



***Striga scottiana* (Scrophulariaceae) – a new species from southern Western Ghats of Tamilnadu, India**

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Abstract

Striga scottiana Solomon Jeeva, Shynin Brintha and Rasingam, a new species of Scrophulariaceae from Allamparai, Chunkankadai and Marunthuvalmalai hills of southern Western Ghats is described with photographs and other relevant notes. The habitat and status are also discussed.

Key words: Chunkankadai, Marunthuvalmalai, Scrophulariaceae, *Striga*, Western Ghats

Introduction

Striga Lour., belonging to the family Scrophulariaceae, commonly known as 'witchweed', is a genus of parasitic plants distributed in the Old World tropics, particularly tropical Africa, Arabia and Asia (Fischer *et al.*, 2011) and is represented by about 40 species (Mohamed *et al.*, 2001). Of these, four species are distributed in Tamil Nadu (Gamble 1925; Henry *et al.*, 1987; Mathew, 1998; Daniel and Umamaheswari, 2001) and two species in Trivandrum, a part of erstwhile Travancore (Mohanan and Henry, 1994). Recently, Maridass (2008) collected *S. gesnerioides* (Willd.) Vatke from the Kakatchi forest range of Kalakad-Mundanthurai Tiger Reserve (KMTR) of Western Ghats. During a floristic expedition to the Western Ghats of Kanyakumari district, a few specimens of *Striga* were collected from Chunkankadai and Marunthuvalmalai hills during the month of December 2010. The features of these specimens did not match those of any other described species. Hence, it is described here as a new species. A detailed botanical description, line drawings and photographs of the species are provided to facilitate its easy identification (Figure 1 and 2).

Striga scottiana Solomon Jeeva, Shynin Brintha and Rasingam **sp. nov.**

Type: India, Tamilnadu, Kanyakumari district: Chunkankadai hills, 12 December 2010, *S. Jeeva 2252* (Holotype BSID!; Isotype SCCN!).

Small parasitic herbs, up to 44 cm high; stem solitary, unbranched or rarely single branched, prominently 4-winged, dark black, scabrous to strigose. Leaves simple, opposite or sub-opposite, scale-like, appressed to the stem; basal leaves broadly ovate, c. 4 × 3 mm, acute at apex; upper leaves lanceolate, c. 8 × 3.5 mm, acuminate at apex, margin entire, ciliate, midrib prominently keeled beneath, secondary nerves obscure, sparsely to densely strigose on both surfaces. Spikes dense, terminal, up to 30 cm long, longer than the vegetative parts; bracts lanceolate, 8 × 3 mm, acuminate at apex, slightly longer than the calyx, strigose throughout, ciliate along margins; bracteoles linear, 4 × 1 mm, strigose. Calyx tubular, c. 5.5 mm long; tube 5-ribbed, the ribs running to the apex of each lobe; lobes sub-equal, linear-lanceolate, c. 1.5 mm long, sparsely strigose, ciliate along margins. Corolla tubular, c. 10 mm long, white with suffused pink at centre, abruptly incurved above the middle; tube 8.5 mm long, silky hairy within, glabrous without; lobes 5, spreading, unequal; upper lobes prominently bilobed, lower 3-lobed, obovate, c. 3 mm long, glabrous to hairy. Stamens 4, attached above the middle of corolla tube, included, didynamous; anthers 1-celled, c. 0.8 mm long; filaments c. 2 mm long, pubescent. Style slender, thickened upwards; stigma globose, entire. Fruit a loculicidal capsule, oblong, 4.5 mm, glabrous; seeds many, oblong, 0.4 × 0.2 mm, reticulate.

Diagnosis: *Striga scottiana* resembles *Striga gesnerioides* but differs in the robust, solitary, unbranched or rarely 1 branched stems, lanceolate

