

A NOTE ON ROSA HIRSUTA, SP. NOV. AND FOUR OTHER ENDEMIC TAXA OF ROSA L. IN THE INDIAN FLORA

CHHABI GHORA AND G. PANIGRAHI

Botanical Survey of India, Howrah

ABSTRACT

During our revisionary studies on the genus *Rosa* L., 31 taxa comprising 24 species and seven additional infraspecific units, are sorted out occurring indigenously or as naturalized elements within the political boundary of India. Of these, five taxa, including a new species described here, are endemic to India proper. The correct name of the taxon with reference to pertinent literature and relevant synonyms, if any, is followed by a short description with diagnostic features and citation of types and representative specimens studied in CAL, distributional range of the taxon in India, is also indicated.

1. *Rosa hirsuta* Chhabi Ghora et Panigr ; sp. nov. (Fig. 1. A-H).

Rosa hirsuta sp. nov. proxime affinis *R. sericeae* Lindl. sed differt foliis supra parum pilosis, infra glandulari-hispidis; ramis caulisque dense tectis cum glandibus setisque glandiferis; stipulis pedicellis hypanthiisque hirsutis cum setis glandiferis.

Typus : INDIA : Uttar Pradesh, Kumaon, Milan glacier, 3812 m (12,500 ft) 28 Aug. 1848, *Strachey & Winterbottom* 5 (CAL — accession number 15 1642, Holotypus; (CAL — accession number 15 1641 — Isotypus).

Woody scandent herb with copious short leafy branches; branches and stem densely glandular, prickly and covered with enongated glandular bristles; prickles usually opposite or scattered, flat, with a broad base (to 10 mm) and abruptly tapering to a point, 15 mm long. *Leaves* upto 5.5 cm long; leaflets 7-11, 10-14 × 5-7 mm, elliptic-obovate, base cuneate, apex obtuse, margin glandular serrate from below the middle, serrulate at apex, slightly hairy

above, hispid-glandular beneath, villous on the midrib and veins. *Stipules* 11 × 2 mm, adnate upto 7 mm from base apex triangular, margin glandular, pubescent and glandular on both surfaces. *Petioles* slightly prickly, velutinous and covered with glandular bristles. *Flowers* solitary, 3.2 cm across. *Pedicels* 25 mm long, hispid and with glandular bristles. *Hypanthia* 6 × 4 mm, hispid, with glandular bristles, globose. *Sepals* 5, 18 × 3 mm, lanceolate, villous on both surfaces, glandular outside margin entire, villous. *Petals* 5, 20 × 20 mm, obovate. *Stamens* many, filaments 3-4 mm long. *Carpels* many, exserted; styles 3 mm long, woolly; stigma globose.

Fruits 8 × 10 mm, globose.

Flowering : August. **Fruiting** : Sept.

Ecology : Usually grows in temperate climate, from 3,600-3,800 m.

In *Rosa sericea* Lindl. (1820, *Rosa* Monogr. 105, t. 12) the leaflets are glabrous, slightly silky hairy beneath on midrib and lateral veins only; stems and branches

usually with a few prickles only or sometimes mixed with bristles; stipules, pedicels and hypanthia glabrous, smooth.

Paratypes : Uttar Pradesh : Kumaon, Milliam, Gori Valley, 14 Aug. 1900, *Inayat* 14391 (acc. no. 15 1650); Ralam, 3648 m (12,000 ft), 23 Aug. 1848, *Strachey & Winterbottom* 5 (acc. no. 15 1643); Millam, Sept. 1848, *Strachey & Winterbottom* 5 (acc. no. 15 1646).

2. *Rosa leschenaultiana* (Thory & Redoute) Wight & Arnott, Prodr. 1: 301. 1834; Hook. f. Fl. Brit. India 2: 268. 1878.

Rosa sempervirens L. var. *leschenaultiana* Thory & Redoute, Les Ros. 3: 87, cum plate. 1823.

Type : Tamil Nadu : Nilgiri mount., Mr. Leschenault s.n. (P).

