



Dr. Vivek C.P.

**Botanical Assistant,
Botanical Survey of India,
Andaman & Nicobar Regional Centre,
Port Blair.**

**Date of Joining in BSI, ANRC :
31.12.2014**

As JRF in BSI, SRC, Coimbatore (2010-

Project : Taxonomy Capacity Building Project for Research on grasses and bamboos, under AICOPTAX, sponsored by MoEFCC



Topic : Taxonomy of grass genus
Eragrostis Wolf in India

PI : Dr. V.J. Nair (formerly Deputy
Director of BSI, SRC,
Coimbatore and Co-ordinator
of AICOPTAX and Janaki
Ammal Awardee)

SUBMITTED THE FINAL REPORT IN 2014

Ph.D. Degree

Title of Thesis - A taxonomic study on the grass genus *Eragrostis* Wolf (Tribe: Eragrostideae Stapf) in India

University - Bharatiar University, Coimbatore, Tamil Nadu

Date on which Degree Awarded - 05.08.2015

Highlights

total species : 44 nos.
 sp. nov. : 4 nos.
 var. nov. : 1 no.
 syn. nov. 1 no.
 new report to India: 1 no.
 names lectotypified: 2 nos.

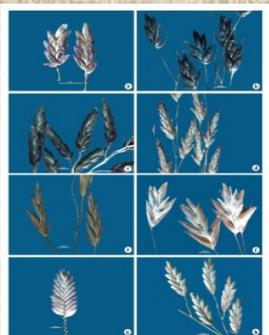
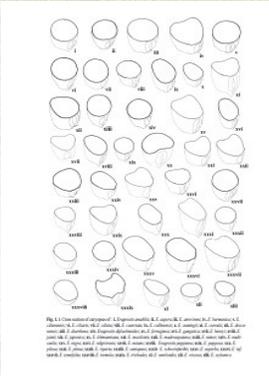


Plate 2. 10- Nikon SMZ 1500 scanning images of spikelets of: a. *Eragrostis acuta* Steud., b. *E. nigra* Steud. ex Steud., c. *E. nigropurpurea* Steud., d. *E. Martii* Steud., e. *E. puberula* (L.) Steud., f. *E. setifolia* (Steud.) Kunt., g. *E. setigera* (Steud.) Wood, h. *E. sordida* (Roxb.) Nees ex Steud., i. *E. stricta* (Roxb.) Trin.

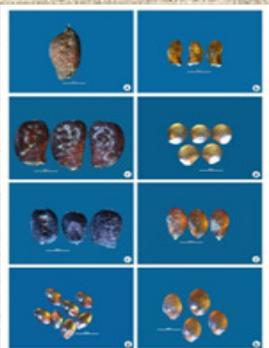


Plate 3. a. Nikon SMZ 1500 scanning images of spikelets of: a. *Eragrostis acuta* Steud., b. *E. nigra* Steud. ex Steud., c. *E. nigropurpurea* Steud., d. *E. Martii* Steud., e. *E. puberula* (L.) Steud., f. *E. setifolia* (Steud.) Kunt., g. *E. setigera* (Steud.) Wood, h. *E. sordida* (Roxb.) Nees ex Steud., i. *E. stricta* (Roxb.) Trin., j. *E. stricta* Nees & Mey.

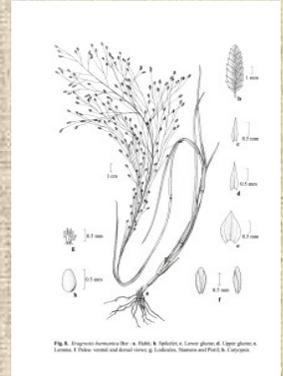


Fig. 4. *Eragrostis acuta* Steud.: a. Habit, b. Detail of lower glume of 1 upper glume, c. Lemma, d. Palea with and without lemma, e. Ligule, f. Lower glume and Palea & Lemma.

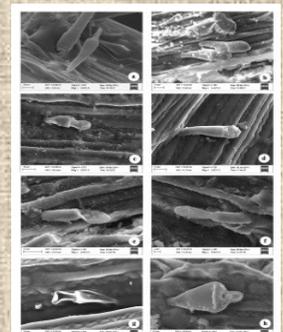


Plate 5. 10- SEM images of spikelets of: a. *E. pappiana* Chinn., b. *E. papposa* (Dru) Steud., c. *E. zosterifolia* (L.) Steud., d. *E. aquaria* (Willd.) Nees & Mey., e. *E. stricta* (Roxb.) Nees & Mey., f. *E. stricta* (Roxb.) Nees & Mey., g. *E. stricta* (Roxb.) Nees & Mey., h. *E. stricta* (Roxb.) Nees & Mey., i. *E. stricta* (Roxb.) Nees & Mey., j. *E. stricta* (Roxb.) Nees & Mey.