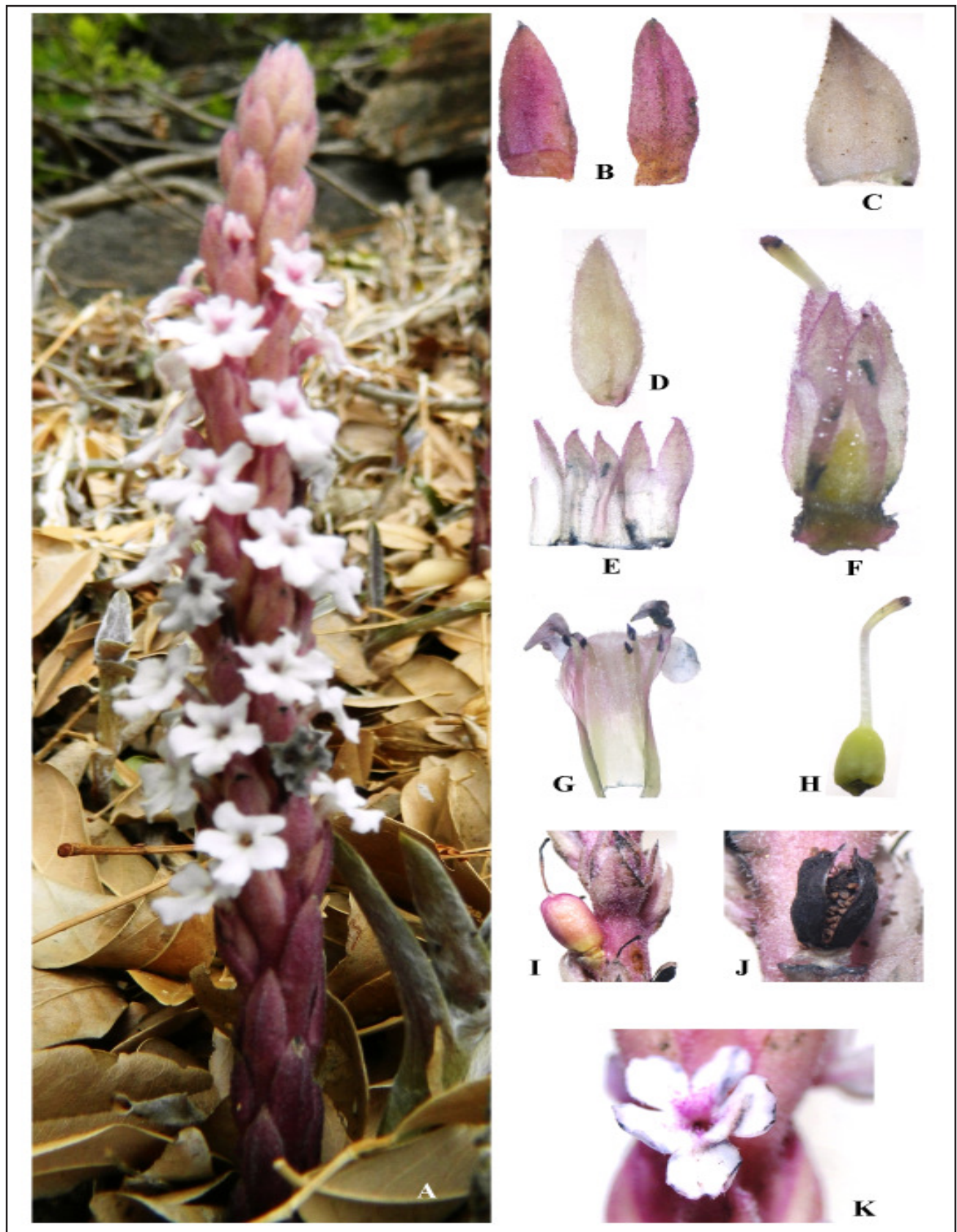


Figure 1. *Striga scottiana* – A. Habit; B. Leaves (dorsal and ventral view); C. Bract; D. Bracteole; E. Calyx; F. Calyx with pistil; G. Corolla tube cut open; H. Pistil; I. Fruit; J. (dehiscence stage); K. Flower showing corolla lobes.

