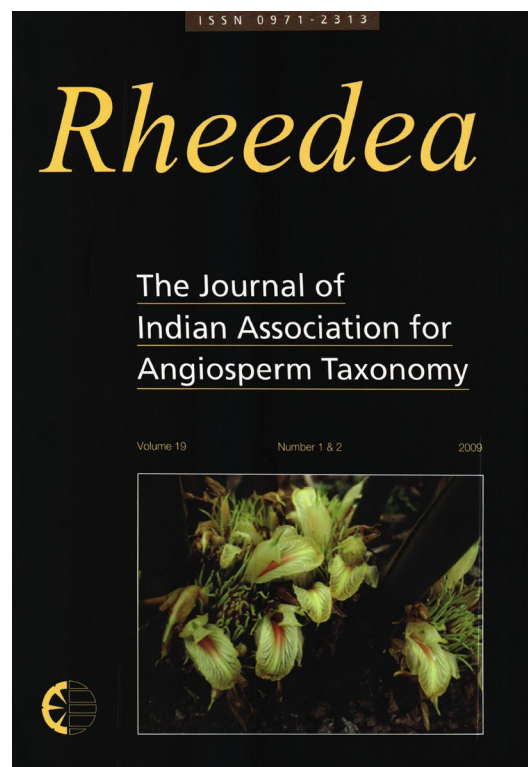




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Lepironia (Cyperaceae): A New Genus Record for Kerala

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Abstract

Lepironia articulata (Retz.) Domin, a sedge known to occur in India only by its reported type collection from the vicinity of Tranquebar (Tharangampadi in Tamil Nadu), was found growing in the coastal belt of Alappuzha District in Kerala. The present collection forms the second record for the species in India and marks the addition of genus *Lepironia* to the flora of Kerala. A detailed description, with relevant notes, illustration and photographs are provided.

Keywords: *Lepironia*, New Genus Record, Kerala

Introduction

During the course of a botanical exploration in the tsunami-affected coastal areas of Kerala, an interesting sedge specimen was collected from an open marsh in the coastal belt of Alappuzha District. On critical examination and reference to relevant literature (Clarke, 1894; Fischer, 1932, 1957; Kern, 1974; Koyama, 1985; Karthikeyan *et al.*, 1989), the specimen was identified as *Lepironia articulata* (Retz.) Domin, a least reported genus from India, which is yet to be figured in the floristic account of Kerala. Though the sedge forms gregarious thickets in the backwater marsh (Fig. 1), its occurrence in Kerala is restricted to a single location near Pallana at geographical co-ordinates of latitude 9° 17' 17.7" N and longitude 76° 24' 22.1" E (–4 m MSL).

Five species of *Lepironia* have been reported worldwide with their distribution extending from Madagascar through the Indian subcontinent and Malaysia, eastwards to Australia (Mabberley, 2005). In Sri Lanka, the genus *Lepironia* is represented by a single species, viz. *L. articulata*. Domin's (1915) description of *L. articulata* was based on a specimen collected by Koenig described and named as *Restio articulatus* by Retzius (1786) from the proximity of the erstwhile Tranquebar, known as Tharangampadi in Tamil Nadu, India. Apart from this locality, there is no other authentic record on the distribution of the species from India, except for a reference by Santapau & Henry (1973) in which they have stated as "reported to be cultivated in India; used for making baskets and mats", without mention-

