

Murdannia spirata var. parviflora (Commelinaceae), a new record for India

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मुरडानिया स्पाइरेटा प्रभेद पार्विफ्लोरा (कोम्मिलिनेसी) भारत के लिये एक नवीन अभिलेख

शेख मुजफ्फर, अर्जुन प्रसाद तिवारी, मयूर नंदीकर एव अच्युतानंद शुक्ला

सारांश

मुरडानिया स्पाइरेटा (लि.) जी. ब्रुकेन, प्रभेद पार्विफ्लोरा फाडेन (कोम्मिलिनेसी) का भारत से प्रथम बार अभिलेखित किया गया है। प्रस्तुत शोध पत्र में इस जाति का विस्तृत वर्णन एवं सहज निर्धारण के लिए रेखांकन उपलब्ध कराया गया है।

ABSTRACT

Murdannia spirata (L.) G. Brückn. var. *parviflora* Faden (Comelinaceae) is reported here for the first time from India. Detailed description, illustration and distribution of the taxa are provided.

Keywords: India, *Murdannia spirata* var. *parviflora*, New Record

INTRODUCTION

Murdannia Royle is one of the dominant genera in the family Commelinaceae. It is represented by c. 55 species and distributed in the tropical and subtropical regions of Asia and Africa (Govaerts & Faden, 2015). In India, the genus is represented by c. 27 species, of which 7 species viz., *Murdannia assamica* Nampy & A. Ancy, *M. saddlepeakensis* Ramana & Nandikar, *M. brownii* Nandikar & Gurav, *M. fadeniana* Nampy & Joby, *M. lanceolata* (Wight) Kammathy, *M. lanuginosa* (Wall. ex C.B. Clarke) G. Brückn., *M. satheesiana* Joby, Nisha & Unni are endemic to India (Nandikar et al., 2015). Recently, *Murdannia ugemugei* Kamble & al. (2016) described from

Maharashtra, India and *M. keisak* (Hassk.) Hand.-Mazz. has been added to the Indian flora from West Bengal (Chowdhury et al. 2015).

Recent trips in the Balaghat and Seoni districts of Madhya Pradesh, Central India, some interesting specimens belongs to the family Commelinaceae were collected along the river bank of Bhamodi and Lamta village. After scrutiny with relevant literature the identity of the specimen is confirmed as *Murdannia spirata* (L.) G. Brückn. var. *parviflora* Faden. A personal communication with Dr. R.B. Faden (Smithsonian Institution, USA) also confirmed the same. Interestingly, this taxon is so far known only from Sri Lanka and Southern United States (Florida). Its collection from Madhya Pradesh

constitutes a new record to Indian Commelinaceae (Nandikar & Gurav, 2015). The detailed description, photographic illustration, along with relevant notes and key of all varieties of this species are provided herewith. The specimens are housed in the herbarium of Botanical Survey of India, Central Regional Centre, Allahabad (BSA) and United States National Herbarium (US).

TAXONOMIC TREATMENT

Murdannia spirata (L.) G. Bruckner var. *parviflora* Fadan, in Novon 11 (1): 25. 2001.

(Plate 1)

Trailing herbs, with definite base, rooting at the nodes; roots fibrous. Stem slender, deeply pinkish-purple, pigment, sparsely hairy. Leaves sessile; sheathed; sheath 0.2-0.5 cm, ciliate; lamina lanceolate or lanceolate-elliptic to ovate, 3-3.5 × 0.5-1 cm, base cordate or rounded, apex acute, margin pinkish-white, clasping at base, ciliate. Inflorescence terminal and axillary thyrses; cincinni two-three-flowered, usually forked into two, dichotomous divergent paniculate branches; peduncles glabrous or occasionally, with a longitudinal line of pubescence. Flowers 5-8 mm long, pedicels c. 6mm long; bracteole 1-4 mm long, persistent, sepals, petals 4-8 mm wide, orbicular, pink with 10-12 dark purple contrasting veins, with