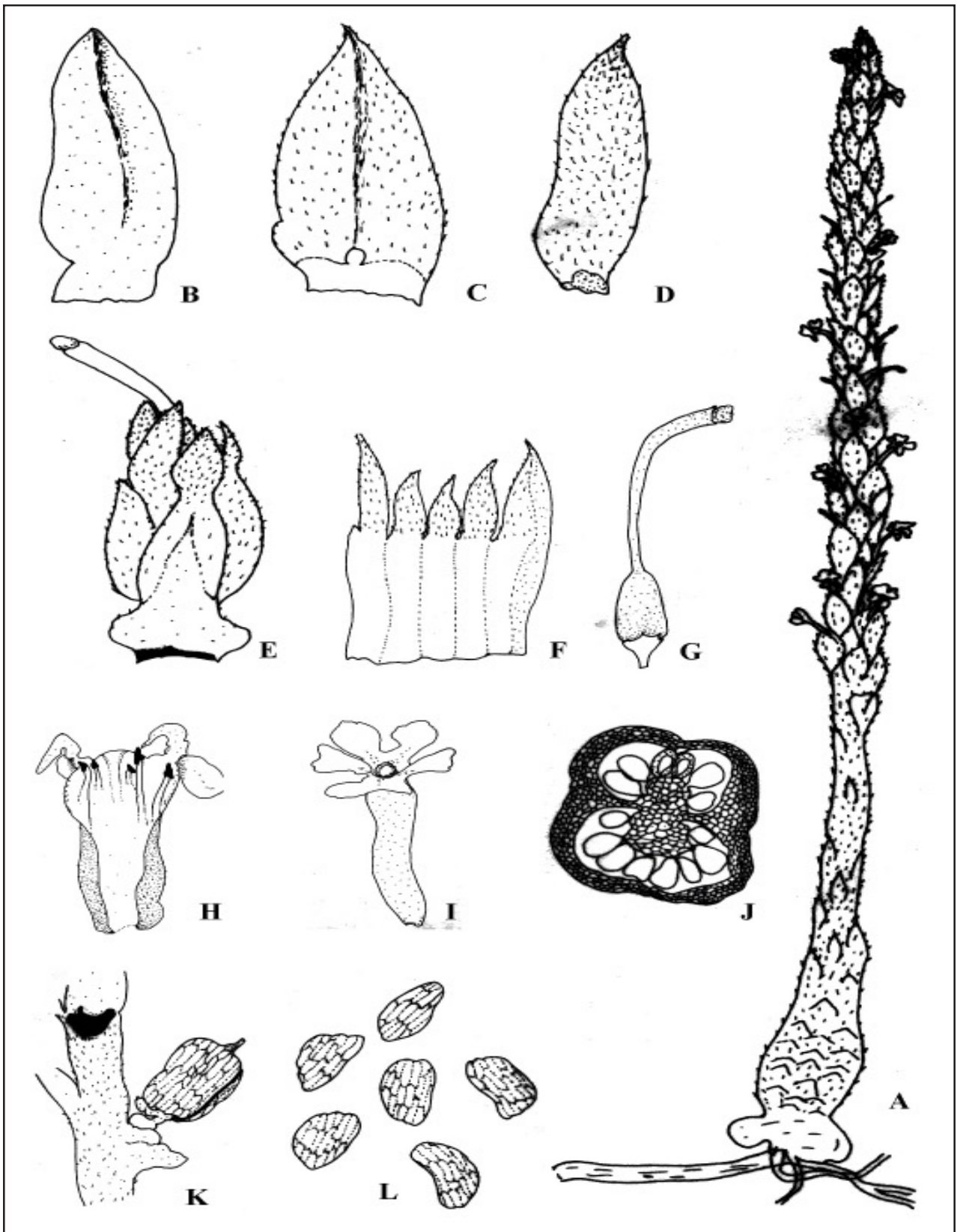


Figure 2. *Striga scottiana* – A. Habit; B. Leaf; C. Bract; D. Bracteole; E. Calyx with pistil; F. Calyx; G. Pistil; H. Corolla tube cut open; I. Flower showing corolla lobes; J. CS of ovary; K. Mature fruit; L. Seeds.

Characters	<i>Striga scottiana</i>	<i>Striga gesnerioides</i>
Stem	Robust, solitary, rarely 1-branched, 4-winged	Slender, tufted, terete to subquadrangular
Leaves	Lanceolate	Oblong
Hairs on leaves	Densely appressed strigose	Minutely puberulent to almost glabrous
Inflorescence	Congested, densely strigose	Congested to lax, puberulous
Bracts	Longer than the calyx, densely strigose	Bracts as long as or shorter than the calyx, puberulous
Upper lobes of corolla	Clearly 2-lobed	Indistinctly bi-lobed or emarginate

leaves, densely covered with strigose hairs throughout, congested spikes, bracteoles longer than calyx and bi-lobed upper corolla lobes.

Specimens examined: INDIA, Tamilnadu, Kanyakumari district: Chunkankadai hills, 12 December 2010, S. Jeeva 2252 (holotype BSID; isotype SCCN).

Etymology: The species name is in recognition of Mr. Septimus Scott, the founder of the century-old Scott Christian College, Nagercoil, Kanyakumari district, Tamilnadu, India, from the portals of which world-renowned taxonomists have blossomed.

Habitat: The species is a root parasite of *Euphorbia tortilis* Rottler ex Ainslie and is also associated with *Selaginella wightii*, *Leucas aspera*, etc.

Distribution: These specimens were collected from Allamparai, Chunkankadai and Marunthuvalmalai hills of southern Western Ghats; however, further floristic explorations are needed to confirm the distribution of this newly described species.

Conservation status: The populations located in both the areas are highly threatened due to fire during dry seasons. Based on the IUCN Red List Categories and Criteria version 3.1. this new species can be categorized as 'Near Threatened'. However, more studies are essential to confirm the IUCN and distribution status of this species.

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