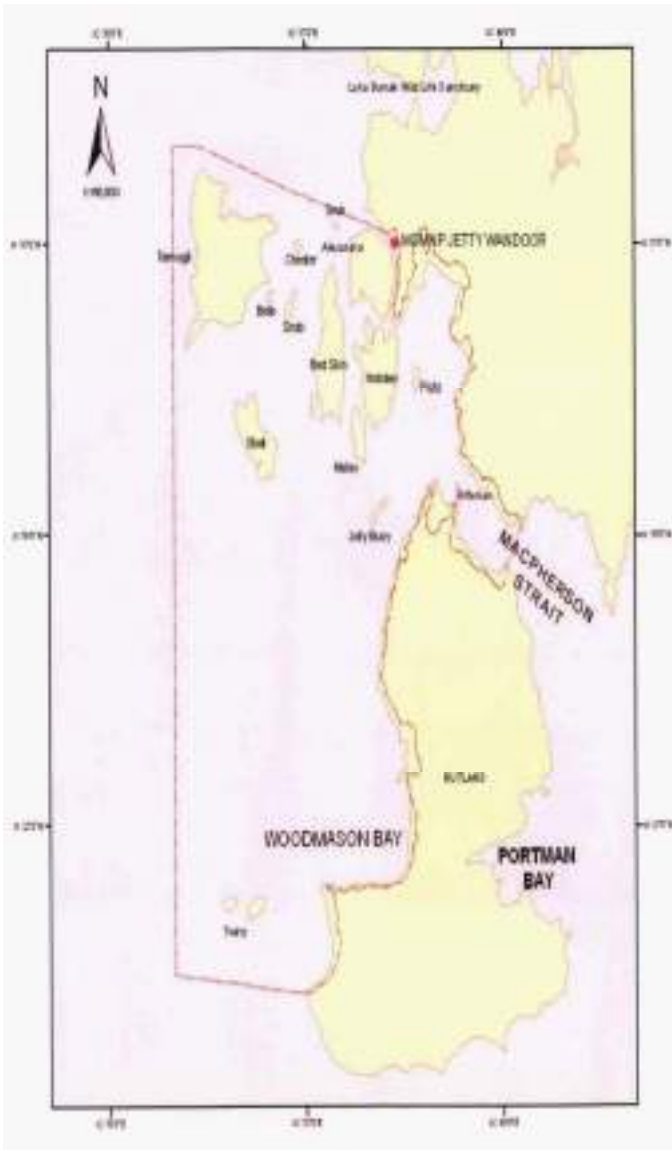
PROJECT 3.: SEAWEEDS OF MGMN PARK, S. ANDAMAN.

Executing Scientist : DR.M.PALANISAMY

Tenure : 2004 – 2007

Mahatma Gandhi Marine National Park : [11°22'06" – 11°36'34" N and 92°30'00" - 92°40'33"E]

➤ Established	24th May 1983
➤ Area Covers	218.5 km²
➤ Distance from Port Blair	32 km (South west)
➤ Total field tours conducted	8 Nos.
➤ Seaweed specimens collected	115 Nos.
➤ Herbarium sheets prepared	212 Nos.
➤ Total seaweeds	110 species
➤ Green	35 species, Genera 19
➤ Brown	27 species, Genera 11
➤ Red	38 species, Genera 23
➤ BGA	4 species, Genera 4
➤ Seagrass	6 species, Genera 5
Nos. of papers published	: 5



Boergesenia forbesii
(Harv.) Feldmann



Bornetella nitida
Munier-Chalmas ex Sonder



Halymenia floresii
(Clemente) C. Agardh



Liagora indica
V. Krishnam. & Sundararajan



Stoechospermum marginatum
(C. Agardh) Kütz.



Colpomenia sinuosa
(Mertens ex Roth) Derbes & Solier

**PROJECT 4.: SEaweEDS OF CHIDIYATAPU, NORTH BAY AND VIPER ISLAND,
S. ANDAMAN.**

Executing Scientist : DR.M.PALANISAMY

TENURE : April 2007 – March 2008

Chidiyatapu: 11°29'30" to 11°30'34" N and 92°35'10" to 92°42'30" E from Port Blair 25 km
North Bay : 11°42'16" to 11°42'25" N and 92°45'00" to 92°45'23" E from Port Blair 2 km
Viper Island: 11°39'35" to 11°39'49" N and 92°41'30" to 92°42'20" E from Port Blair 1.5 km

- **Total field tours conducted** **6 Nos.**
 - **Seaweed specimens collected** **86 Nos.**
 - **Herbarium sheets prepared** **172 Nos.**
 - **Total seaweeds** **81 species**
 - **Green** **26 species, Genera 14**
 - **Brown** **19 species, Genera 10**
 - **Red** **32 species, Genera 19**
 - **BGA** **4 species, Genera 4**
 - **Seagrass** **5 species , Genera 4**
- Nos. of papers published : 5**



Ulva lactuca L.



