

Royal Botanic Gardens, Kew for their help in identifying the taxon.

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CRITICAL NOTES ON LITTLE KNOWN PLANTS FROM ARUNACHAL PRADESH

The Flora of Subansiri district in Arunachal Pradesh is under intensive study. In the course of several botanical explorations conducted in the above area, the senior author came across two interesting plants, namely *Rhyncho-techum calycinum* C. B. Clarke (Gesneraceae) and *Leycesteria glaucophylla* (Hook. f. & Thoms.) Clarke (Caprifoliaceae), the latter being recorded for the first time from Arunachal Pradesh. Besides, the details of floral characters of *Rhyncho-techum calycinum* is given for the first time, while *Leycesteria glaucophylla* is a rare species, found in higher elevations. Recent finding of *L. glaucophylla* in Arunachal Pradesh forms a connecting link with its occurrence in Burma as it has been earlier reported in Sikkim, Bhutan, Nepal and Burma. The plant is noted for the peculiarity of its indumentum which is non-adepressed and irregular on the under surface.

Rhyncho-techum calycinum C. B. Clarke in Hook. f. Fl. Brit. India 4 : 374. 1885 ; Burkill in Rec. Bot. Surv. India 10(2) : 330. 1925. (Figs. 1-5).

The species was first described by C. B. Clarke (1885), based on a collection from a locality "on the Soondra bank—upper Assam ?", stating "Corolla not seen". Burkill (1925) collected the fruiting specimen of the plant from Janak Stream (37282), Siang district between 1911-1912 during the Abor Expedition. There appears to be no other record of its collection from the Himalayas

or from any other part of India. Hence, the present report from Itanagar and Kheel in the Subansiri district, is significant in that the flower is described in detail for the first time.

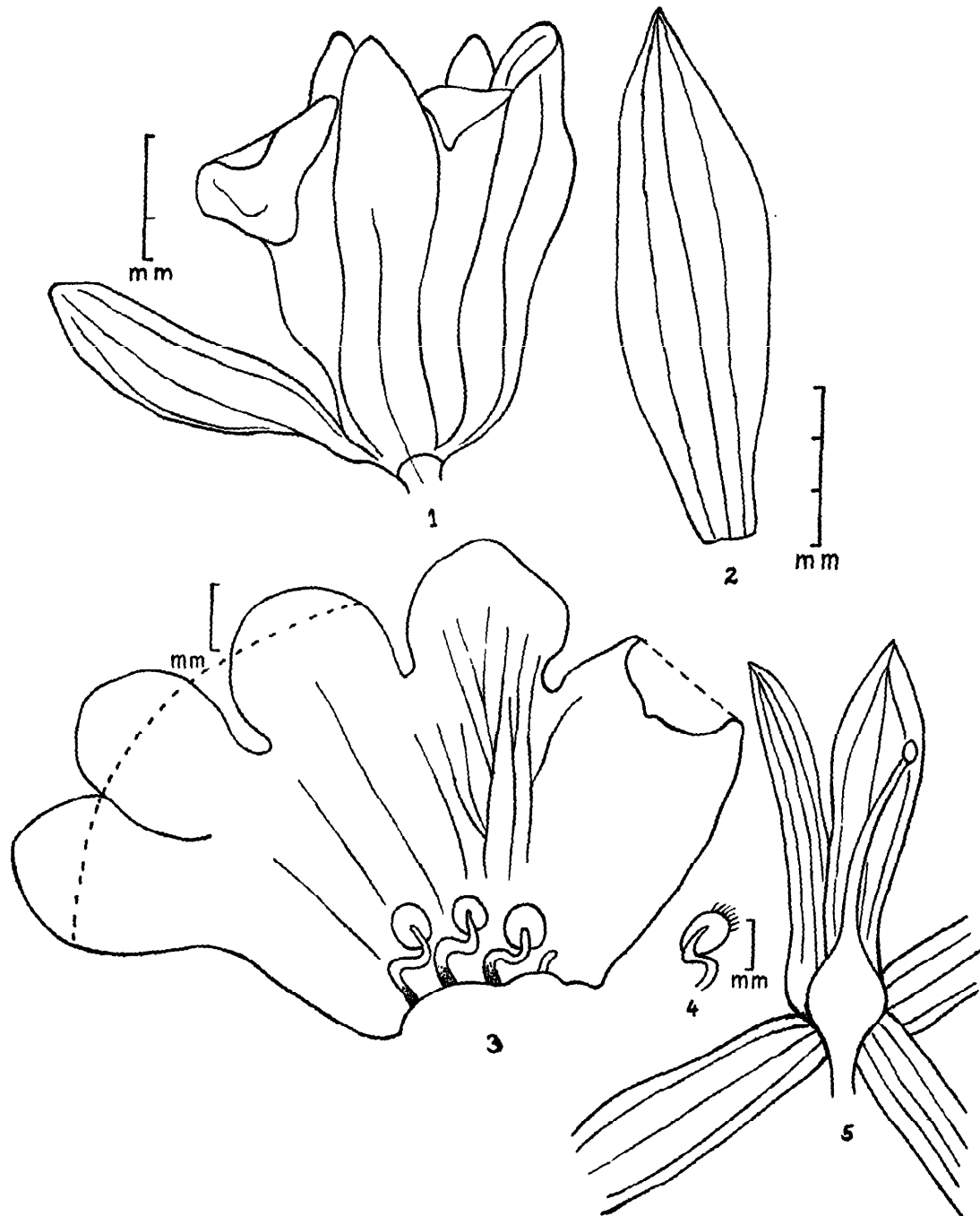
Flowers white, 10-12 mm across, in axillary capitate cymes ; peduncles whitish green ; pedicels ca 1 mm long, white. *Sepals* oblong, 8-9 × 2 mm, white, shortly united at base, acute to obtuse at apex, variable in shape, imbricate, 3-nerved, glabrous, exceeding the corolla tube by 2 mm, persistent. *Corolla-tube* campanulate, 5-8 mm long ; lobes 5, orbicular, 7.2 × 2.0 mm reflexed, glabrous, nerves prominent. *Stamens* 4, one abortive, didynamous, alternate, epipetalous ; filaments attached to the petals, up to 5 mm long, free upward, curved, slender below and stouter above, purple brown ; smaller stamens 1 mm long ; anthers ovoid, 0.6 × 0.6 mm yellowish-purple. *Pistil* 7 mm long ; ovary obconic, ± 2.5 × 2.0 mm ; style ± 4.5 mm long, slender, pink ; stigma capitate, white. *Berry* small, glabrous.

