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| 3. Filaments glabrous within. | 3. Filaments covered with long, flexuous, glistening hairs within. |
| 4. Style pubescent in the lower 1/4 th. | 4. Style pubescent upto 2/3 its length. |
| 5. Berries black, not shining, covered with a whitish 'bloom'. | 5. Berries orange-red, shining, not covered with a 'bloom'. |
| 6. Seeds dark-colored. | 6. Seeds pale-colored. |
| 7. Stone grains absent. | 7. Stone grains present. |

Erect or decumbent herbs, 25-40 cm high, sparingly branched from the base, without basal rosettes. Stems green with a purple tinge, nodular, hard, pubescent, 8-9 mm in diameter at base. Branching crowded. Leaf-blades ovate, truncate, merging into the petiole, irregularly dentate with 2-4 teeth on each side, sparingly hairy on both surfaces, more hairy on the veins and margins. Inflorescence a corymbose cyme, extra-axillary, few-flowered, pedunculate. Peduncles 7-10 mm long, at an angle of 90-100°. Pedicels slightly pubescent, 4-5 mm long, at an angle of 40-50°. Flowers regular, bisexual, complete. Calyx 1.2-1.5 mm long, gamosepalous, pubescent, deeply lobed; lobes 0.5 mm long and 0.7 mm wide, oblong with rounded apices and a purple spot in between. Corolla 4.5-5 mm long, 7-8 mm wide, gamopetalous, rotate, white with a yellowish-green star, distinctly lobed; lobes 2.5-3 mm long, with a dark purple, median stripe, often with two short, lateral ones on either side of the median at the base, the stripes more prominent on the outer surface of the corolla lobes. Corolla lobes 5 (rarely only four). Stamens 5, 2.6-3 mm long, epipetalous, closely placed and forming a column; anthers 1.6-1.8 mm long, yellow, notched at the apex; filaments 1-1.2 mm long, dilated at base, covered with long, flexuous, glistening hairs throughout within. Ovary 1-1.2 mm long, subglo-

bose; style 3-3.2 mm long, straight or slightly bent at the tip, little exceeding the anther column, pubescent up to 2/3 its length; stigma globose, capitate. Berries 6-6.5 mm in diameter, soft in texture, globose, shining, green becoming orange-red at maturity, with a persistent, reflexed calyx. Seeds 2 mm in diameter, pale-colored, 25-32, with 2 or 3 stone grains per berry, these engulfed in a mucilaginous pulp (Plate I).

INDIA: Gujarat State: Baroda District, Baroda, L. V. Palace compound, 2.10.60, *Sabnis* 2762, 2763 (Herbarium, The M. S. University of Baroda, Holotype); The M. S. University campus, behind Botany Department, 10.11.64, *Sabnis* 3630; Sabarkantha District, Danmahudi, Sabarmati river banks, 30.9.68, *Bhatt* 1518; Harad, 2.1.70, *Bhatt* 2480; Khedbrahma, on way to Padhara, 18.3.70, *Bhatt* 2586; Hampshwar, 28.10.71, *Sabnis & Thaker* 574.

Flowering and fruiting: September to March.
Chromosome number: $2n=48$.

Distribution: At present noted as a rare weed in gardens and roadsides in Baroda and in cultivated fields, river banks and waste places in some localities in north and central Gujarat.

ACKNOWLEDGEMENTS

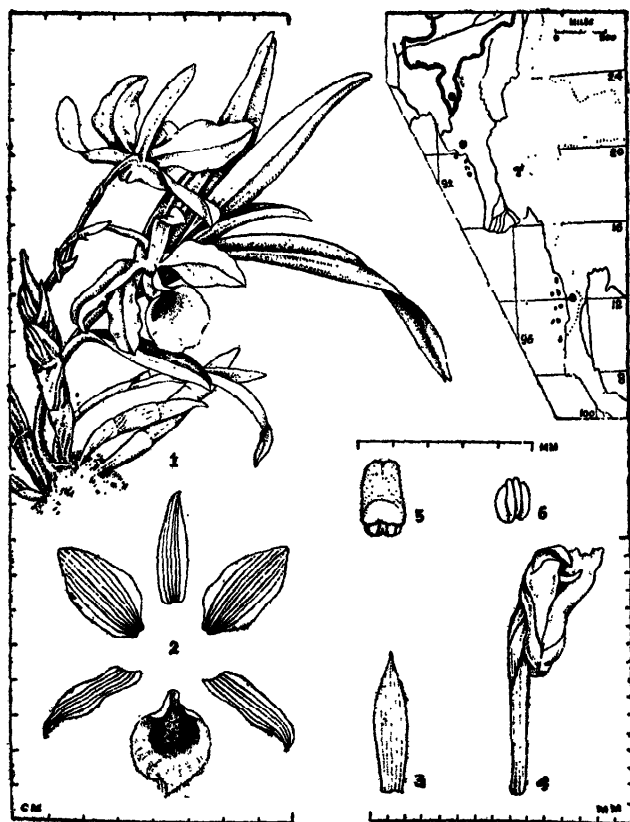
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DENDROBIUM BENSONIAE REICHB. F.—A NEW FIND FROM MIZO (LUSHAI) HILLS, MIZORAM