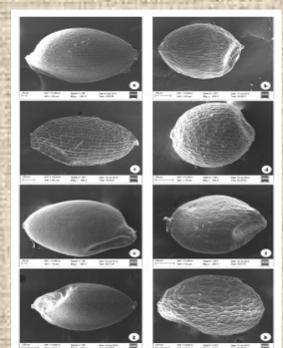


Plate 6. 10- SEM images of spikelets of: a. *Eragrostis acuta* (L.) Wright & Steud., b. *E. aquaria* (Willd.) Nees & Mey., c. *E. stricta* (Roxb.) Nees & Mey., d. *E. stricta* (Roxb.) Nees & Mey., e. *E. stricta* (Roxb.) Nees & Mey., f. *E. stricta* (Roxb.) Nees & Mey., g. *E. stricta* (Roxb.) Nees & Mey., h. *E. stricta* (Roxb.) Nees & Mey., i. *E. stricta* (Roxb.) Nees & Mey., j. *E. stricta* (Roxb.) Nees & Mey.

Annual Action Plan (2015 – 2018)

Name of the Project

Study of the Flora of Kyd, Pitman & James Islands, South Andaman

Name of the other executing officials

Dr. Sanjay Mishra, (Scientist B), Mr. Gautam Anuj Ekka (Pres. Assistant)

Annual Action Plan - works done

Number of field tours conducted : 3 nos.
Number of field numbers vouched : 364 nos.
Number of species identified : 204 nos.
Number of seeds and seedlings
collected for introducing in garden : 74 nos.

Works progressing....

- Identification and documentation of collected specimens
- Consultation of relevant literature
- Consultation of herbarium

Publications

Total Number of Papers Published in National and International Journals : 14 Nos.

Total Number of Abstracts published : 5 Nos.

(first author in 12 nos. and co-author in 2)

- new species discovered : 5
Nos.

- new variety discovered : 1 No.

- names lectotypified : 2 No.

- species synonymized : 1
No.

- new report to state : 2 Nos.

- others : 3 Nos.

Poster Presented in Seminars : 2 Nos.

List of Papers Published

1. **Vivek C.P.**, G. Gnanasekaran, G.V.S Murthy and V.J. Nair. 2016. Microhairs of Indian *Eragrostis* Wolf (Poaceae) and their taxonomic significance. *Nelumbo* 58: 48 - 56, DOI : [10.20324/nelumbo/v58/2016/105921](https://doi.org/10.20324/nelumbo/v58/2016/105921).
2. **Vivek, C.P.**, G.V.S. Murthy and V.J. Nair. 2013. *Eragrostis nilgiriensis* (Poaceae): a new grass species from Nilgiri district, Tamil Nadu, India. *Nord. J. Botany* 30: 001–004 doi: 10.1111/j.1756-1051.2012.01676.x.
3. **Vivek C.P.**, G.V.S Murthy and V.J. Nair. 2015. Lectotypification of *Eragrostis maderaspatana*. *Nelumbo* 57: 40-42 (DOI:[10.20324/nelumbo/v57/2015/87093](https://doi.org/10.20324/nelumbo/v57/2015/87093)).
4. **Vivek, C.P.**, M.M. Swapna and K.K. Suresh. 2010. *Eriocaulon wayanadense* (Eriocaulaceae), a new species from Kerala, India. *Rheedea* 20(1): 25 - 27.
5. **Vivek, C.P.**, G.V.S. Murthy and V.J. Nair. 2013. *Eragrostis minor* Host var. *rajasthanensis* (Poaceae: Eragrostideae) - a new variety from Rajasthan, India. *J. Econ. Taxon. Bot.* 37 (4): 717 – 719.
6. **Vivek C.P.**, G.V.S Murthy and V.J. Nair. 2015. On the identity of *Eragrostis dayanandanii* (Poaceae) described from Tamil Nadu, India. *Nelumbo* 57: 43-45 (DOI: [10.20324/nelumbo/v57/2015/87094](https://doi.org/10.20324/nelumbo/v57/2015/87094)).
7. **Vivek C.P.**, G.V.S Murthy, G. Gnanasekaran, K.A.A. Kabeer and V.J. Nair. 2015. A study on the Caryopses morphology of the grass genus *Eragrostis* in India. *Nelumbo* 57: 1-10 (DOI: [10.20324/nelumbo/v57/2015/87084](https://doi.org/10.20324/nelumbo/v57/2015/87084)).
8. **Vivek, C.P.**, G.V.S. Murthy and V.J. Nair. 2013. *Eragrostis Jainii* (Poaceae: Eragrostideae) a new species from Kerala, India. *Nelumbo* 55: 1 - 5.
9. **Vivek, C.P.**, G.V.S. Murthy and V.J. Nair. 2013. *Eragrostis collinensis* (Poaceae: Eragrostideae) - a new species from the hills of Kerala and Tamil Nadu. *Ind. J. Forestry.* 36 (3) 401 – 404.
10. **Vivek, C.P.**, G.V.S. Murthy and V.J. Nair. 2013. A note on *Eragrostis rottleri* Stapf (Poaceae) and its lectotypification. *Nelumbo* 55: 109 – 112.
11. **Vivek, C.P.**, G.V.S. Murthy and V.J. Nair. 2013. On the confusion in the identity of *Eragrostis atrovirens*, *E. gangetica* and *E. nutans*. *Nelumbo* 55: 94 – 101.
12. **Vivek, C.P.**, G.V.S. Murthy and V.J. Nair. 2012. A new species *Eragrostis henryi* (Poaceae: Eragrostideae) from Tamil Nadu, India. *Nelumbo* 54: 9 – 12.
13. Sanjay Mishra, **C.P. Vivek** and L.J. Singh. 2016. *Eleocharis spiralis* (Rottb.) Roem. & Schult. (Cyperaceae): An addition to the flora of Andaman and Nicobar Islands. *Tropical Plant Research* 3(2): 289 – 291.
14. Sanjay Mishra, **C.P. Vivek** and L.J. Singh. 2016. *Courtesia cyperoides* (Roxb.) Seik. A new