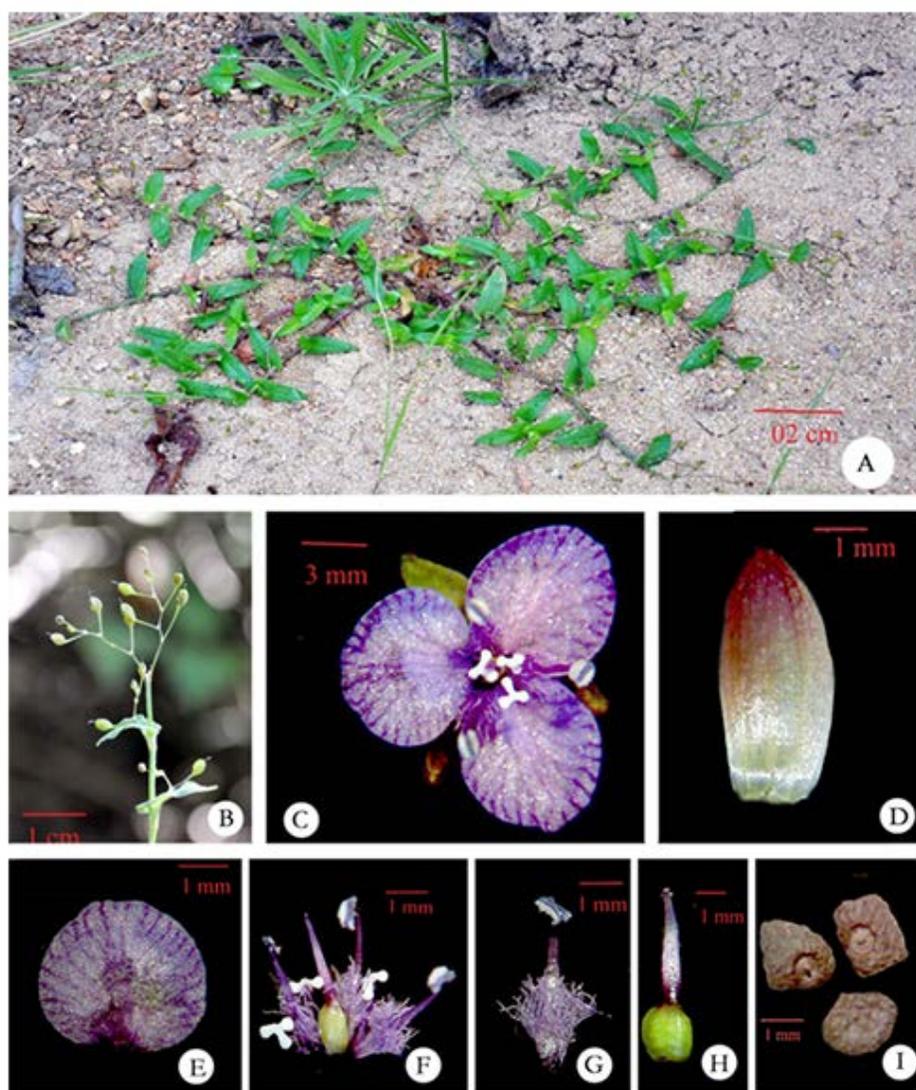


Plate 1. *Murdannia spirata* (L.) G. Brückn. var. *parviflora* Faden.; A. Habit B. Inflorescence C. Flower D. Sepal E. Petal F. Arrangement of androecium and gynoecium G. Stamen H. Pistil I. Seeds

three or four vascular forking and reforking into finer traces radiating towards the margins. Staminodes 3, filaments white, glabrous or bearded, antherodes trilobed; stamens 3, antesealous; filaments tapering to another connectives from thicker base, hairs in group on filaments halfway below the centre of the total of its length, anther white to pale blue; ovary yellow, ovoid; style 1.5 mm long, enantiostylus; stigma capitate, papillate. Capsules oblong-ellipsoid, trilobular, apex with persistent style base; seeds 3-4 per locule, uniseriate, testa brown to grey, quadrangular, reticulate, pitted rugose or verrucose.

Flowering and Fruiting: July to January.

Ecology: It grows as undergrowth in open forest, stream sides, ditches and along roadsides, at an elevation of 350-500 m asl. The common associated species are *Arundinella* sp., *Eleocharis acutangula* (Roxb.) Schult., *Fimbristylis argentea* (Rottb.) Vahl and *Fimbristylis bisumbellata* (Forssk.) Bubani, etc.

Distribution: India (Madhya Pradesh), Sri Lanka (Anuradhapura, Jaffna, Mannar, Trincomalee districts).

Specimens examined: India, Madhya Pradesh, Seoni District, Bhamodi village (22° 04' 03.7"N and 074°49'29.2"E), 30 July 2015, *Mujaffar Shaikh* 124 (US) and Balaghat district, Lamta village, near river beds (22°07'17.4"N and 080°07'41.5"E), 6 December 2015, *Mujaffar Shaikh* 124, 126 (BSA, US).

Note: *Murdannia spirata* var. *parviflora* can be easily distinguished from the typical varieties and *M. spirata* var. *flavanthera* by its decumbent habit, small flower size and petals with dark contrasting veins. The three varieties can be distinguished as follows:

- 1a. Petals with dark contrasting veins2.
- 1b. Petals without dark contrasting veins
.....var. *spirata*
- 2a. Plant without definite base; anthers yellow to cream yellow; ovary green; seeds 5-7 per locules
.....var. *flavanthera*
- 2b. Plant with definite base; anthers white to slightly blue; ovary yellow; seeds 3-4 per locules
.....var. *parviflora*

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