Specimens examined : Subansiri district : Itanagar, 400-600 m 27.6.1978 G. D. Pal 75958, in fruiting (ARUN) ; Doimukh Sagali Road, 20 km from Doimukh towards Kheel, 600 m, 26.10.1985, G. D. Pal 1941, in flowering (ARUN).

Distribution : INDIA : Arunachal Pradesh.

Ecological data : It is growing in primary forest edges, moist & shady places along streams associated with *Phlogacanthus carvi*.

florus Nees, *Rhynchoglossum lazulinum* **Leycesteria glaucophylla** (Hook. f. & Thoms.)
 A. S. Rao et Joseph etc. C. B. Clarke in Hook. f. in Fl. Brit. India
Fls. : Oct.-Feb.; *Frts.* : March-June. 3 : 16. 1880; Airy Shaw in Kew Bull.



Rhynchotechum calycinum C. B. Clarke

Figs. 1-5 : 1. Flower. 2. Sepal. 3. Corolla. 4. Stamen. 5. Pistil with sepals.

1932 (4) : 172. 1932; Hara Fl. E. Himal. 317. 1966 (1st rep.), 124. 1971 (2nd rep.) et Enum. Fl. Pl. Nepal 2 : 195. 1979. *Lonicera glaucophylla* Hook. f. & Thoms. in J. Linn. Soc. (Bot.) 2 : 165. 1858. *Leycesteria belliana*. W. W. Smith in Trans. & Proc. Bot. Soc. Edinb. 24 : 173. t. 13. 1911, et in Rec. Bot. Surv. Ind. 4 : 379. 1913.

Plant suffrutescent, 1.0-1.5 m tall, much branched; branches terete, 2-5 mm across, glabrous, blackish green. *Stipules* interpetiolar, ovate, cordate, ca 4 × 3 mm. *Leaves* ovate, 4.0-11.5 × 2-6 cm, broadly serrate, base cordate, rounded, acuminate at the apex, 5-7 pairs pinnate secondaries, dark green above, whitish green tomentose beneath; petioles 2-3 mm long, pubescent. *Inflorescence* a compact axillary cymes of 3-5 flowers, pubescent all through; bracts ovate, 2-3 × 1-2 mm, entire, acute, tomentose outside. *Flowers* sessile to subsessile; pedicels ca 1 mm long; bracts ovate-lanceolate, 3-5 × 2-3 mm, pubescent without. *Calyx tube* 5 mm long, fusiform, adnate to ovary; lobes 5, equal or rarely subequal, oblong, 3-4 × 0.5-1 mm, entire, acute, pubescent beneath. *Corolla* tubular, pale yellow, 14 mm long, 5-lobed; lobes ovate or round, 3.0-3.5 × 2.5-3.5 mm, entire, pubescent outside. *Stamens* 5; filaments 11-12 mm long, pubescent; anthers dorsifixed, oblong, 2 mm long. *Ovary* ovate

to conical, 7 mm long, pubescent, 5-chambered; ovules many, round or subconical; style 15 mm long, pubescent below, upto 12 mm, glabrous above; stigma 1-fid, capitate.

Specimens examined: Sikkim: Karponang, 3150 m, 4.7.1910, W. W. Smith 2996 (CAL-as *Leycesteria belliana* W. W. Smith-Syntype); Karponang, 2655 m, 20.5.47, K. P. Biswas 7144 (CAL); Gangtok to Karponang 1955, R. S. Rao 701 (CAL); West Bengal: Tongloo, 3320 m, 29.5.1862, T. Anderson 154 (CAL); Tongloo, S. Kurz s.n.; Darjeeling, 2150 m, S. N. Basu J. 4 No. 6219 (CAL); Arunachal Pradesh: Subansiri district, Tale valley, 3215 m, 12.4.1980, G. D. Pal 77725 (ARUN).

Distribution: INDIA: Arunachal Pradesh, West Bengal, Sikkim (Hara 1966 l.c.); NEPAL, BHUTAN, N. BURMA (Hara 1966 l.c. and 1979 l.c.).

Ecological data: It is growing in moist shady places of primary forest along the hill slopes associated with plants like *Viburnum simonsii* Hook. f., *Prunus padus* Linn. etc.

Fls.: April-May; *Frts.*: June-July.

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