List of Abstracts Published

1. **Vivek C.P.**, L.J. Singh and M.Y. Kamble. 2015. Aquatic and wetland plant diversity and climate change in Andaman and Nicobar Islands. *In: National Seminar on Harmonizing Biodiversity and Climate Change: Challenges & Opportunity*, Port Blair. Abs. 91.
2. Sanjay Mishra, **C.P. Vivek**, Gautam Anuj Ekka and Lal Ji Singh, 2016. A preliminary account on the flora of Kyd, Pitman and James Islands Wildlife Sanctuary, South Andaman. *In: International Conference on Climate change adaptation and biodiversity: Ecological sustainability and resource management for livelihood security*, Andaman Science Association, Port Blair. Abs.: 235 – 236.
3. Singh LalJi and Mishra S., Ekka Anuj Gautam and **Vivek C.P.** 2016. Conservation of Medicinal Plants Diversity in Dhannikhari Experimental garden cum Arboretum (DEGCA), Andaman and Nicobar. *In: National seminar on ethno medicinal practices in Andaman and Nicobar islands: Scope, Limitation and Prospective organized by Regional Research Centre of Ayurveda (RRCA)*, Port Blair, 11-12 November, 2016. Abs.
4. Sandip Kumar Behera, Sanjay Mishra, Lal Ji Singh and **C. P. Vivek**. 2015. Some interesting Pteridophytes of South Andaman, India. *In: National Conference on Cryptogam Research in India: Progress and Prospects*, Lucknow. Abs.
5. LalJi Singh, Gautam Anuj Ekka, Sanjay Mishra, Sandip Kr. Behera and **Vivek C. P.** 2015. Endemic Pteridophytes: a conservation appraisal in the Andaman and Nicobar Islands, India. *In: National Conference on Cryptogam Research in India: Progress and Prospects*, Lucknow. Abs. 107.

Duties Assigned in BSI, ANRC

1. In-charge of mounting and duplicate sections and database unit
2. Looking after duties of library
3. Digitization of herbarium
4. Member of disciplinary committee
5. Member of Raj Bhasha Karyavayan Samittee
6. Assisting the HoO and other officers in other duties as

and when assigned

Major scientific works done

Total Number of

- 137 unidentified herbarium specimens of PBL identified into 68 species
- 179 nos. plants identified for public

Preparing the scientific illustrations, descriptions, etc. as and when assigned

Assisted scientists in field tours

- 16.02.2015 to 25.02.2015: Rani Jhansi Marine National Park, South Andaman
- 14.03.2016 to 19.03.2016 : Diglipur, North Andaman
- other local field collections

Duties performing in relation to ANRC, Garden

Assisting the Scientist In-Charge in the monitoring activities

- preparing details of plants for display boards
- attending students, trainees, research scholars and public



Scientific Service Rendering to Other Departments

Herbaceous plants growing in A&N Islands for the Directorate of Agriculture, Port Blair

Plant species used for nursery techniques and rare and endangered species of Andaman & Nicobar Islands for Deputy Conservator of Forests, Silviculture Division, Port Blair

RET Plants growing in A&N Islands for Conservator of Forests, Silviculture Division, Port Blair

Major technical works done

Herbarium Related

Total Number of

- herbarium specimens scanned in PBL : 2,239 nos.
- Label details computerized in XL format : 11,037 nos.
- herbarium specimens dusted : 1,750 nos.
- old folders replaced : 60 genus
covers, 228

species covers

Library Related

Total Number of

- books accessioned : 14 nos.
- Journals incorporated : 72 nos.
- Newsletters, magazine,
brochures etc. incorporated : 46 nos.

Future Plan

Continue working on
family Poaceae



Photo courtesy: Dr. K.A. Sujana



THANK YOU