

***Begonia sandalifolia* C.B. Clarke - A New Record for India**

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Abstract

Begonia sandalifolia C.B. Clarke (Begoniaceae) has been recorded from India for the first time from Upper Subansiri District of Arunachal Pradesh. The plant is illustrated and the female flower is described for the first time. The species belongs to the Asian section *Platycentrum* of the genus *Begonia*. Detailed description of the plant along with line drawings and distinguishing features with the closely allied species *B. hatacoa* Buch.-Ham. ex D. Don are provided.

Key words: *Begonia sandalifolia*, New record, Arunachal Pradesh, India

INTRODUCTION

The genus *Begonia* L. comprises of about 1500 species distributed throughout the tropical and subtropical countries except Australia (Tebbutt 2005). Doorenboss *et al* (1998) has recognized 63 sections for the genus *Begonia*. Subsequently three more sections, *Leprosae* by Shui *et al* (2002), *Symbegonia* by Forrest & Hollingsworth (2003) and *Chasmophila* by de Wilde & Plana (2003) have been proposed bringing the total number to 66.

During the revision of the family Begoniaceae under the Flora India Project, several interesting findings were recorded (Ambrish & Uddin 2006; Uddin *et al* 2008), and some more are under confirmation. From the present Indian Territory about 57 species belonging to 7 sections of *Begonia* are reported (Uddin 2007; Uddin & Phukan 2007). The present authors came across an interesting specimen identified as *B. inflata* C.B. Clarke while studying the specimens in ASSAM. After critical examination and matching with the type specimens and the protologue it has been confirmed to be *B. sandalifolia* C.B. Clarke. So far the species is reported from Myanmar only.

Begonia sandalifolia was first described by C.B. Clarke (1879) on the basis of a collection by Griffith from Myanmar. The original description is lacking the description of female flower since the type specimen was incomplete. No elaborated diagnosis of the species appeared in any subsequent literature. Therefore, a detailed taxonomic account of the species coupled with illustrations (Figure 1) and the distinction between the allied species i.e. *B. hatacoa* Buch.-Ham. ex D. Don have been provided to facilitate easy identification of the species in the field.

Begonia sandalifolia belongs to the section *Platycentrum* which is one of the largest Asiatic sections. The section is characterized by 2-locular ovary with bifid placentae, extended connectives of anthers and the capsule dehisces by lateral slits. However, in case of many less known species their assignment to section is made arbitrarily since the section is very close to the section *Parvibegonia*. The section *Platycentrum* includes 110 species distributed throughout India and China to South-East Asia (Hoover *et al* 2004; Shui *et al* 2002). About 18 species belonging to the section *Platycentrum* are recorded from India and are mostly distributed throughout the North-Eastern States and the Eastern Himalaya.

Begonia sandalifolia C.B. Clarke in Hook. f., Fl. Brit. India 2: 649. 1879. [Fig. 1]

Plants caulescent, 30–50 cm high. *Rootstock* tuberous, not much thickened. *Stem* slender, branched, swollen at the nodes, glabrous except the upper portions of the branches. *Leaves* cauline, alternate; *stipules* 0.8–1.2 × 0.4–0.5 mm, ovate–oblong, acute–acuminate, persistent; *petiole* 1.5–3 cm long, pubescent; *lamina* 10.2–15 × 3.5–5.0 cm, oblique, obovate–oblanceolate, acuminate, serrate-denticulate, pubescent on nerves beneath, otherwise glabrous. *Inflorescence* biparous cymes, 4–8 flowered; *peduncle* 7–8 cm long, near the end of the branches; *bracts* large, elliptic, glabrous. *Male flowers*: *pedicels* 7–8 cm long, slightly pubescent; *sepals* 2, 1.3–2.2 × 0.8–1.2 cm, round, slightly pubescent; *petals* 2, oblong, 1.8–2.2 × 0.4–0.6 cm, white, glabrous; *stamens* 50 or more; *anther* 1.2–1.5 cm long, obovoid; *filament* 0.8–1.3 cm long. *Female flower*: *tepals* 5, unequal, imbricate; *outer tepals* ovate–broadly ovate, 8–12 × 5–6 mm; *inner tepals* oblong–lanceolate, 6–8 × 4–5 mm, innermost tepal is the smallest; *styles* 2, divided into long spirally curved branches; *stigmas* 2-cleft, spiralled; *ovary* glabrous, 2 locular; *placenta* bifid, axile. *Capsule* pendulous,