Rosa sempervirens Hook. f. & Thoms. (vide Fl. Brit. India 2: 368. 1878, *pro syn.*) *non* Linn. (1753).

Rosa wallichii Sabine in Wall. Num. List No. 687. 1829, *nom. nud.*

Climbing shrub upto 18-21 m long, branches covered with thick prickles, scattered, usually curved downwards. *Bracts* 10 × 3 mm, pubescent, margin glandular. *Leaflets* usually 5 (-7), 4-6.5 × 2.5-3.2 cm, ovate, base rounded, apex acute, margin serrate, glandular, glabrous above, glandular, prickly and pubescent beneath on midrib. *Petioles* densely glandular, pubescent. *Stipules* 1.5 × 0.4 cm., entire, margin glandular. *Flowers* corymbose or rarely solitary, 3-4 cm across. *Pedicels* 2.6-3 cm long, densely covered with glandular bristles, pubescent. *Hypanthia* 6 × 4 mm, ovoid, with glandular bristles. *Sepals* 2.5 × 0.7 cm, spatulate, velutinous, bristly outside, tomentose bristly inside. *Petals* 2 × 1.8 cm., obovate, white. *Stamens* many. *Styles* 8 mm long, united into a column, velutinous. *Fruits* 12 × 10 mm, covered with glandular bristles.

Distribution : INDIA : Tamil Nadu (Nilgiri — Palni hill ranges).

Specimens examined in CAL : Tamil Nadu : Coonoor, 1500 m, Oct. 1910, A. Meebold 11887; Nilgiri Hills, Pykara, Aug. 1878, G. King s.n.; Nilgiri dist. Kateri Road to Kundha, 1667 m, 27 Mar. 1957, K.M. Sebastine 2708; Nilgiri dist. top of Pakasuramalai, 2067 m 13 May 1957, K.M. Sebastine 3207; Ootacamund, 14 Aug. 1878, G. King s.n., Nilgiri dist., Pykaran, 2100 m, Oct. 1910, A. Meebold 11836; Nilgiri dist. Ooty, 2100 m, Aug. 1883, J. S. Gamble. 16667.

3. *Rosa hookeriana* Bertol. Misc. Bot. 24: 172-173, t.1. 1863, *non* Wall. Num. List. No. 691. 1829, *nom. nud.* (Fig. 2.A-H).

Type : North Himalaya, in temperate region, 2440-3355 m.; t.1 in Bertol l.c.

Shrubs with spiny branches; spines usually in pairs, or scattered, straight, upto 12 mm long. *Leaflets* 7-9, 10-12 × 5-7 mm, ovate, base cuneate, apex obtuse, margin argute glandular, serrulate, glabrous or slightly pubescent. *Stipules* 15 × 3 mm, acuminate, margin ciliate, glandular. *Bracts* foliaceous, 10 × 4 mm. *Flowers* solitary, 5 cm across. *Hypanthia* 12 × 6 mm, ovoid-oblong, glabrous, smooth. *Pedicels* 1.5-2.5 cm long, pubescent. *Sepals* 5, 3 × 0.6 cm, lanceolate, pubescent inside, apex subsetose, margin serrate. *Petals* 5, 25 × 18 mm, obovate, white, rarely pinkish. *Styles* free, slightly exerted.

Distribution : INDIA : (Himachal Pradesh).

Specimens examined in CAL : Himachal Pradesh, Lahul, Jaeschke 182; Lahul, Bhaga Thal, dicht bei der Kardangar Braske, Jaeschke 184; Lahul, Jaeschke 186; Lahul, bi Kyelang, 3952 m, Jaeschke 183. Pangi, Mrs. Douie 124.

4. *Rosa macrophylla* Lindl. var. *hookeriana* Hook. f., Fl. Brit. India 2 : 366. 1878.

Type : INDIA : Uttar Pradesh, Kumaon, *R. Blinkworth* s.n. vide Wallich, Num. List No. 691 (K, microfich. and photo—CAL; Isotype—CAL).

Rosa hookeriana Wall., num. List No. 691. 1829, *nom nud.*, *non* Bertol. (1863).

