

worked out for India." *M. micrura* (I) has been extensively recorded in other Indian habitats. In case of the two varieties of *M. micrura*, the supraocular depression is present only in the larger variety. *Diaphanosoma excisum* occurs under two varieties, namely *D. excisum* Sars 1885 (I) and *D. excisum* Sars var. *Stingling Jenkin* 1934 (II). These two varieties can be distinguished on the basis of length of antenna and serration

on the carapace border. Biswas (1971) and Mathew (1977) have reported the Indian occurrence of *D. excisum* Sars 1885 as variety (I). The second variety, *D. excisum* Sars var. *Stingling Jenkin* 1934 (II) was reported by Biswas (1971). All the identified Cladocerans occurred both in the reservoir and in the nursery pond, except *Moina dubia* and *Macrothrix laticornis*, which occurred only in the nursery pond.

REFERENCES

- BISWAS, S. (1971): Fauna of Rajasthan, India. Part II. Crustacea: Cladocera. *Rec. Zool. Surv. India* 63: 95-141.
- FREY, D.G. (1967): Phylogenetic relationship in the family Chydoridae (Cladocera). *Proc. Symp. Crustacea* 1: 29-37.
- GREEN, J. (1962): Zooplankton of the River Sokoto: the Crustacea. *Proc. Zool. Soc. Lond.* 138(3): 415-453.
- HOFF, C.C. (1943): The Cladocera and Ostracoda of Reelfoot Lake. Report of Reelfoot Lake Biological Station. 7: 49-107.
- MATHEW, P.M. (1977): Studies on the zooplankton of a tropical lake. Proceedings of the Symposium on warm water zooplankton. NIO, Goa. Pp. 297-308.
- MICHAEL, R.G. (1973): Cladocera: A guide to study freshwater organisms. *Journ. Madurai Univ. Suppl.* 1: 71-85.
- REY, M.J. & L.S. JEAN (1968): Las cladocers (Crustaces, Branchiopodes) Du Tehad. Cus. O.R.S.T.O.M., Ser. *Hydrobiol.* 2 (3-4): 79-118.
- SHIRGUR, G.A. (1984): Techniques of phased fertilization. A new dimension in aquaculture. Workshop on feed from the sea to feed a Billion by 2000 A.D. Article No. VI: 1-19.
- SHIRGUR, G.A. & S.T. INDULKAR (1987): Continuous mass culture of Cladoceran *Moina micrura* in plastic pool by phased fertilization technique for daily exploitation. *Fishing Chimes* 7(2): 19-23.
- WARD, H.B. & G.C. WIPPLE (1966): Freshwater Biology (2nd edition). Cladocera. John Wiley and Sons, London. Pp. 587-656.

22. AEGINETIA INDICA ROXB.: A NEW NON-PHOTOSYNTHETIC ANGIOSPERM FOR JAMMU AND KASHMIR FLORA¹

HARISH CHANDER DUTT^{2,3} AND SHASHI KANT^{2,4}

¹Accepted March 02, 2005

²Department of Botany, University of Jammu, Jammu 180006, Jammu & Kashmir, India.

³duttharish@rediffmail.com

⁴shashikant@rediffmail.com

During a floristic exploration in the foothills of Jammu in September 2003, the authors collected a specimen of a broomrape with underground parts, growing in a moist and shady habitat, near village Thain of Dayalla Chak, Kathua at an altitude of 600 m above msl. A large population of the species in association with other grasses and *Adiantum* species has been found in this area. The collected specimen has been deposited in the Herbarium, Department of Botany, University of Jammu (Regn. No. SK-HC 1/8248). After a detailed study of the available literature and preserved herbarium collection, the broomrape was identified as *Aeginetia* Roxb. (Fig. 1) of Orobanchaceae – a dicot family.

Perusal of existing literature and collected herbarium sheets implied clearly that this species had not been recorded earlier in Jammu and Kashmir. However, the species has been described by Kehimkar (2000) as a Himalayan species existing between 600-1100 m above msl. A detailed description of this new record to the flora of Jammu and Kashmir is given below:

gnibnaga.

otatetell mev. *Aeginetia indica* Roxb.

sidT: baismvuoq za.

