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Tragia plukenetii Radcl.-Sm. (Euphorbiaceae): An Addition to Flora of Allahabad, Uttar Pradesh

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ABSTRACT

Tragia plukenetii Radcl.-Sm. is reported as a new addition to the Flora of Allahabad District of Uttar Pradesh, A detailed description, up to date nomenclature and photographs are provided here to facilitate its easy and correct identification in the field.

KEYWORDS: Addition, Allahabad, Euphorbiaceae, Tragia plukenetii

INTRODUCTION

The genus Tragia comprises of 168 species [1] is distributed mainly in tropical and subtropical regions of Africa, America and Asia. In India, the genus is represented by 7 species [2] and 2 species reported from Uttar Pradesh [3].

During floristic reinvestigation in Uttar Pradesh, Tragia was collected from Allahabad District of Uttar Pradesh and perusal of relevant literature [1,3,4,5] the specimen was identified as Tragia plukenetii Radcl.-Sm. and it was found that the species had no past record of the occurrence in Allahabad [6] (Misra & Verma, 1992). Therefore the present report of Tragia plukenetii Radcl.-Sm. is a new addition for the Euphorbiaceae of Allahabad. A detailed description, up to date nomenclature, distribution, specimen examined and photographs are provided. The specimen has been deposited in Duthie Herbarium, Department of Botany, University of Allahabad, Prayagraj.

Tragia plukenetii Radcl.- Sm. in Kew Bull. 37: 688. 1983. Croton hastatus L., Sp. Pl.: 1005. 1753. Tragia cannabina L. f., Suppl. Pl.: 415. 1781; Duthie, Fl. Gangetic Plain 3: 114. 1915. Tragia cannabina var. hastata (L.) Pax & K. Hoffm., Pflanzenr. IV, 147, IX: 85. 1919. Tragia involucrata var. cannabina Mull. Arg., Prodr. 15(2): 944. 1866; Hook.f., Fl. Brit. India 5: 465. 1888.

Straggling, climbing shrubs, rarely erect herbs (Figure 1), 1 m high, sparsely hispid with stinging hairs; branches scattered hispid, glabrous when old. Leaves palmately 3-lobed or rarely unlobed or 2-lobed with one lateral lobe suppressed, 3-10 x 1.5-7 cm, chartaceous, sparsely hispid or hirsute on nerves to glabrescent beneath, 3-nerved at base; central lobe narrowly oblong or obovate in outline, 1.5-8 x 0.5 x 2 cm, irregularly crenate-serrate along margins; lateral lobes 0.5-4 x 0.3-1.5 cm; lateral primary veins entering into lateral lobes; lateral nerves (on central lobe) 3-7 per side, predominantly craspedodromous; petioles 3-20 mm long. Racemes terminal on lateral shoots or leaf –opposed, 2-5 cm long, consisting of solely male flowers or associated with 1-3 female flowers at base; peduncles up to 3 cm long. Male flowers: pedicels 1 mm long; sepals broadly ovatesuborbicular, 1 x 0.7mm, glabrous or thinly pubescent outside; stamens 3; filaments 0.3 mm long, anthers oblong, 0.3 mm long. Female flowers: pedicels 1 mm long; sepals 1-2 mm long, fimbriate, thinly hispid outside; ovary 2 mm in diam., hirsute; styles 3 mm long, trifid at apex. Fruits depressed 3-5 x 6-8 mm, deeply 3-lobed, hispid (Figure 2); main body of fruiting sepals linear to oblong, 3-6 x 2-4 mm (including lobes); lobes 4-10 per side, linear, 1-2 mm long, fulvous hispid; seeds 3, globose.

Flowering & Fruiting: Throughout the year.

Habitat: Rare in waste places.

Medicinal uses: T. plukenetii has been used to treat variety of ailments since many years ago. Recently, an increasing attention has been drawn because of numerous pharmacological activities and the identification of multiple bioactive phytochemical constituents like alkaloids, carbohydrates, flavonoids, glycosides, sterols, saponins and tannins [7]. Traditionally, it has been used to treat sore throat [8]. The roots are useful in guinea worms and in skin diseases. A decoction of the root is useful in bronchitis.

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Figure 1: Tragia plukenetii Radcl.-Sm



Figure 2: Tragia plukenetii Radcl.-Sm. fruits

Locality: Jhunsi (Near Ulta Qila), Prayagraj, Renu: 29215.

Distribution: Africa: Nigeria, Somalia, Zimbabwe. Asia: India, Sri Lanka In India: Andhra Pradesh, Goa, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

Specimen examined: Etawah, G. D.: 6487 (DD) named as *Tragia involucrata* var. *cannabina* on 26.11.1986.

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