

Addition of a wild aromatic plant *Pogostemon hirsutus* Benth. (Lamiaceae) to the flora of India

During a botanical exploration in January 2007, an interesting *Pogostemon* species belonging to the family Lamiaceae was collected in the high-altitude grasslands of Akkamalai shola of Valparai, Anamalai hills, Coimbatore District, Tamil Nadu, India. After careful and critical analysis, the species was identified and confirmed as *Pogostemon hirsutus* Benth. This species has so far been considered to be endemic to Sri Lanka. No Indian flora has reported this species, except the *Flora of British India*¹, where J. D. Hooker mentioned that this species is found only in the Central Province of Sri Lanka at the altitude between 5000 and 7000 ft. Cramer² affirms that this species is endemic to Sri Lanka, where it is common and Bhatti and Martin³ who revised the *Pogostemon* of the world, corroborate the same. There are only two specimens of *P. hirsutus* deposited in Indian herbaria, i.e. at the Central National Herbarium at Kolkata (CAL), which were collected by Breckets 321 at Wallekelly, Sri Lanka and Gardner C. P. 283 collected in 1853 at Horton Plains, Sri Lanka. The present collection matches with the above specimens collected from Sri Lanka and hence this adds a new plant record to the angiosperm flora of India.



Figure 1. *Pogostemon hirsutus* Benth.

Since *Pogostemon cablin* (Blanco) Benth. yields patchouli essential oil that has great demand worldwide, *P. hirsutus* is also being studied for its potentiality. This species yields 0.4% of essential oil on dry weight basis. The essential oil is strongly aromatic and is similar to that of commercial patchouli essential oil. Hence the present finding is significant. Two herbarium specimens are deposited at the Herbarium of the Foundation for Revitalisation of Local Health Traditions (FRLH), Bangalore. A detailed description with a photograph (Figure 1) of the plant is provided to enable its easy identification.

Pogostemon hirsutus Benth., Labiat. Gen. Sp. 155. 1833; Benth. in DC., Prod. 12: 154. 1848; Hook. F., *Fl. Brit. India* 4: 635. 1885; *Trimen, Handbook Fl. Ceylon* 3: 379. 1895; Abeywick., *Ceylon J. Sci., Biol. Sci.* 2(2): 219. 1959; *Cramer, Rev. Handb. Fl. Ceylon* 3: 175. 1981; Bhatti & Martin, *Bull. Nat. Hist. Mus. London (Bot.)* 27(2): 106. 1997.

Hirsute herbs, ca 50 cm tall; stems slender throughout, lower half prostrate, upper half erect, obtusely four-angled, slightly purplish, densely glandular-hirsute, hairs four-celled. Leaves opposite, ovate, 1–3 × 1–1.5 cm, base cuneate, apex acute, margin serrate, ciliate, slightly aromatic when crushed, scabrous above, densely so on nerves beneath, glandular-punctate on both surface, hairs four-celled; petioles up to 1.5 cm long, densely hirsute, hairs four-celled. Inflorescence terminal, unbranched, dense, cylindrical spike, 4–7 cm long, basal 1 or 2 spike clusters interrupted. Bracts linear-subulate, ca 2 mm long, hirsute, hairs five-celled. Calyx ca 5 mm long, tube ca 3 mm long, glabrous inside, hirsute outside, hairs 3–5-celled, ten-nerved, lobes ovate-lanceolate, ca 2 mm long, slightly unequal, apex acuminate, margin ciliate. Corolla white, ca 7 mm long, two-lipped, upper lip three-lobed, lower lip one-lobed, upper lip longer than lower lip, tube linear, ca 4 mm long, minutely hairy outside. Stamens 4, exserted; filaments bearded at the middle with moniliform white hairs. Styles bifid, light pinkish, glabrous, shorter than stamens. Nutlets oblong, black, shining, foveate, ca. 1 mm long.

Habitat: This species is found growing in a humid rocky slope near a water course

in a high-altitude grassland at ca. 2200 m altitude.

Flowering and fruiting: November to February.

Status: Rare, only seven plants were noticed. Distribution: Sri Lanka – Kandy and Nuwara Eliya Districts (Central Province of Sri Lanka) and India – Akkamalai shola, Anamalai hills, Coimbatore District, Tamil Nadu.

Specimens studied: India, Tamil Nadu, Coimbatore District, Valparai, Akkamalai shola, 27.1.2007, R. Murugan 21 (FRLH); Sri Lanka, Kandy District, Wallekelly, Breckets 321 (CAL); Nuwara Eliya District, Horton Plains, Gardner C. P. 283 (CAL).

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2. Cramer, L. H., In *A Revised Handbook to the Flora of Ceylon* (eds Dassanayake, M. D. and Fosberg, F. R.), Oxford & IBH, New Delhi, 1981, vol. 3, pp. 175–176.
3. Bhatti, G. R. and Ingrouille, M., *Bull. Nat. Hist. Mus. London (Bot.)*, 1997, 27, 77–147.

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