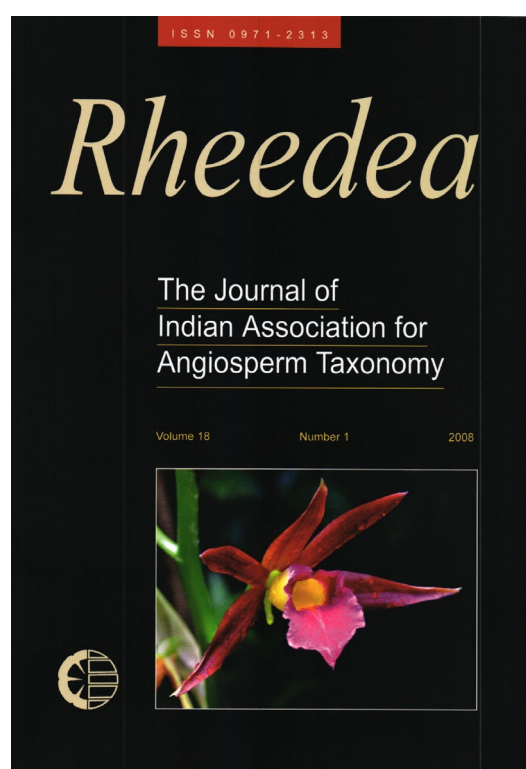




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Collection of *Begonia adscendens* C.B. Clarke (Begoniaceae) after more than 100 years from Esii Hill, Manipur, India

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Abstract

Begonia adscendens C. B. Clarke is collected after a gap of 116 years from Esii Hill, near Dzuko Valley, Manipur. This collection is the only one after the type specimen collected by C. B. Clarke in 1887. This species occurs in small patches in Manipur-Nagaland along India-Myanmar border and is endemic. It is described and illustrated.

Keywords: *Begonia adscendens*, Esii Hill, Japfu range, Endemic

Introduction

Begonia adscendens was first described by C. B. Clarke in 1890 from Japfu range of Naga Hills without giving precise locality. This species could not be collected thereafter either from India or bordering Myanmar (Kress *et al.*, 2003; Smith *et al.* 1998; Ambarish & Uddin, 2006; Hughes and Pullan, 2007; Uddin, 2007) though many exploratory tours had been conducted for more than a century. Chauhan (2000) did not include this species in *Flora of Manipur*. In September 2006 we collected this species from Esii Hill, a continuation of the Japfu range which falls under the political boundary of Manipur. Our identification was later confirmed in consultation with the original description and type specimens available at K. The present collection is the only one after the type collection of specimens by C. B. Clarke in 1887. The protologue was incomplete as the description was made based on fruiting specimens and C. B. Clarke admitted *flores non visi*. The species is described and illustrated

Begonia adscendens C. B. Clarke J. Linn. Soc. 25:26, t.13.1890. **Fig. 1**

Plants tuberous, acaulescent, glabrous, 30-50 cm high, densely covered with hairs, interrupted by many short internodes and leaf scars. *Roots* fibrous, tubers 2.5-3.5 × 3.5-4.0 cm. *Leaves* 11.5-21.8 cm across, ovate, base asymmetric, margin crenate-denticulate, apex

acuminate, adaxially glabrous, pubescent on the nerves beneath, 10-11 nerves arising from base; petioles 15-21 cm, succulent, 0.5-1.2 cm. in diameter, pubescent, pink; stipules 1.0-1.5 × 0.8-1.2 cm, entire, acuminate. *Inflorescence* biparous cymes with 40-50 flowers; peduncle 30-45 cm long, glabrous; bracts persistent, ovate, glabrous. *Male flowers*: pedicel 7-16 cm long; tepals 2 + 2; outer pair 1.5-1.8 × 0.8-1.2 cm, ovate, pink with red tinges, acute, entire, adaxially glabrous, abaxially pubescent; inner pair 0.6-0.7 × 0.3-0.5 cm, obovate, pink or white, entire, apex rounded; stamens 16-20, monadelphous; anthers 2.0-2.5 × 0.5-1.0 mm, bithecal, pink or white, filament 1.0 – 1.5 mm. *Female flower*: pedicel 0.8-1.8 cm long, tepals 4-5, outermost 1.2-1.5 × 0.5-0.7 cm, inner ones gradually smaller, innermost 0.5-0.7 × 0.3-0.4 cm, each tepal entire, acute, adaxially glabrous and abaxially pubescent; ovary 3 locular, glabrous, placentae bifid. stigma 3, persistent, styles lunate, shortly fused at the base, 2-3 mm long, 1.5-2.0 mm wide at the apex. *Capsule* 3 winged, 3 celled; two shorter wings 0.8- 1.0 cm long with blunt ends; longer wing 2.2-3.5 cm long, tapering up or ascending from the plane, acute, glabrous, with ventral suture between the adjacent wings.

