

Rhynchospora gracillima (Cyperaceae), A little known species from Nilgiri Biosphere Reserve

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Abstract

Rhynchospora gracillima Thwaites, an interesting sedge species has been collected from Wayanad district which form the part of Nilgiri Biosphere Reserve, India. The present report is an addition to the Kerala state as well as Nilgiri Biosphere Reserve. A detailed taxonomic description along with photographs and relevant information are provided based on fresh collections for easy identification.

Keywords: Kerala, Wayanad, New Record.

Introduction

The genus Rhynchospora Vahl with about 250–300 species is centered mainly in warm temperate zones and the Neotropics with highest concentration in America (Thomas et al., 2009; Viji et al., 2014). In India, it is represented by nine species, of which six taxa are reported in Kerala (Viji et al., 2014).

As part of taxonomic revision of the family Cyperaceae in Nilgiri Biosphere Reserve, an interesting specimen of Rhynchospora was collected from Manikkunnumala, Wayanad district. On critical examination with relevant literature (Thwaites & Hooker, 1864), it was identified as Rhynchospora gracillima Thwaites. The species was first described from Sri Lanka (K000357555) and later found out its extended distribution from Australia, Indonesia, SW Pacific Islands, Sri Lanka, Thailand and India (Koyama, 1985; Verma & Chandra 1982; Dey & Prasanna 2010). In India, it was collected from Meghalaya, Orissa, Tamil Nadu and Andaman & Nicobar during the 18th and 19th century, and there is no further collection of this species from any of these regions except one from Andhra Pradesh by N. P. Balakrishnan during 1960. The present report from Wayanad district has confirmed its extension up to highlands of Kerala and it also forms an addition to Nilgiri Biosphere Reserve. A detailed description with photographs and relevant notes are provided to facilitate its easy identification.


TYPE: Sri Lanka (Ceylon). South of the Island, Thwaites C.P. 3818 (Isotype: K000357555, image!)

Perennial herbs. Rhizomes short, not woody; roots fibrous. Culms tufted, 10–50 cm high, filiform, erect, trigonous, smooth, the bases surrounded by old leaf sheaths. Leaves basal and cauline, 2–4 per culm; sheaths 1–4 cm long, pale brown on distal leaves; blades setaceous, 10–25 × 0.07–0.1 cm, green, gradually narrowed to apex, scabrous near margin towards apex. Inflorescence terminal and axillary, lax, 1–3 distant corymbiform anthelas; involucral bracts setaceous, 2–4 cm long; terminal inflorescence larger than the lateral ones, 2–4 cm long; rays terminated by 1–3 spikelets; lateral inflorescence simple, peduncles exerted from sheaths; spikelets...
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Fig 1. *Rhynchospora gracillima* Thwaites & Hook. A. Habit; B. Spikelet; C-E. Glumes; F. Pisol with anthers when young; G. Stamen; H. Pistil; I. Nut.
solitary, lanceolate, 5–6 × 1–1.3 mm, 3–4flowered, usually maturing into 2 nuts; pedicels 0.8–1 cm long; glumes spirally imbricate, 5–7 per spikelet, broadly ovate, membranous, pale ferruginous, mucronate. Flowers bisexual, upper ones sterile. Perianth bristles absent. Stamens 3; anthers linear, 1.5–2 mm long, apex with acute crest, filaments ca. 0.5 mm long. Ovary obovoid, ca. 1 mm long; style 1.5–3 mm long, base depressed, saddle shaped; stigma bilobed at apex. Achenes broadly obovoid, 1.5–2 × 1.5–2 mm, biconvex, transversely wavy-wrinkled, greyish white, truncate apex; epidermal cells linear, longitudinally arranged. (Fig. 1.)

**Phenology:** Flowering and fruiting occurs during November to May.

**Habitat:** *Rhynchospora gracillima* occurs at an altitude of ± 1100 m in the open marshy areas. The associated species in the community includes *Cyperus haspan* L., *Kyllinga brevifolia* Rottb., *K. nemoralis* (J. R. Forst. & G. Forst.) Dandy ex Hutch. & Dalziel, *Eragrostis unioloides* (Retz.) Nees ex Steud. etc.

**Distribution:** Australia, Indonesia, SW Pacific Islands, Sri Lanka and Thailand. **India:** Meghalaya, Orissa, Andhra Pradesh, Tamil Nadu, Andaman & Nicobar Islands and now from Kerala.

**Specimen examined:** INDIA. **Kerala,** Wayanad district, Manikkunnumala, ±1100 m, 28.03.2014, A. R. Viji & A. G. Pandurangan 82954 (TBGT).

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**Literature cited**