Neomeris annulata Dickie



Sargassum duplicatum (J.Agardh)
J.Agardh



Sargassum swartzii C.Agardh



North Bay - Tourists Paradise

PROJECT 5. : STUDIES ON DIATOM FLORA OF SCHIRMACHER OASIS, EAST ANTARCTICA

Executing Scientist: **Dr. M. Palanisamy**

Tenure: Dec. 2003 – March 2006

Schirmacher Oasis	: 70° 44'S to 11°54'E
Length and width	: 27 km and 4.5 km
Totally covered area	: 34km ²
Fresh water lakes	: 106
Samples collected	: 226
Total species identified	: 39
Diatom	: 18
Moss	: 5
Lichens	: 16
Nos. of papers published	: 5



PROJECT 6.: SEaweeds OF TAMIL NADU, SOUTHEAST COAST OF INDIA
Executing Scientist : DR.M.PALANISAMY

TENURE: APRIL 2008 – MARCH 2011

TAMIL NADU COAST:

[located between 8° 00'-13° 30'N lat. and 76° 15'-80° 18'E long.]

- | | |
|--|-----------------------|
| ➤ Coastal length | 1076 KMS |
| ➤ Stretches along Bay of Bengal, Arabian Sea and Indian Ocean. | |
| ➤ Total field tours conducted | 7 Nos. (122 Places) |
| ➤ Field Nos. collected | 1263Nos. |
| ➤ Herbarium sheets prepared | 2526 Nos. |
| ➤ Total seaweeds | 222 species |
| ➤ Green | Genera 22 species 60 |
| ➤ Brown | Genera 19 species 46 |
| ➤ Red | Genera 61 species 116 |
| ➤ Seagrass | Genera 6 species 14 |



Chaetomorpha antennina(Bony) Kutz.



Boergesenia forbesii (Harvey) J. Feldmann



Sargassum virgatum(Martens)J.Agard



Hydroclathrus clathratus(C.Agardh) Howe



Corynomorpha prismatica(J.Agardh) J.Agardh



Laurencia papillosa(Forssk.) Greville

World : 2 Families : 13 Genera : 58 species
India: 2 Families : 6 Genera : 14 species



PROJECT 7: SEAWEED SURVEY OF KERALA COAST

Dr. M. Palanisamy, Sci. 'D' & Sri. S.K. Yadav, Bot. Asst.

Tenure: April 2011 – March 2014

Kerala Coast	: 8°18'–12°48' N & 74°52'–77°22' E
Length of the coast	: 580 km
Field tours conducted	: 6 Nos.
Total nos. of sites surveyed	: 139 Places
Total Field nos. collected	: 1272
Nos. of herbarium sheets made	: 2524
Seaweed taxa recorded	: 147 species
Nos. of papers published / communicated	: 14

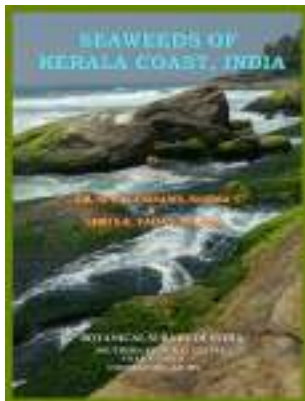


Map 1. Area of Study: Kerala coast

- Total nos. of new records : 16 taxa
- Total nos. of endemic seaweeds : 14 taxa
- Total nos. of economically important seaweeds : 42 taxa

Summary

Class	Order	Family	Genus	Species
CHLOROPHYCEAE	6	9	16	48
PHAEOPHYCEAE	5	7	17	43
RHODOPHYCEAE	10	18	28	56
Total	21	34	61	147



PROJECT 8: SEAWEED FLORA OF KARNATAKA COAST

Dr. M. Palanisamy, Sci. 'D' & Sri. S.K. Yadav, Bot. Asst.