Shrubs with branches unarmed, glabrous or slightly spiny. *Leaflets* 5-9, 1.5-4.0 × 1-2 cm, elliptic to lanceolate, base cuneate, apex acute, margin sharply serrate or double-serrate, glandular, pubescent beneath. *Petioles* woolly, slightly prickly. *Stipules* 18 × 4 mm, foliaceous, lanceolate, entire, margin with glandular bristles, glabrous outside, woolly beneath. *Bracts* 10 × 4 mm, foliaceous, apex acute, margin with glandular bristles, midrib hairy. *Flowers* 1-3 together, 4-5 cm across. *Hypanthia* 10 × 5 mm, oblong, covered with glandular bristles. *Pedicels* 1.5-2.7 cm long, tomentose, eglandular. *Sepals* 5, 3 × 0.4 cm, lanceolate, margin entire, woolly on both surfaces, eglandular. *Petals* 5, 3 × 2.5 cm obovate, white to pink, stamens many. *Styles* free, little exserted, woolly at base.

Distribution : INDIA (Kashmir and Uttar Pradesh).

Specimens examined in CAL : Kashmir : Pir Panjal, 2, 250 m, 17 Aug. 1891, G. A. Gammie s.n.; Upper Chenab, 2,700 m, Aug. 1879, B. H. Baden Powell 106. Uttar Pradesh : Kumaon, Milam, 3450 m, Aug. 1848, *Strachey & Winterbottom* 3; Kaelle, 3 Jul. 1864, *Brandis* 3603; Kumaon, Tola, 3450 m, 26 Aug. 1848, *Strachey & Winterbottom* 3; Tehri-Garhwal, Damodar Valley, 3000-3300 m, 26 Jun. 1883, J.

F. Duthie 1090; Jumnotri, 3600-3,900 m, Oct. 1877, J. D. Hooker 154.

5. *Rosa clinophylla* Thory var. *parvifolia* Ghora & Panigr., in Journ. Jap. Bot. 60(2) : 59. 1985.

Type : Manipur, 4 Mar. 1954, D. B. Deb 2999 (Holo-CAL).

Rosa involucrata Roxb. var. *parvifolia* Lindl. in Wall. Num. List No. 696. 1929, *nom. nud.*; Hook. f., Fl. Brit. India 2 : 365. 1878, *sine descript.*, *nom. invalid.*