sed of *Aeginetia japonica* Siebold & Zuccarini; *Orobanche*

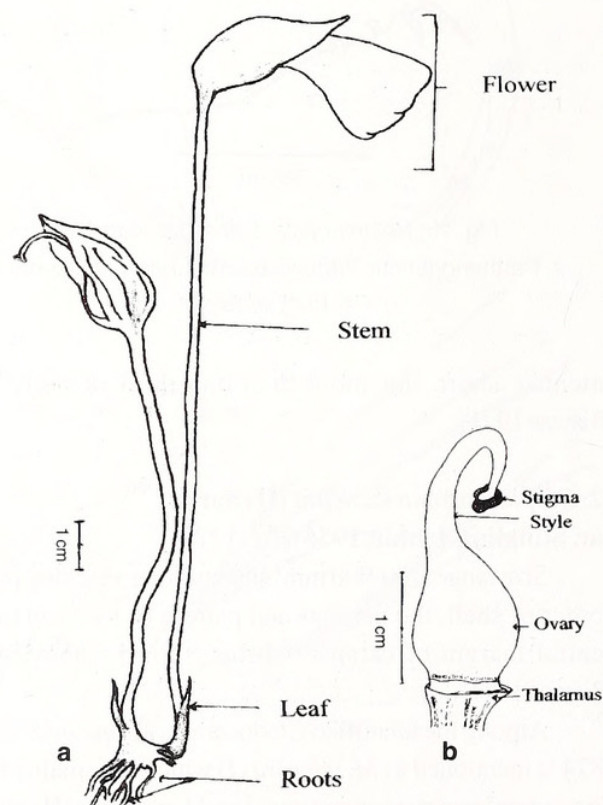


Fig. 1: *Aeginetia indica*: a. Habit; b. Gynoecium

aeginetia Linn.; *Phelipaea indica* (Linn.) Sprengel ex Steudel.

Root slightly fleshy. Stems (10-25 cm) branched from near base. Leaves small reddish, ovate, 6-9 x 2-3 mm near the stem base, glabrous. Inflorescence solitary terminal, purplish-red (non-green); flower fimbriate, ebracteate, ebracteolate, 1.25-5 cm long. Calyx acuminate, spathe like, pink. Corolla purplish-red, tubular-campanulate, 1.25-5 cm, long, tube

slightly curved. Ovary 1-locular, parietal placentas four. Style 1-1.5 cm. Capsule conical 1-2 cm. Seeds numerous 0.03-0.04 mm.

Fl. & Fr.: May-September.

Distribution: Bangladesh, Bhutan, Cambodia, Indonesia, Japan, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, India: western Himalaya in Kumaon to Nepal, Assam and Khasia Hills.

REFERENCE

KEHIMKAR, I. (2000): Common Indian Wild Flowers. Bombay Natural History Society & Oxford University Press, Mumbai. Pp. 141.

23. *DIOSPYROS NIGRESCENS* (DALZ.) SALDANHA (EBENACEAE): AN ADDITION TO THE FLORA OF TAMIL NADU¹

S. KARUPPUSAMY^{2,3}, K.M. RAJASEKARAN⁵ AND T. PULLAIAH^{2,4}

¹Accepted January 11, 2005

²Department of Biotechnology, Sri Krishnadevaraya University, Anantapur 515 003, Andhra Pradesh, India.

³Email: ksamylin@yahoo.co.in

⁴Email: pullaiaht@yahoo.co.in

⁵Department of Botany, Madura College, Madurai 624 011, Tamil Nadu, India. Email: capt_kmr@gmail.com

During the floristic survey of the Dindigul district of Tamil Nadu, we came across an interesting species of *Diospyros* in the Sirumalai hills. This species was examined critically, and was identified as *Diospyros nigrescens*. It has not been reported from Tamil Nadu so far. The present study extends its distribution to Tamil Nadu.

Diospyros nigrescens (Dalz.) Saldanha in Saldanha & Nicolson, Fl. Hassan. 197. 1976. *Diospyros angustifolia* (Miq.) Kostermans, Ceylon J. Sci. 12: 106. 1977. *Maba nigrescens* Dalz. in Dalz. & Gibson, Bombay Fl. 142. 1861; Cooke, Fl. Bombay 2: 97 (157). 1904; Gamble, Fl. Presi. Madras. 768 (540). 1921.

Trees, branches fulvous-pubescent. Leaf blade elliptic-lanceolate, acute at apex, cuneate at base, with reticulation slightly raised beneath, fulvous hairy on midrib beneath, to 8 x 3 cm. Inflorescence 1-3 flowered, axillary subsessile clusters. Flowers 3-4merous. Calyx lobe ovate, acute, hairy. Corolla white, hairy. Stamens 6-9, pistillode rudimentary, staminodes 0. Ovary 3-celled, hairy. Stigmas 3. Fruit ellipsoid, clothed when young with fulvous silky hairs, fruiting calyx cup shaped (Fig. 1).

Fl. & Fr.: February-September.

Ecology: Sporadically occur in evergreen forests and stream banks on the Ghats.

Distribution: Confined to the Bombay Presidency in Konkan and Kanara (Cooke 1908), the Sirumalai hills of Tamil Nadu.

Specimen examined: The Sirumalai hills (Eastern Ghats), Dindigul district, Tamil Nadu. Karuppusamy and Rajasekaran, 1058 (SKU), Karuppusamy, 1131 (SKU).



Fig. 1: *Diospyros nigrescens* (Dalz.) Saldanha:
A. Flowering twig, B. Flower, C. Fruit

REFERENCE

COOKE, T. (1908): Flora of the Presidency of Bombay, Vol. III. Bishen Singh Mahendra Pal Singh, Dehradun. Pp. 157-158.



Dutt, Harish Chander and Kant, Shashi. 2007. "Aeginetia Indica Roxb.: a new Non photosynthetic Angiosperm for Jammu and Kashmir Flora." *The journal of the Bombay Natural History Society* 104, 116–117.

View This Item Online: <https://www.biodiversitylibrary.org/item/188396>

Permalink: <https://www.biodiversitylibrary.org/partpdf/154759>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder

License: <http://creativecommons.org/licenses/by-nc/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.