

mixed with flowers, linear-oblong to spatulate, sparsely ciliate dorsally at the tip. Male flowers few, restricted to the topmost or the next lower receptacles, intermingled with female flowers; perianth lobes 4, broadly ovate to suborbicular, obtuse; stamens 4, opposite to the perianth lobes; filaments distinct, inflexed in bud; anthers 2-celled, dehiscing longitudinally. Female flowers numerous; perianth lobes 3, minute, shorter than ovary, broadly oblong, obtuse. Achenes ellipsoid, ribbed, yellowish.

*Specimens examined*: Royal Calcutta Golf Club, Tollygunge; 24 Aug. 1965, Mitra 281 (CAL); 20 Aug. 1966, Mitra 618 (CAL).

*Field notes*: The plant was luxuriantly growing

on an old wall during latter part of monsoon. In the following year the plants reappeared on the same spot. A search for the plant in the adjoining regions proved futile.

Wight, *loc. cit.* describes the cystolith bearing leaves, erroneously as "pilose".

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### RHYNCHOGLOSSUM LAZULINUM—A NEW SPECIES OF GESNERIACEAE

**Rhynchoglossum lazulinum** A. S. Rao and Joseph sp. nov.

*Herba* foetida densa ca 6 dm alta. *Caulis* cylindricus, levis. *Folia* alterna et opposita, inferiora longe petiolata, superiora fere sessilia, late obliquo-elliptica, 9–2.4 × 3.5–10 cm membranacea, ad apicem acuta vel acuminata, valde inaequalia, rotunda, subcordata vel decurrentia ad basin, integra ad margines, nervis lateralibus 12–15 paulum arcuatis distinctis 5–10 mm inter se distantibus. *Inflorescentia* racemosa, terminalis, glabra, paulum undulata, 14.5–25.5 cm longa, pauci-vel pluri-flora; bractea et bracteolae subulatae, ca 4 mm longae, pedicellis validis ad 1 cm longis. *Calyx* infundibuliformis, ca 4 cm longus, distincte porcatus, viridis; lacinae ca 11 mm longae, multo minores calycis tubo, ovatae, acuminatae, callosae ad apicem; *corolla* bilabiata, nitenter caerulea vel violacea, tubo glabro, ca 6 cm longo, ca 5 mm diam., aliquantum dilatato, puberulento et eminenter curvato ad faucem; labium inferius 2.5 × 5 cm 3-lobum, lobis inaequalibus, suborbicularibus; labium superius 2.5 × 3 cm bilobum, lobis aequalibus, ovatis, lobis omnibus obscure crenulatis; *stamina* didynamia, inaequalia, antheris confluentibus planis, ca 1 cm latis; disco cupulato, 1 mm alto. *Ovarium* ovoideum, ca 1 cm altum, stylo valido, ca 2.5 cm longo, stigmate obtuse bilobo ca 3 × 2 mm, superficie interna velutina. *Fructus* capsularis calyce persistente paulum accrescente inciusus. *Semina* plura, ovoidea, minuta (0.5 × 0.25 mm); testa brunnea, reticulata (Figs. 1-6).

*Typus* Joseph 39716A lectus 30 km ex Bhalluk-

pong and altit. 1250 m in dist. Kameng, N.E.F.A. die 10 septembris anni 1964 et positus in CAL. Isotypi Joseph 39716 B-F positi in herbario Assamiae. Paratypi N. L. Bor 18179 lectus in Aka Hills anno 1936, G. K. Deka s.n. (B.S.I. Accsn. No. 29477) lectus ad Balipara F. T. 13.11.1951, A. R. K. Sastry 40738 lectus in Subansiri dist., N.E.F.A., 19.11.1964.

**Rhynchoglossum lazulinum** A. S. Rao and Joseph sp. nov.

Succulent malodorous dense herbs about 6 dm high. *Stem* cylindrical, smooth. *Leaves* alternate as well as opposite, long petioled at lower nodes to sessile near the peduncle; lamina obliquely broadly elliptic, 9–2.4 × 3.5–10 cm membranous, acute to acuminate at apex, strikingly unequal, rounded, subcordate or decurrent at base, entire margin, with 12–30 slightly arching distinct lateral nerves 5–10 mm apart. *Inflorescence* a terminal raceme, glabrous, slightly undulate, 14.5–25.5 cm long, few to several-flowered; bract and bracteole subulate about 4 mm long; pedicel stout upto 1 cm long; *calyx* infundibuliform, about 4 cm long, conspicuously ridged, green; calyx lobes about 11 mm long, much smaller than the calyx tube, ovate, acuminate, callose at tip; *corolla* bilabiate, bright blue to violet; corolla tube glabrous, about 6 cm long, about 5 mm diam., a little dilated puberulent and prominently bent at the throat; lower lip about 2.5 × 5 cm 3-lobed, the lobes unequal, suborbicular; upper lip about 2.5 × 3 cm, 2-lobed, the lobes equal, ovate, all lobes obscurely crenulate;

*stamens* didynamous, unequal, the confluent anthers flat, about 1 cm broad; disc cuplike 1 mm high; *ovary* ovoid about 1 cm high, style stout, about

2.5 cm long, stigma obtusely bilobed, about  $3 \times 2$  mm inner surface velvety. *Fruit* a capsule within the persistent, slightly accrescent calyx. *Seeds* many,



*Rhynchosyris lazulinum* A. S. Rao and Joseph sp. nov.