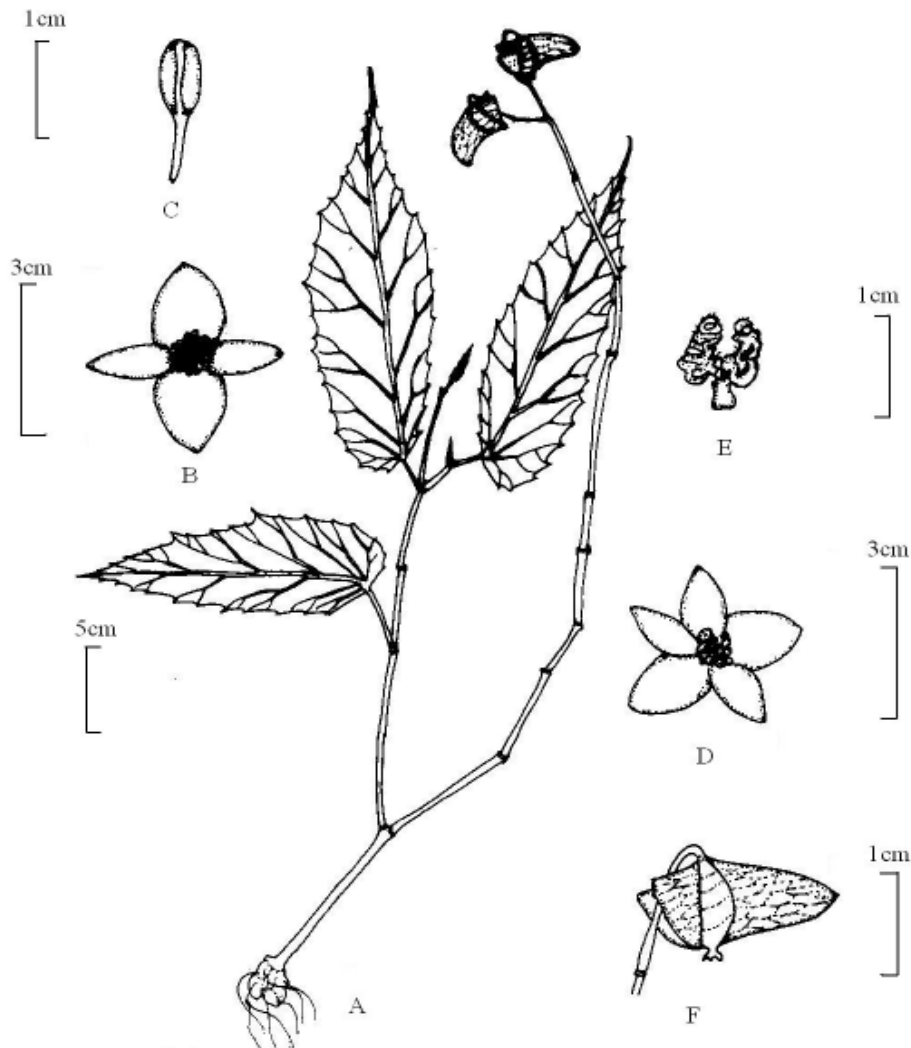


Fig. 1. *Begonia sandalifolia* C.B. Clarke: A. Habit, B. Male flower, C. Stamen, D. Female flower, E. Stigma, F. Capsule

recurved *ca.* 1.9 × 1.2 cm, 3 winged; *distal wing* 1.5 – 2.0 × 0.6 – 0.9 mm, descending; *lateral wings* 0.8 – 1.5 cm long, obtuse; *styles* deciduous; *seeds* short, ellipsoid; *dehiscence* by 4 lines on either sides of lateral wings.

Type: Myanmar, *W. Griffith* 2585 (K, Holotype!; P, Isotype!).

Flowers & fruits: April – May.

Distribution: India: Arunachal Pradesh; Myanmar.

Specimens examined: MYANMAR, *W. Griffith* 2585 (K, P); INDIA, Arunachal Pradesh, Subansiri District, Palin – Sayata, 16.05.1966, A. R. K. Sastry 45344 (ASSAM, ARUN).

Notes: *Begonia sandalifolia* C.B. Clarke is often confused with *B. hatacoa* Buch.-Ham. ex D. Don due to their similar habit and leaf characters. However, the former may be distinguished by its subshrubby habit, serrate-denticulate leaf margin, obovoid – oblanceolate lamina of 10.2 – 15 × 3.5 – 5.0 cm size and the whitish perianth segments, whereas herbaceous habit, sinuate-dentate leaf margin, elliptic lamina of 20 – 25 × 6 – 10 cm size and the perianth segments with pink veins characterize the later.

Acknowledgements

The authors are grateful to Dr. M. Sanjappa, Director, Botanical Survey of India, Kolkata and Dr. T. M. Hynniewta, Joint Director, BSI, EC, Shillong for providing facilities and encouragements.

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