Flowering & Fruiting: July-September.

Specimens Examined: India, Manipur, Japfo, 1887.

C. B. Clarke 41240 (Isotype, K); Manipur, Senapati district, Esii Hill, near Dzuko Valley beside Koziiri stream, 1.9.2006, Mao & Gogoi 109408, 109428, 109434 (ASSAM)

Distribution: India, (Japfu Hill range bordering the

states of Manipur and Nagaland along the Indo-Myanmar Border), rare, endemic.

Habitat: Dense sub-tropical forests, on sandy soils or rocks in moist shady places in association with species of *Polytrichum*, *Funaria*, *Selagenella*, *Colocasia*, *Impatiens*. etc.

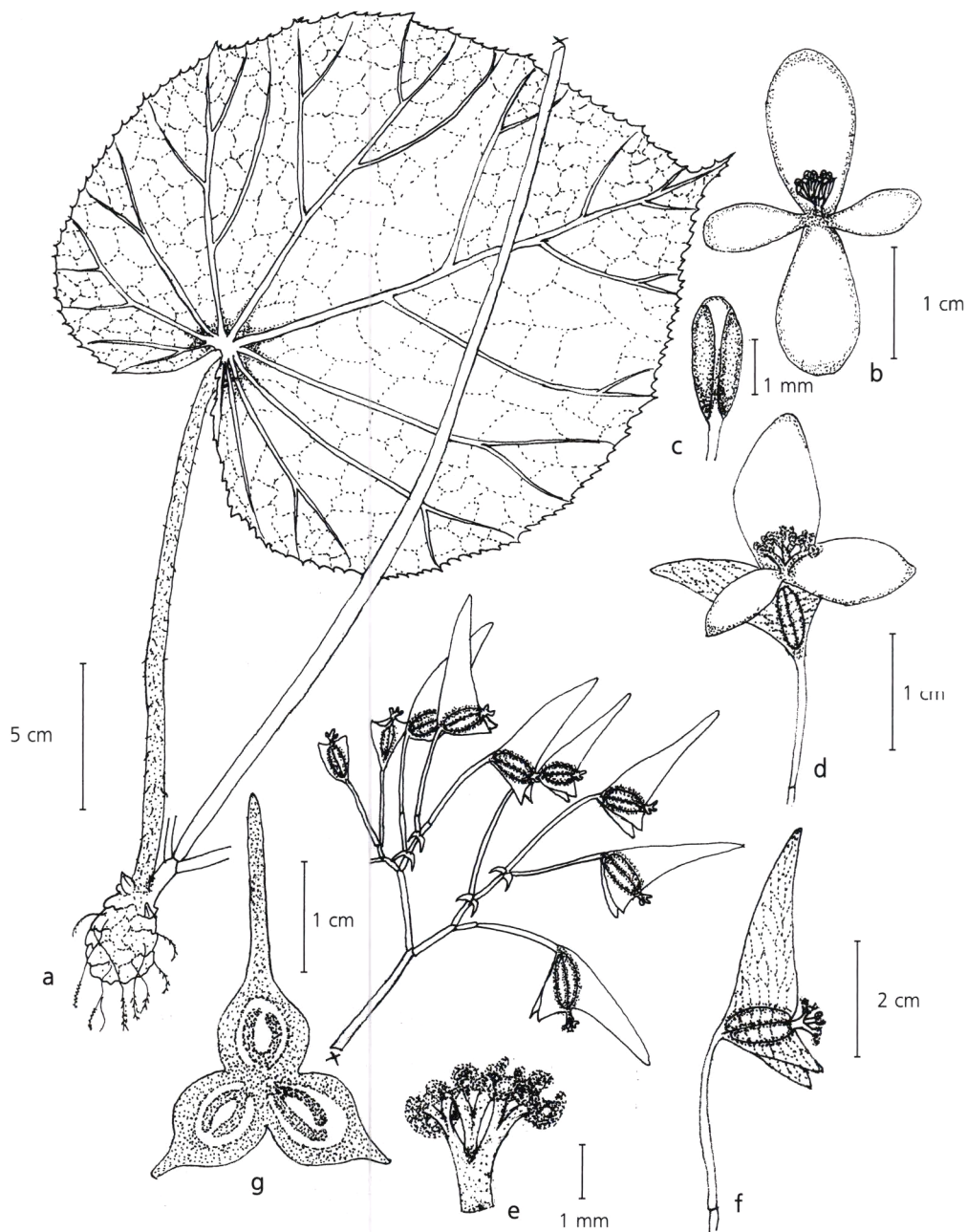


Figure 1. *Begonia adscendens* C.B. Clarke – a. Fruiting plant; b. Male flower; c. Stamen; d. Female flower; e. Carpel; f. Capsule; g. Ovary (C.S.).

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