Figs. 1-6: 1. Flowering shoot. 2. Flower slit open. 3. Stamens. 4. Calyx (slit open) with pistil. 5. Fruit (calyx slit open). 6. A few seeds enlarged and not to scale. (Drawn from Joseph 39716A)

ovoid, small ( $0.5 \times 0.25$  mm), the testa brown, reticulate (Figs. 1-6).

Holotype: *Joseph* 39716A at Krishna 36 km from Bhallukpong, alt. about 1250 m on the way to Sessa, Kameng district, N.E.F.A. In shady moist places near the way side, on black humus soil, 10 September 1964 (CAL). Isotypes: *Joseph* 39716 B-F of the same gathering (ASSAM). Paratypes: N. L. Bor 18179 Aka Hills, 1936; G. K. Deka s.n. (B.S.I. Accsn. No. 29477) Balipara F. T. 13.11.51; A. R. K. Sastry 40738 on way from Palim to Sayata, Subansiri district, N.E.F.A. on hilly slopes of damp forest floor and along small streams with *Impatiens*, on black clayey soil, 19.11.1964.

Mr. B. L. Burtt of the Royal Botanic Gardens, Edinburgh who studied the two sheets of Deka and

Bor, noted that the specimens belonged to an undescribed species. He further noted that "neither of these sheets would be adequate for description as a new species". Subsequent fuller collections of J. Joseph from Kameng and A. R. K. Sastry from Subansiri proved to be identical material. This has now offered the opportunity to describe the new species.

#### ACKNOWLEDGEMENT

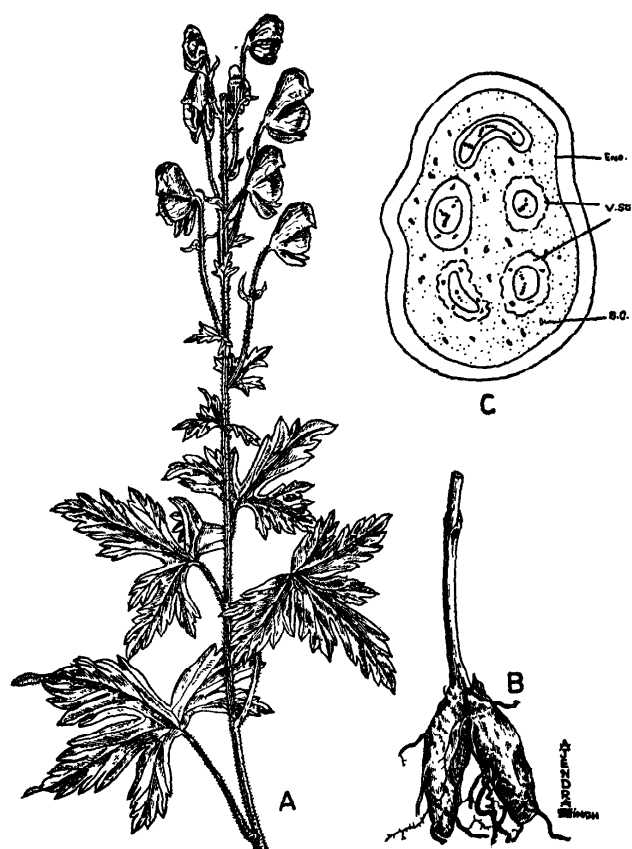
We are grateful to Rev. Fr. Dr. H. Santapau, Director, Botanical Survey of India for the latin rendering of the description.

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### A NOTE ON THE OCCURRENCE OF *ACONITUM DEINORRHIZUM* STAPF IN NORTH-WEST HIMALAYAS

*Aconitum deinorrhizum* Stapf (Ranunculaceae) the roots of which constitute one of the commercial aconites of India has, rarely, been recorded in the past from north-west Himalayas. The previous record of the species is from Janikanda in Rampur Bashahar (Himachal Pradesh), and the specimen has been used by Stapf (1905) as a type for giving the plant its present name. Stapf has further recognized the specimens collected by Madden from Shatul and Boorun Passes and mentioned under *A. ferox* as *Aconitum deinorrhizum* Stapf. It is surprising that no floristic record of the species or the extent of its distribution has yet been made, although the drug derived from the plant reaches the indigenous crude drug markets in fairly large quantities. Investigations in various herbaria revealed a very scanty representation by a few old preserved specimens of Aitchison's collections from Chamba. Reference of the plant in the existing literature also is scanty as well as confusing. In the Wealth of India (1948) the distribution of the plant is given as from Kunawar to Nepal but the plant has not been recorded yet from any locality in Jaunsar, Garhwal and Kumaon Himalayas. This fact has been further confirmed during a survey of commercial aconites in north-west Himalayas by the authors, who found that the crude drug derived from the plant comes only from Jammu and Kashmir and Himachal Pradesh.

During a survey of medicinal plants in north-



*Aconitum deinorrhizum* Stapf

Figs. A-C: A. Areal portions with flowers. B. Mother and daughter tubers. C. T. S. through the root.  
(S.C.—Stone cells; End.—Endodermis; V. str.—Vascular strand)