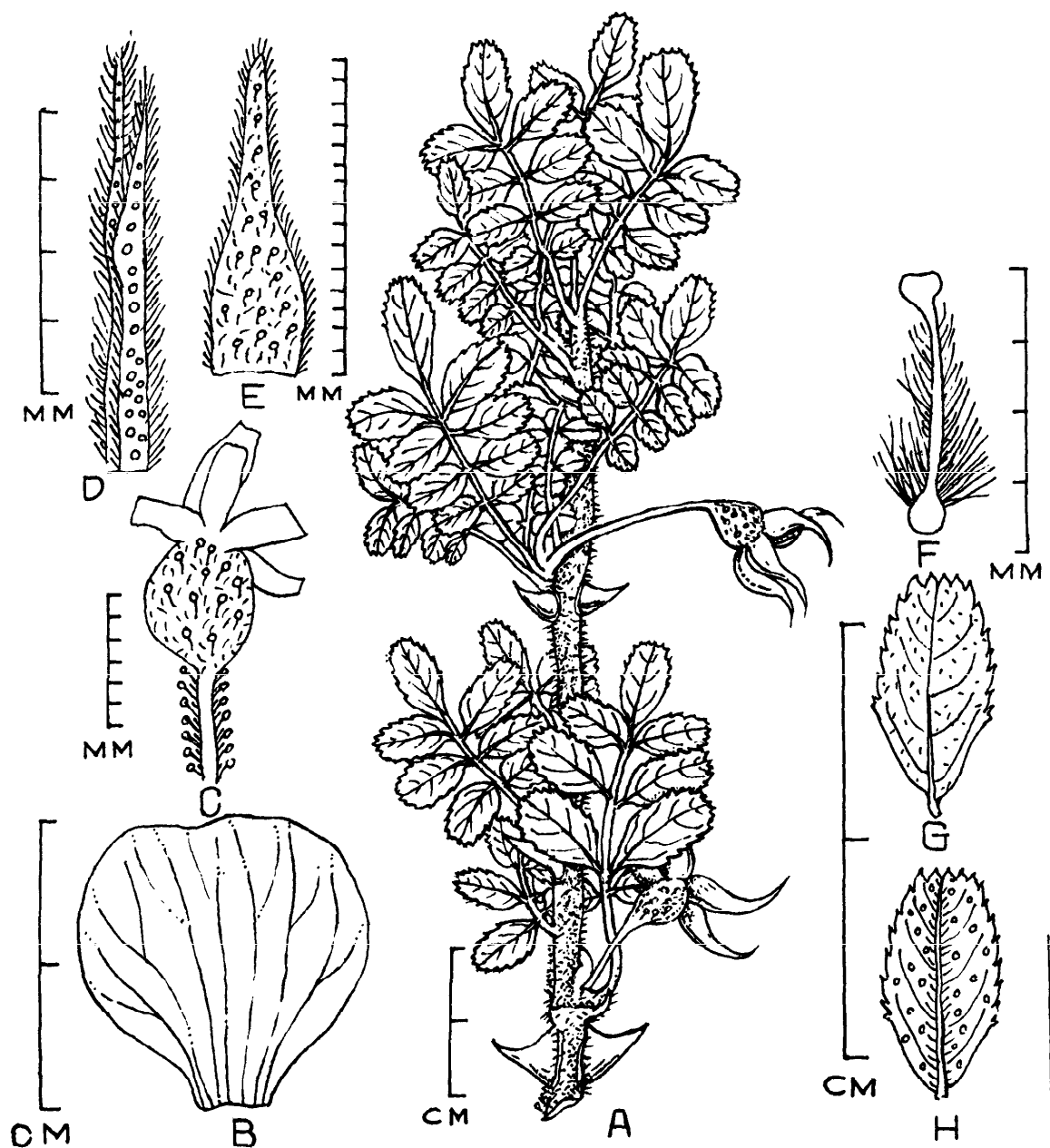
Bushy shrubs; branches glabrous; prickles erect, slightly pointing upwards, usually in pairs just below the stipules. *Leaflets* 7-9, 12-18 × 5-9 mm, elliptic, base cuneate, apex round, margin glandular serrate, glabrous on both surfaces except the midrib beneath. *Petioles* woolly with a few prickles. *Stipules* 3-4 mm long, laciniate, glabrous, glandular. *Flowers* solitary, 2 cm across. *Pedicels* 2 mm long, woolly. *Bracts* 3-4, 8 × 2 mm, lanceolate, woolly on both surfaces. *Hypanthia* 4 × 4 mm, globose, woolly. *Sepals* 5, 12 × 3 mm lanceolate, margin entire, woolly outside, tomentose, glandular inside. *Petals* 13 × 14 mm, slightly emarginate. *Stamens* many. *Styles* free, up to 2 mm long. *Stigma* woolly.

Distribution : INDIA (Manipur, Bihar and Uttar Pradesh).

Paratypes : Bihar, Chotonagpur, J. J. Wood s.n. Uttar Pradesh : Kumaon, *Blinkworth* s.n. vide Wallich Num. List. No. 696.