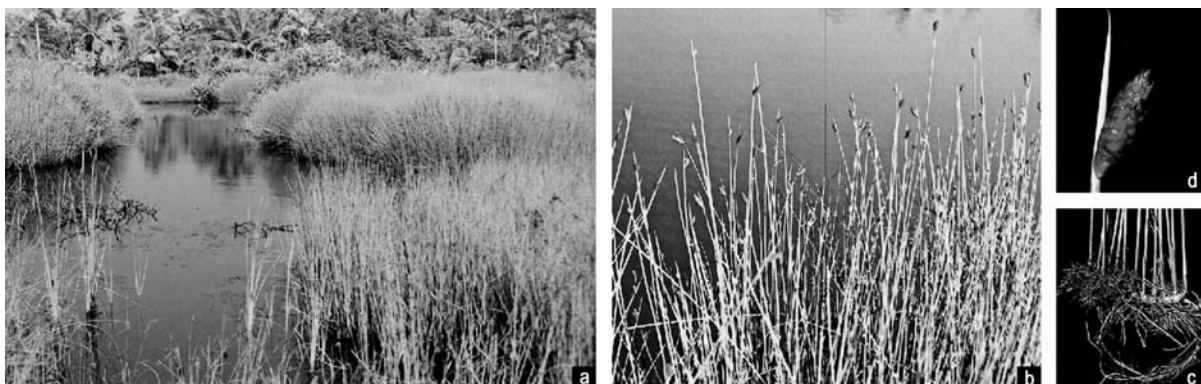


Figure 1. *Lepironia articulata* (Retz.) Domin: a. Habitat; b. Habit; c. Creeping rhizome with basal parts of culms; d. Single spike.