- Duration : 2014-2017
- GPS: 11°31'-18° 45'N & 74° 12' – 78° 40'E
- Total length of the coast : 320 km

OBJECTIVES

- ❖ Survey and collection of all the seaweeds
- ❖ Herbarium preparation and documentation of the seaweed resources of the coast.
- ❖ Study of the endemic, medicinally and economically important seaweeds.
- ❖ Liquid preservation of economically important seaweeds and seagrasses.
- ❖ Study of associated and epiphytic seaweeds and seagrasses of the coast.
- ❖ Completion report in the Flora format will be submitted by end of March 2017

Total Field tours conducted : 6

Total nos. of sites surveyed : 139

Total Field nos. collected : 1295

Nos. of herbarium sheets : 2590



Map showing Karnataka coast



St. Mary's island, Malpe



Seaweeds and mangrove association at Mulki



Caulerpa taxifolia (Vahl.) C. Agardh



Sargassum cinereum J. Agardh



Gelidiopsis repens (Kuetz.) Weber Bosse

PROJECT 9: Study of Diversity of Marine Macro Algae of Andhra Pradesh, India

AICOPTAX Project -- Funded by MOEF & CC, New Delhi .
Dec.2016- 2019

Principal Investigator: Dr. M. Palanisamy, Sci. 'D'

TOTAL FUND ALLOTTED

□ 22,02,900/-

I Year

□ 11,19,300/-

II year –

□ 4,10,550/-

III Year –

□ 6,73,050/-

PLAN OF WORK - I – YEAR

Project Fellow
Selection

Permanent
Equipment
Purchase

Literature survey

Field Survey in
March 2017 to
Andhra Pradesh
Coastal Area

ADMINISTRATIVE WORKS CARRIED OUT SINCE 2002

➤ BSI , ANRC, Port Blair (March 2003 to March 2008)

- **Officer In charge** **1025 days**
- **DDO** **2 years**
- **Garden In charge** **4 years**
- **Purchase committee Chairman for** **2 years**

➤ BSI , SRC, Coimbatore (Since April 2008)

- **HOO/ Officer In charge more than** **375 days**
- **DDO** **3 years**
- **Garden In charge** **4 years**
- **Herbarium, Library, Lab, etc.** **5 years**
- **Purchase committee Chairman for** **5 years**
- **Purchase officer** **3 years**
- **Preparation of Scientific & Technical reports** **3 years**
- **Rajbhasha Adhikari** **3 years**

**SCIENTIFIC / TECHNICAL / TRAININGS / CONFERENCE /
WORKSHOP / JURY / EXPERT COMMITTEE / PRESENTATION/
THESIS EVALUATION / GARDEN INSPECTION WORKS
CARRIED OUT SINCE 2002**

▪ Trainings	12
▪ Conference/Workshops/Seminars	13
▪ Jury	6
▪ Expert Committee	3
▪ Presentations	17
▪ Thesis Evaluation (Ph.D.)	7
▪ Thesis Evaluation (M.Phil.)	3
▪ Reviewer (International)	4
▪ Reviewer (National)	3
▪ Reviewer (Book Chapters)	2
▪ Garden Inspection (MOEF&CC Funded)	6

Details of Projects carried out and Publications: Individually/jointly

Research Activity	Contribution	Number
Number of projects carried out	Individually Jointly	7 (1 ongoing) 2 (1 ongoing)
Number of books	written /compiled /edited / contributed	1
Number of papers published	Individually First author jointly or co-author	6 no. 14 nos. 12 nos.
Number of new taxa	New species	--
New reports	Antarctica Andaman Regions, states	1 no. 6 nos. 2 nos.

NEW PROJECT PROPOSED
SEAWEED FLORA OF GOA COAST, INDIA (2017-2019)

Dr. M. Palanisamy, Scientist 'D' & Shri. S.K.Yadav, Bot. Asst.

Sl. No.	Target 2017-18	Work Plan
1	Field tours to be conducted: 3 (in Q2 , Q3 and Q4)	Q 2: First tour will be conducted tentatively in the month of July, 2017. Q3 : Second tour will be conducted tentatively in the month of November, 2017 Q4 : Third tour will be conducted tentatively in the month of January, 2018
2	Herbarium Consultation tours to be conducted: 1 (in Q4)	▪ Seaweed Herbarium Consultation will be done at NIO & Goa University, concurrently with the proposed Field Tour of Q4



Thanks