During the winter of 1961, Sri S. C. Mustafi, the then Orchidarium Keeper collected for cultivation about 400 orchids including species of *Dendrobium* and *Paphiopedilum* from Mizo (Lushai) Hills, Mizoram. After a long interval, one of the *Dendrobiums* (N.O. Plant No. 881) flowered on 23rd June 1969 and after study proved to be *Dendrobium bensoniae* Reichb. f., a species originally reported from Burma.

The type locality for the species is on the mountains near Tongou, direct west of Prome in Pegu, Burma. Apart from this two more localities are known in Burma. It is also reported to occur in Northern Thailand and lower Siam [Seidenfaden & Smitinand, *Orch. Thail.* 2(2): 207, 1960] and under cultivation in the Singapore Botanic Garden (Holtum *Fl. Malaya, Orchids*, 2n ed. 1: 287, 1957). In India this species is being reported for the first

*Dendrobium bensoniae* Reichb. f.

1. Habit. 2. Perigon spread out. 3. Bract. 4. Column. 5. Operculum. 6. Pollinia from BSI(EC) 38042. Inset map showing localities including type locality (T).

time on the basis of the N.O. plant No. 881 from the Mizo (Lushai) Hills. Incidentally, this additional locality extends in the north the hitherto known distribution of *Dendrobium bensoniae* Reichb. f.

The following short descriptive notes, with analytical illustration and inset distribution map, supplements earlier published data on this orchid.

Dendrobium bensoniae Reichb. f. in Bot. Zeit. 25: 230. 1867; Hook. f. Fl. Brit. Ind. 5: 739. 1890; Veitch Man. Dendrob. 21. 1889 (with fig.); Kraenzlin in Pfreich. 45: 46. 1957.

Stems erect, 4-8 mm thick, 3.5-7.5 cm long. Leaves 2-5, deciduous, 6-nerved. Flowers 2, ca 4.6 cm across, white with 2 dark purple blotches in the lip surrounded by a band of yellow. BSI (EC) 38042 (ASSAM).

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Botanical Survey of India, Shillong

RUBUS GHANAKANTAE ROLLA RAO ET JOSEPH—A NEW SPECIES FROM ARUNACHAL PRADESH

Rubus ghanakantae Rolla Rao et Joseph Sp. Nov.

Affine *Rubus preptanthus* Focke speciem Siensis, sed ab omnibus generis speciebus notis differt praesentia pili cespitosus typicorum ad apicem ex omnis anthera.

Holotypus lectus ad Rahung-Bomdila (2,160 m alt.) in Kameng district, Arunachal Pradesh die 5 Junii 1957 et positus in CAL sub numero Rolla 8086A, Isotypi Rolla 8086 B-E varie distribuendi.

Rubus ghanakantae is to some extent allied to the Chinese species, *Rubus preptanthus* Focke, but is quite distinct from all the known species of the genus by the presence of characteristic tuft of hairs at the tip of each and every anther.

Prickly shrub, about 2 m high; prickles sparse, small, hooked, often absent on flowering twigs.

Mature stem glabrous; tender branches cottony-pubescent. Leaves simple, 4-12 × 1.5-4.5 cm, shortly petioled, stipulate, ovate to lanceolate, shortly acuminate, spinulose-serrate, glabrous on upper surface with fine pubescence along midrib and veins, lower surface densely pubescent; sometimes petiole and mid-rib on lower surface with small, tender-hooked spines; stipules entire, -14 mm × 3 mm, lanceolate, acute, longer than petiole, finely villous outside and glabrous inside, deciduous. Inflorescence -4 cm long, sub-corymbose, few flowered, terminal, velvety-tomentose sparsely intermixed with glandular, capitate bristles. Flowers -2.3 cm in diameter, creamy-white, pedicellate; pedicels -14 mm long, densely-tomentose, sparsely intermixed with glandular capitate bristles; bracts stipule-like -12 mm × 5 mm, oblong to lanceolate, sub-equally bifid at tip, densely