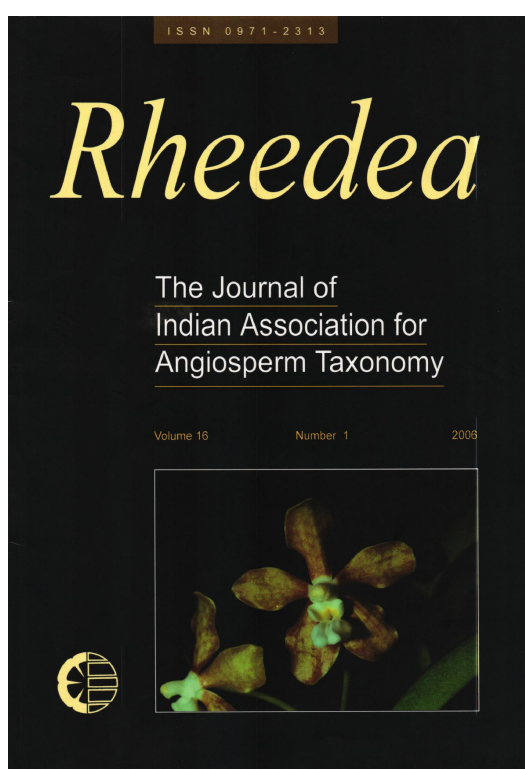




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A New Species of *Ceropegia* L. (Asclepiadaceae) from Konkan, Maharashtra, India

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Abstract

Ceropegia mohanramii, a new species, is described from Konkan area of Maharashtra. It is closely allied to *C. attenuata* Hook. but can be distinguished from the latter by its shorter corolla lobes and the ampulliform heads formed by the corolla lobes. It is illustrated. The species is represented by about 100 individuals in about one sq. km. area and not found elsewhere.

Keywords: *Ceropegia mohanramii*, New species, Asclepiadaceae, Konkan, The Western Ghats

Introduction

Ceropegia L. is an Old World genus belonging to the tribe Stapelieae Decne. of Asclepiadaceae (Bruyns & Forster, 1991). It is represented by over 170 species distributed in the tropics of Africa and Asia with one reaching Australia (Bruyns, 1997; Mabberley, 1997). In India, the genus has 44 species (Ansari, 1984; Ahmedullah & Nayar, 1986; Jagtap & Singh, 1999). *C. andamanica* (Sreekumar *et al.*, 1998) and *C. anantii* (Yadav *et al.*, 2004) are the later additions. The Western Ghats is an important centre of diversity for *Ceropegia* and the area accounts for 37 species, of which 28 are endemic. In Maharashtra, the genus is represented by 22 species, of which 14 are endemic.

We collected this species from coastal plains of Konkan during field surveys in Maharashtra state. Critical examination of these specimens (M.M. Sardesai 2541), perusal of relevant literature, including the monograph on *Ceropegia* by Huber (1957), revealed that it was a new species closely allied to *C. attenuata* Hook. Consultation of the images of authentic materials belonging to *C. attenuata* [K000 357705 (Type) and K000 357706 (K)] reaffirmed our conclusion. The new species is described and illustrated.

Ceropegia mohanramii* Yadav, Gavade *et* Sardesai, *sp. nov.

Ceropegia attenuata similes, floribus brevioribus ad 4 cm longis (non 7.5 cm), corollae lobis tubo brevioribus (nec aequilongis ad longioribus) capitulum ampulliformem (non attenuatum) facientibus differt.

Type: INDIA, Maharashtra, Sindhudurg District, Kudal Tehsil, Kochara (15° 50' N and 73° 31' E) 29 July 2000, M.M.Sardesai 2541 (Holotype, CAL; Isotypes, BLATT, BSI, K, SUK).