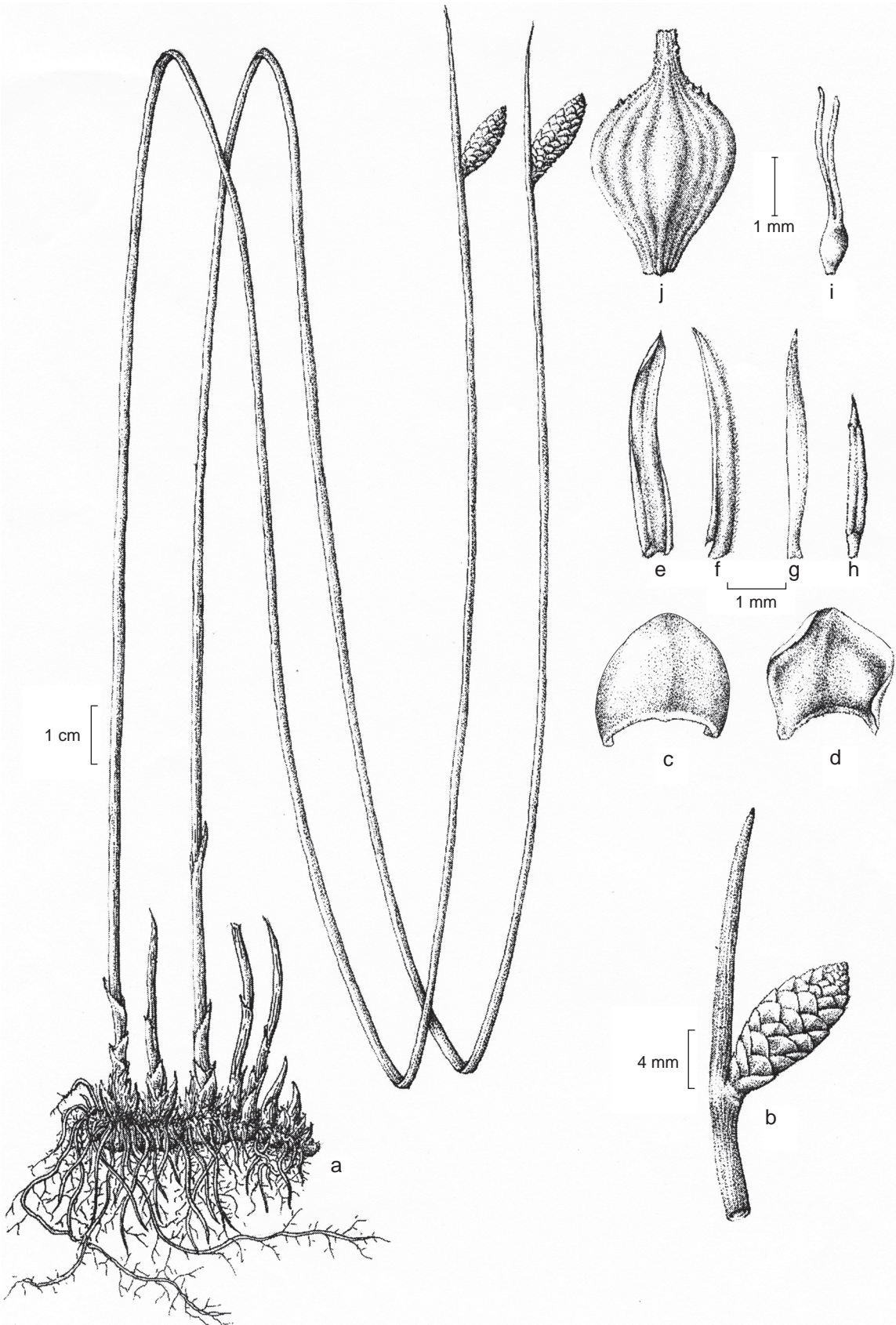


Figure 2. *Lepironia articulata* (Retz.) Domin: a. Habit; b. Spike; c, d. Glume – inner and outer view; e, f. Outer squamellae – inner and outer view; g. Inner squamellae; h. Stamen; i. Pistil; j. Nut.

ing any specific locality of occurrence. The present report not only forms the second collection report from India but also a new distributional record of the genus for the State of Kerala.

Lepironia articulata (Retz.) Domin, *Biblioth. Bot.* 85: 486. 1915; C. E. C. Fisch. in *Bull. Misc. Inform.* 1932: 70. 1932 & *Fl. Madras* 3: 1161. 1957 (repr. ed.). *Restio articulatus* Retz., *Observ. Bot.* 4: 14. 1786. *Lepironia mucronata* Rich. in Pers., *Syn. Pl.* 1: 70. 1805; Hook.f., *Fl. Brit. India* 6: 684. 1894. **Fig. 2**

Perennials; rhizome horizontally creeping, woody. Culms often in a row from rhizome, erect, 50 – 200 cm high, cylindrical, greyish green, glabrous, hollow and transversely septate. Leaves reduced to bladeless sheaths, stramineous. Inflorescence a pseudolateral, many-flowered spike, c. 2 cm long, ovoid-obovoid or ellipsoid, yellowish brown to dark brown at maturity. Involucral bract single, erect, looking like continuation of the stem. Rachilla fleshy, conical, persistent. Glumes chartaceous, spirally arranged, broadly ovate or sub-orbicular, rounded at apex, 4 – 6 mm long, glabrous, chestnut brown to dark reddish brown, not nerved; lower few glumes empty and others with axillary, bisexual cymule. Outer squamellae (transversal scales) opposite, linear-lanceolate, 3 – 5 mm long, membranous with scarious margin, folded with ciliate keel; inner squamellae linear-lanceolate, 3 – 4 mm long, membranous. Stamen 2.5 – 3 mm long with dark extended connective. Style 2-fid, continuous with the ovary; the slightly thickened base persistent on the nut as a short beak. Nut dorsiventrally planoconvex, obovoid-suborbiculoid, longitudinally smooth-ridged, abruptly contracted at base, rounded at mucronate apex, glabrous, entire or spinulose at apex.

Flowering & Fruiting: December – March.

Habitat: The sedge has been found to form thickets along backwater in the low-lying area (–4 m MSL) connected by inland water channels. The muddy substratum shows a peculiar black colouration quite different from the rest of the neighbouring coastal area. Associate species in the habitat include *Dimeria copei*, *Eleocharis acutangula*, *E. geniculata*, *E. retroflexa*, *Fimbristylis dichotoma* subsp. *glauca*, *Fuirena umbellata* and *Ischaemum vembanadense*.

Specimens Examined: SRI LANKA, Ceylon, s. loc., s. d., s. coll., s. n. (Acc. No. 53826) (MH). INDIA, Kerala, Alappuzha District, Pallana, K. V. Jetty, 15.3.2007, P. K. Shaji 7327; Pallana, K. V. Jetty, 28.2.2008, P. K. Shaji & T. Shaju 7342 (Environmental Resources Research Centre Herbarium, Thiruvananthapuram).

Distribution: Madagascar, Sri Lanka, Thailand, Indo-China, S. China, N. and E. Australia, Carolines, New Caledonia, Fiji, Sumatra, Malay Peninsula, Borneo, Moluccas and New Guinea.

Note: In Sumatra and Borneo, dried stems of *Lepironia articulata* is used for making mats for packing tobacco, rubber and kapok, whereas in New Guinea the natives use the sedge for basket-making (Kern, 1974). However, such economic uses have not been observed in Kerala.

Acknowledgements

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