

Research article

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Eleocharis lankana T. Koyama (Cyperaceae) – A new record for Maharashtra state (India)

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ABSTRACT:

Eleocharis lankana T. Koyama (Cyperaceae) has reported for the first time from Maharashtra state of India. The present paper provides a brief description of the species, its phenology, colour photo plates for easy identification. A note on the identity of *E. lankana* has been provided.

KEYWORDS: *Eleocharis lankana*, new record, coastal region, Konkan.

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INTRODUCTION:

As a part of taxonomic revision of genus *Eleocharis* R. Br. in Maharashtra, floristic survey of Konkan region was undertaken. During this survey some specimens of *Eleocharis* R. Br. were collected. After perusal of relevant literature^{1,2,3} and critical analysis of specimens it revealed that the specimens belong to *Eleocharis lankana* T. Koyama.

A thorough scrutiny of literature^{1,4,2,3} revealed that this species has so far not been recorded from Maharashtra. Hence in present communication it is reported here as new record for Maharashtra.

Eleocharis lankana was described for the first time by T. Koyama⁵ from Yakkala, Colombo district of Sri Lanka in 1974. Earlier it was endemic to Sri Lanka only, later the species is reported from Kerala, India⁶. Recently *Eleocharis lankana* sub sp. *mohamadii* was described by Wadoodkhan from Kagal Lake, Kolhapur district of Maharashtra state². E. lankana subsp. *mohamadii* Wadoodkhan differs from E. lankana T. Koyama subsp. lankana on the basis of stolon rhizomes and angular spikelets². Though earlier E. lankana was reported from Vidarbha region of Maharashtra⁷, it is reported without locality and herbarium. Therefore this does not stand as authentic report for Maharashtra.

DESCRIPTION OF SPECIES:

Eleocharis lankana T. Koyama, Bull. Natl. Sci. Mus. 17: 67, f. 1. 1974; C.D.K. Cook, Aquat. Wetl. Pl. India 129, f. 123 d-f. 1996.

Densely tufted, perennial herb. Culms erect, 20–55 cm tall, terete, septate, not compressed, c. 2–4.5 mm diameter, transversely septate, intersepta hollow. Spikelets terete, cylindrical, 15– 30×2 –4.5 mm, many flowered, contracted to subacute apex, pale green. Bract broadly ovate to semi circular, green. Glumes ovate-oval to elliptic, 4–7 mm \times 2–3 mm, subacute, tinged with brown inside the hyaline margin, obtusely keeled, broadly hyaline on margin. Perianth bristle 5–6, subrigid, retrorsely scabrous on upper half, shorter than to equalling the nut, pale brownish; spinules about half a wide as the bristle. Stamens 3. Style 5–6 mm long, conical at base, divided into three stigmas, persistent style base. Achene biconvex, obovoid, 1.8– 2.1×1.7 –1.8 mm, attenuated to base, olive to brown coloured, smooth, with raised walls forming fine reticulate pattern.

Flowering and Fruiting: August–November.

Etymology: The specific epithet *lankana* is given after the country Srilanka.

Specimens Examined: INDIA, Maharashtra, Ratnagiri District, Adivare 15.08.2018, *A. S. Pansare* - 55 (Herbarium of NACSC, Ahmednagar).

Worldwide distribution: Eleocharis lankana, earlier was endemic to Sri Lanka only^{5,8}, later the

species also reported from India Kerala⁶ and now in Maharashtra.

Note: *Eleocharis lankana* differs from E. *dulcis* in having the acute tipped floral glumes, more rigid culms that are not distinctly septate as in E. *dulcis* and the shorter rhizome, which never produces elongated stolon and tubers⁵.

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REFERENCES:

- 1. Clarke CB. "Cyperaceae". In: Hook f. (ed.). Flora of British India. Reeve & Co.: London; 1893; 6: 625–30.
- 2. Wadoodkhan MA. Novelties in Cyperaceae of Maharashtra. Journal of Economic and Taxonomic Botany 1998; 22(3): 555-61.
- 3. Wadoodkhan MA. Cyperaceae of Western Ghats, West Coast and Maharashtra. Dattsons Publishers: Nagpur; 2015.
- 4. Lakshminarasimhan P. In: Sharma BD, Karthikeyan S and Singh NP (eds.). Flora of Maharashtra State: Monocotyledones. Flora of India Series 2. BSI: Calcutta; 297-301.
- 5. Koyama T. "Cyperaceae". In: Dassanayake MD and Fosberg FR (eds.). A revised Handbook to the Flora of Ceylon. Oxford & IBH: New Delhi; 1985; 5: 260–62.
- 6. Sasidharan N. Biodiversity documentation for Kerala. Part 6. Flowering Plants. Kerala Forest Research Institute: Kerala; 2004.
- 7. Chavan DP, Survase SA and Kunjalwar SJ. Taxonomic study of genus *Eleocharis* R. Br. from Vidarbha region of Maharashtra. Journal of Global Biosciences 2014; 3(4): 744-48.
- 8. Cook CDK. Aquatic and Wetland Plants of India. Oxford University Press: London; 1996.



Figure 1: Habitat of *Eleocharis lankana* T. Koyama



Figure 2: Spikelet of *Eleocharis lankana* T. Koyama

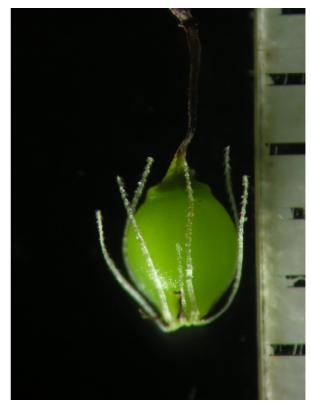


Figure 3: Achene of *Eleocharis lankana* T. Koyama



Figure 4: Image showing herbarium sheet of Eleocharis lankana T. Koyama