Erect perennial tuberous herb; stem tuber slightly depressed, globose, c. 4 x 3 x 2 cm; shoot erect, 10-20 cm tall, usually unbranched, sparingly hairy; root stock 2-3 cm long, smooth, white; internodes 0.3-2 cm long, puberulous. **Leaves** opposite, decussate, sessile or subsessile; blades 2-6 x 0.15-0.6 cm, linear lanceolate, often falcate, midrib puberulous beneath, narrowly grooved above, acute to attenuate at base, acute at apex, scabrous on upper surface, glabrous on lower surface except the midrib, margins minutely hairy. **Inflorescence** axillary or extra axillary 1 flowered sessile cymes, peduncles 1-2 mm long. **Flowers** erect, bracteate; bracts solitary, attached a little above the middle of pedicel, linear, 1.5 x 0.3-0.5 mm, acute; pedicel slender, terete, 4-6 x 1-1.5 mm, puberulous, elongating and becoming stout after fertilization; sepals 5, 3-3.2 x 0.5-0.7 mm, linear, subulate, acuminate, puberulous; corolla 2.8-4 cm long, slightly curved, greenish yellow, abaxially glabrous; basal

Fig. 1

third of the tube inflated, c. 1.3-0.7 cm long, pale purple within, merging into narrow cylindrical upper half of tube, mouth conical, c. 1.5 cm long, basally 0.2-0.3 cm wide, apically 0.6-0.9 cm wide, abaxially

greenish yellow, adaxially striated with vertical purple lines, glabrous; corolla lobes linear, 0.7-1 cm long, erect, jointed at the apex forming ampulliform head, margins only slightly recurved, with

