BEGONIA SINUATA MEISN., A NEW RECORD FOR INDONESIA

Deden Girmansyah

Botany Division, Research Center for Biology, Indonesian Institute of Sciences Jl.Raya Jakarta-Bogor km 46, Cibinong Science Center, Cibinong Bogor E mail: Deden_bo@yahoo.com

Deden Girmansyah. 2014. *Begonia sinuata* Meisn., Catatan Baru untuk Indonesia. *Floribunda* 5(1): 27–29. — Satu jenis *Begonia* dari Karimunjawa dan Bangka, Indonesia telah diidentifikasi sebagai *Begonia sinuata* Meisn., berdasarkan bentuk daun (pangkal menjantung, pinggir rata, permukaan daun dengan bulu bintang pada kedua permukaannya) dan tiga buah sayap yang tidak sama panjang. Sayap paling besar berukuran lebar antara 10–16 mm.

Kata kunci: Begonia, catatan baru, Bangka, Karimunjawa, Indonesia.

Deden Girmansyah. 2014. *Begonia sinuata* Meisn., A New Record for Indonesia. *Floribunda* 5(1): 27–29. — An unidentified *Begonia* from Karimunjawa and Bangka, Indonesia has been identified as *Begonia sinuata* Meisn., a Mainland Asian taxon based on habit, leaf shape (cordate leaf base, entire leaf margin, leaf surface with star-like hairs on both side) and three unequal wings. The largest wings 10–16 mm wide.

Keywords: Begonia, new record, Bangka, Karimunjawa, Indonesia.

A 2005 expedition conducted by the Herbarium Bogoriense staff to Karimunjawa, a Central Java province islands, Indonesia yielded a specimen of a species *Begonia* reported here as *Begonia sinuata* Meisn. based on the monograph of Kiew (2005). In addition, a previously unidentified material from Bangka also matched to *Begonia sinuata*. This report increases the number of *Begonia* species enumerated from Indonesia to 522 species (Hughes 2008).

Begonia sinuata Meisn. (Figure 1)

Meisner, Ber. Verhandl. Naturf. Ges. Basel 2 (1836) 42 Type: Wallich 3680, Penang (holo K).

Erect herb, 2–11 cm high. Stem glossy, with star-like hairs, unbranched, slender, tuber pale brown, globose, without hairs, 4-10 mm diam. Stipule elongate triangular, with star-like hairs, margin entire, tip acuminate, caducous, 2×1 mm. Leaves broadly obovate to rounded, with star-like hairs on both side, dense on the underneath, more clear on the margin, base cordate, margin serrate, apex acuminate, $1.5-7.9 \times 1.5-8.5$ cm; petiole red, sparsely hairs, 0.5-3 cm long. Inflorescence terminal, sparsely star-like hairs along the peduncle, longer than petiole, 3-7 cm long. Male flower: pedicel 10-15 mm long, tepal 4, slightly hairs, margin entire, apex slightly acute-rounded, outer two oval, $5-7 \times 5-7$ mm, inner two narrowly elliptic, $5-7 \times 2-3$ mm, stamen yellow ca. 12, cluster globose, 1-2 mm diameter, filament ca. 0.25 mm long, anther yellow, obovate, ca. 0.75 mm long, apex notched. Female flower: pedicel 3–8 mm long, ovary, $2-5 \times 4-7$ mm, wings 3, locules 2, placenta bifid; tepals 4–5, slightly hairs, outer broadly obovate, margin entire, apex rounded, 2–5 \times 1.5–2.5 mm, inner similar but slightly narrower; Style 2, stigmas yellow, 2–3 mm long, stigma U shaped. Fruit: pedicel 5–9 mm long, capsule, 6–9 \times 11–20 mm, rather hairy, wings 3, unequal, tiny, larger wing 10–16 mm wide, shorter wing 3–9 mm long, splitting between wing and capsule.

Distribution: Southern Thailand, Cambodia, Vietnam, Peninsular Malaysia and Indonesia (Karimunjawa and Bangka)

Habitat: Under shade on rock facies rarely near the shore at 45–500 m asl.

Specimens examined: Sumatra: Gunung Pading, 2 xii 1917, Biinnemeijer, 2180 (BO); Java: Karimunjawa, Kampung Kemloko, 2 v 2005, T. Djarwaningsih & M.Amir, TD 494 (BO)

Notes: There are numerous publications for Javan and Sumatran *Begonia* published (Dryander 1791, Jack 1822a, Jack 1822b, Blume 1827, Hasskarl 1848, Klotzsch 1855, Miquel 1855, Irmscher 1929, Koorders 1912, Backer & Bakhuizen van den Brink Jr 1963, Steenis 1972), but *Begonia sinuata* is not included in those accounts. Therefore, *Begonia sinuata* from Karimunjawa and Bangka revealed to be a new record for the Flora of Indonesia.

Begonia sinuata has a wide distribution from Southern Thailand, Cambodia, Vietnam and Peninsular Malaysia. This species is very common growing on damp vertical rock facies often associated 28 Floribunda 5(1) 2014





Figure 1. A. Male flower of B. sinuata, B. Fruit of B. sinuata (Foto by: Arief Supriatna).

with small waterfall (Kiew 2005).

This species has star-like hairs not common in other *Begonia* species. The first leaf is always bigger than the other and sometimes it looks like only having one big leaf. The habit of this species also varies widely depending on the habitat. Hence, Irmscher (1929) recognised about seven varieties of *Begonia sinuata* in Peninsular Malaysia. After the Peninsular Malaysian Begonias were revised by Kiew (2005), all except one variety were included as synonyms of *Begonia sinuata*. *Begonia sinuata* var. *pantiensis* with leaf margin deeply incised (3–22 mm) was retained.

Begonia sinuata from Karimunjawa and Bangka are identically to Begonia sinuata var. sinuata from Peninsular Malaysia by having cordate leaf base, entire leaf margin with star-like hairs and acute leaf apex.

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