

- Short communication

Rediscovery of *Gonostegia Pentandra* (Roxb.) Miq. (Urticaceae) from Bangladesh Sundarban

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Gonostegia Turcz. (Urticaceae), comprised of three species viz., *G. hirta* (Blume ex Hassk.) Miq. *G. parvifolia* (Wight) Miq. and *G. pentandra* (Roxb.) Miq. is distributed in the tropics and sub-tropics of Asia and Australia (Jiarui *et al.*, 2003). Hooker (1885) described the species *G. pentandra* as *Pouzolzia pentandra* (Roxb.) Benn. from Kangra of Tropical Himalaya, eastwards to Assam, the Khasia Mts. and Bengal, and southwards to Orissa and Canara. Jiarui *et al.* (2003) and Shrestha *et al.* (2005) have re-established the genus *Gonostegia* and synonymized *P. pentandra* under *G. pentandra*. Prain (1903) described it as *P. pentandra* from Orissa and Chota Nagpur only.

This species has never been mentioned in any publication on the flora covering the present territory of Bangladesh (e.g., Heinig, 1925; Raizada, 1941; Khan & Banu, 1969; Alam, 1988; Mia & Khan, 1995; Uddin *et al.*, 1998; Rahman, 2004 and Rahman, 2009). No specimen of this species is found to be deposited in any herbarium of this country since Clark's original collection before 1888 (Clarke 21774) from Jeasore, Khorlna, *i.e.*, Jessore and Khulna of present Bangladesh territory which is reported to be housed in Kew Herbarium (Wilmot-Dear & Friis, 2006).

In 2011 and 2012, the first and second authors collected two specimens of *Gonostegia* from two localities of Sarankhola forest range of Sundarban located in Bagherhat district. These specimens have been identified here as *G. pentandra*. As this species has never been recorded from Bangladesh within last 128 years since its original collection by C.B. Clarke. Therefore this species has been reported here as a rediscovery for Bangladesh. Though rediscovery is not a routine taxonomic work, occasionally taxonomists had have to rediscover the previously published taxa that could not be located since many years to confirm their present occurrence and exact distribution (Ardiyani *et al.*, 2011; Uddin *et al.*, 2011; Yeo *et al.*, 2012). These specimens are presently deposited at Jahangirnagar

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University Herbarium (JUH). The taxonomic description including the illustration (Fig. 1) and photograph (Fig. 2) of this species are given below.

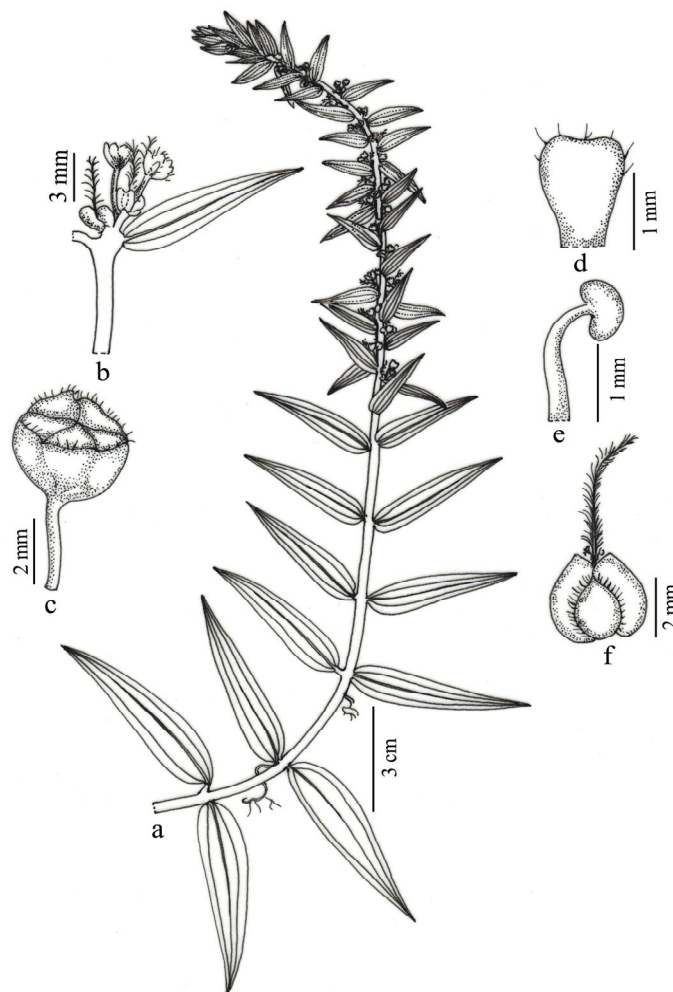


Fig. 1. *Gonostegia pentandra*; (a) Habit, (b) a flowering twig, (c) T.S. of perianth tube, (d) a perianth, (e) stamen, (f) achene with wing and style

Gonostegia pentandra (Roxb.) Miq., Ann. Mus. Bot. Lugduno-Batavi. 4: 302 (1868-1869).

Urtica pentandra Roxb., Fl. Ind., ed. 3: 583 (1832). *Gonostegia pentandra* var. *akoensis* (Yamam.) Masam.; *G. pentandra* var. *hypericifolia* (Blume) Masam.; *Memoralis pentandra* (Roxb.) Wedd.; *M. pentandra* var. *hypericifolia* (Blume) Wedd.; *Pouzolzia hypericifolia* Blume; *P. pentandra* (Roxb.) Benn.

Perennial erect herbs, up to 1 m tall, monoecious. Stem cylindrical at the lower part and tetragonal at the above. Lower leaves opposite, upper leaves sub-opposite to alternate, gradually smaller towards the upper part; petioles 0-4 mm long; lamina lanceolate or linear-lanceolate, 0.7-5.2 (5.4) × 0.2-0.8 cm, adaxially and abaxially glabrous, lepidolate abaxially, tri-nerved, margins entire, apices acute to acuminate, bases rounded to subcordate, lamina of lower leaves lanceolate, 4.7-5.2(5.4) × 0.6-0.8 cm, lamina of upper leaves linear-lanceolate, 0.7-3.0 × 0.2-0.5 cm. Stipules ovate, 1.0-2.0 mm. Inflorescence glomerules, bisexual, each composed of 5-8 flowers, exist only at the axils of upper leaves. Flowers unisexual, perianth light green or greenish white. Male flowers pedicellate, pedicels 2.0-2.2 mm long; buds 2.0 mm in diameter; perianth lobes 5, each lobe 1.5-1.7 × 0.6-0.7 mm, apex truncate with 2-3 cilia; stamens 5, anthers bilobed, dorsifixed, 0.2-0.5 × 0.1-0.2 mm, filament 1.0-1.2 mm. Female flowers sessile; perianth persistent, in ellipsoid tube, longitudinally 2-3 winged in fruiting stage, wings 2.5 × 1.5 mm; style villous, 3.5 mm long, stigma inconspicuous. Achene black, 1.0-1.2 mm. Flowering and fruiting in June to September.

Ecology: Grows in moist low lands along river side.



Fig. 2. Photograph of living sample of *Gonostegia pentandra* (indicated by arrow marks)

Uses: Useful in the treatment of skin rashes (Hammond, 2012).

Distribution: Afghanistan, Bangladesh, India, Indonesia, Myanmar, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand and Vietnam.

Specimens examined: Bagherhat district: Sundarbans east forest division, near Sarankhola forest range office, 22.08.2011, *Sayedur* 566 (JUH); Near Bogi forest station, 18.06.2012, *Mosharof* 635 (JUH).

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