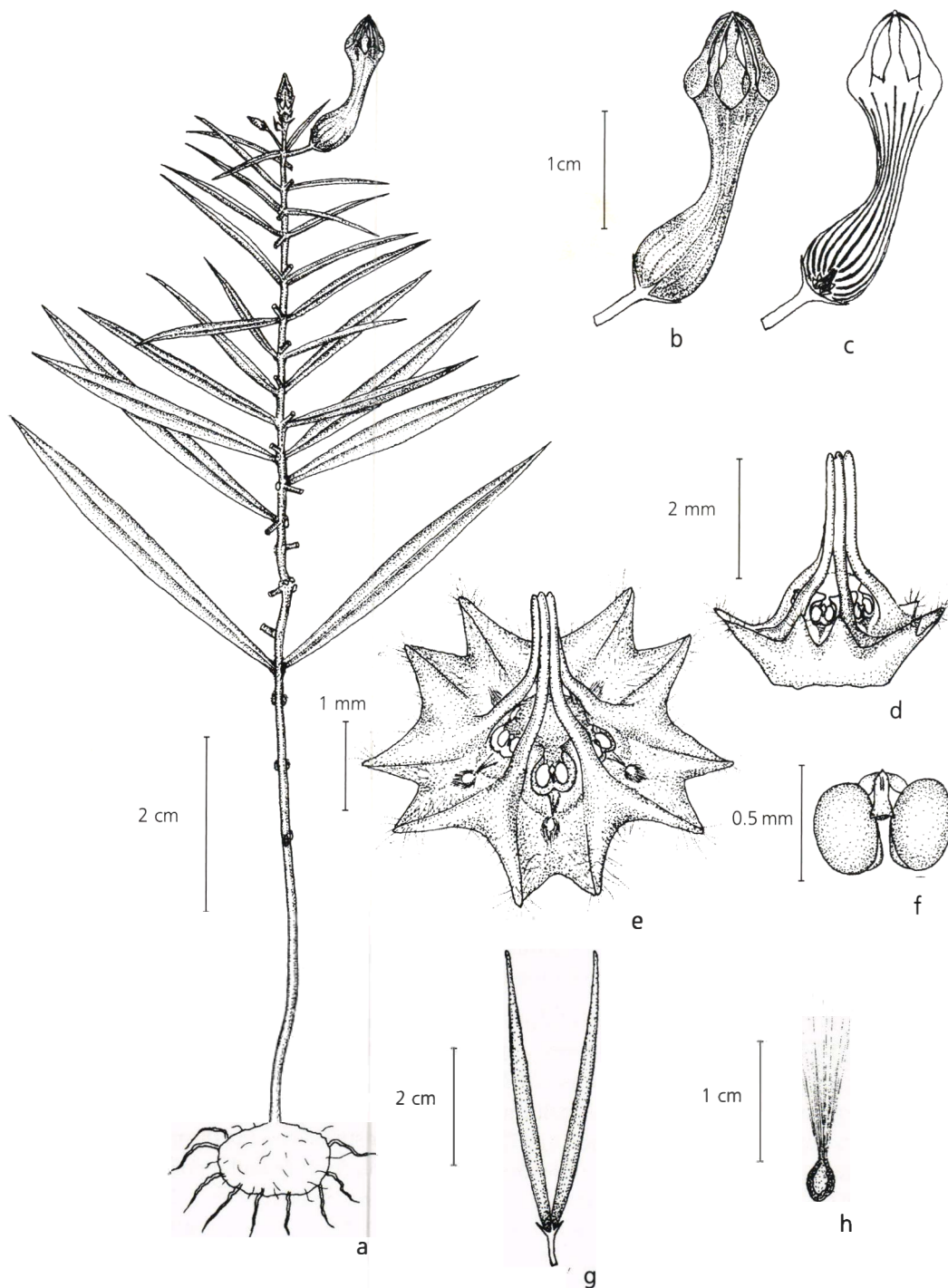


Figure 1. *Ceropegia mohanramii* Yadav, Gavade et Sardesai a. Habit; b. Flower; c. L.S. of the flower; d. Corona (side view); e. Corona (upper view); f. Pollinarium; g. Follicles; h. Seed with coma.



Figure 2. *Ceropogia attenuata* Hook. – a & b. Habit; c. Single Flower; d. L.S. of Flower; *C. mohanramii* Yadav, Gavade & Sardesai – e. Habit; f. Single Flower; g. L.S. of Flower; *C. attenuata* – h. corona; *C. mohanramii* – i. corona; *C. attenuata* – j. pollinaria; *C. mohanramii* – k. Pollinaria

Table 1. Morphological characters of *C. mohanramii* Yadav et al. and *C. attenuata* Hook.

<i>Ceropegia mohanramii</i>	<i>Ceropegia attenuata</i>
Flowers upto 4 cm long.	Flowers upto 7.5 cm long.
Corolla lobes shorter than corolla tube.	Corolla lobes as long as or longer than corolla tube.
Corolla lobes forming an ampulliform head.	Corolla lobes forming attenuate head.

descending hairs and sometimes purple blotched within; outer staminal corona cupular, consisting of 5 deeply bifid lobes, densely ciliate on the margins; inner corona lobes 5, erect, connivent, divergent at the tip linear, 3.5-3.7 mm long, glabrous, whitish with purple bases, occasionally purple spotted; gynostegium sessile, whitish, guidrails straight, not widened at their mouths; pollinarium: corpuscles obovate, basally with translucent lateral projections; pollinia broadly elliptic, 0.4-0.6 mm long. *Follicles* single or double, upto 5-7 x 0.25-0.3 cm, straight, tapering to a fine point, erect; seeds 0.3-0.5 x 0.15-0.17 mm, ovate, oblong; coma 1-1.2 cm long, white, silky (see Table 1.)

Ceropegia mohanramii Yadav, Gavade et Sardesai *sp. nov.* is similar to *C. attenuata* Hook. but differs in having shorter flowers measuring up to 4 cm long and corolla lobes shorter than corolla tube forming an ampulliform head.

Etymology: Specific epithet honors Prof. H.Y. Mohan Ram, University of Delhi, who has made valuable contribution to plant sciences.

Flowering & Fruiting: July-November.

Local Name: Ghayal (Marathi)

Habitat: The species grows on lateritic plateau at an altitude of 50-60 m in accumulated soil around trees like *Careya arborea* Roxb., *Carissa carandas* L., *Catunaregam spinosa* (Thunb.) Tirvengadam, *Memecylon umbellatum* Burm.f., *Syzygium cumini* (L.) Skeels and bushes like *Pavetta crassicaulis* Bremek. Common associates include *Amorphophallus konkanensis* Hett., S. R. Yadav & Patil, *Ceropegia oculata* Hook., *Curculigo orchioides* Gaertn., *Curcuma neilgherrensis* Wight, *Hypoxis aurea* Lour., *Iphigenia indica* Dalz. and *Scilla hyacinthina* (Roth) McBride.

Note: The species has not been located in similar habitats elsewhere in Konkan region in spite of our intensive and extensive search for the species for last

five years. Presently, it is restricted to about one sq. km. area and represented by about 100 individuals.

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