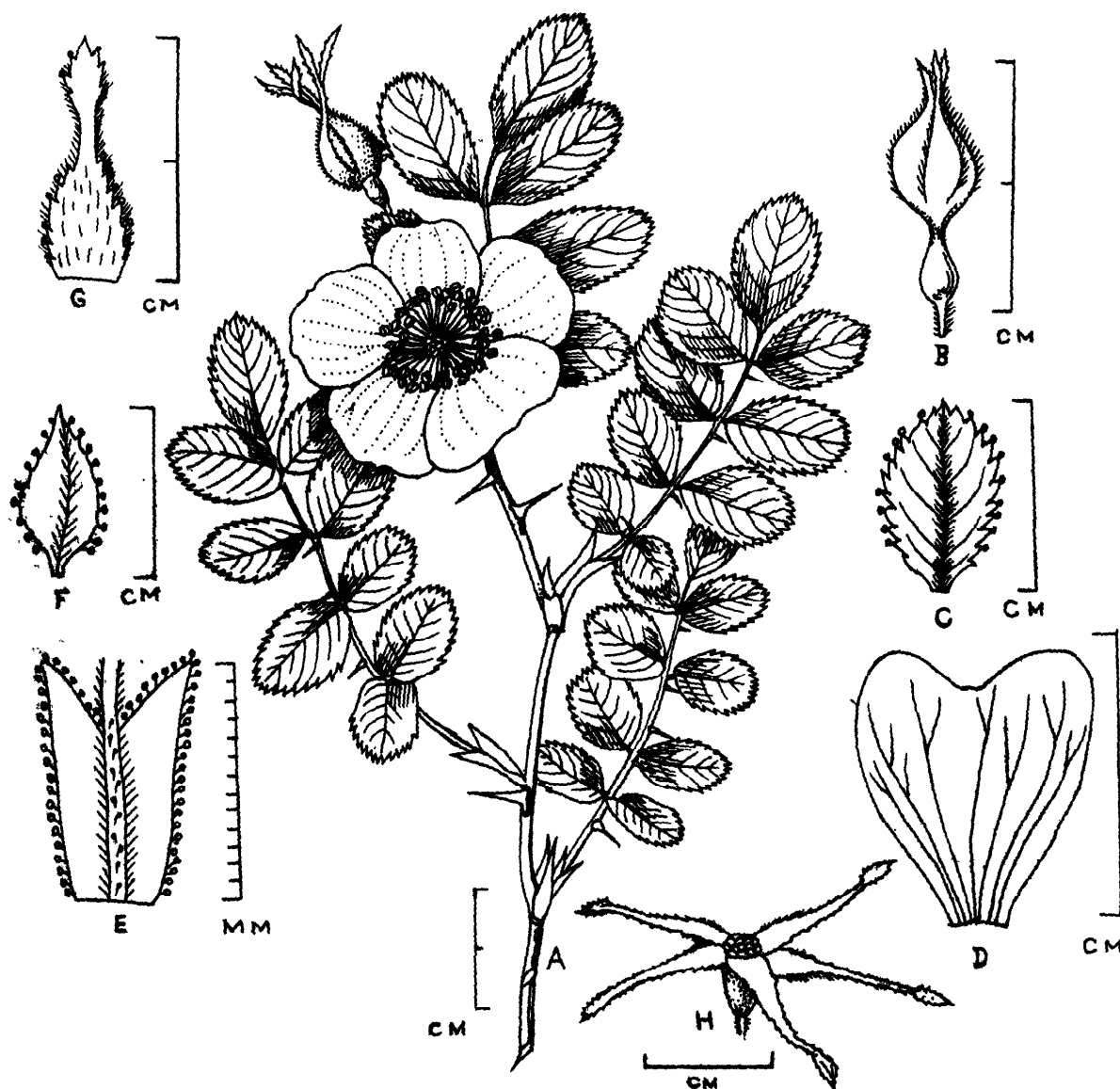
ACKNOWLEDGEMENT

Grateful thanks are due to the Director, Botanical Survey of India, for facilities and to Dr. N. C. Majumdar, Regional Botanist (Hort.), B.S.I. for the latin diagnosis.



Rosa hirsuta Ghora et Panigrahi

Fig 1 (A-H) A Habit showing leaflets, flowers B. Petal C Hypanthium showing bristly glandular pedicels D Half part of a stipule showing glands and hairs E Sepal showing (dorsal) glandular bristles F Carpel G Leaflet (dorsal surface) H Leaflet (ventral surface).



Rosa hookeriana Bertol.

Fig. 2. (A-H) : A. Habit showing leaflets, flower and bud. B. Flower bud. C. Single leaflet. D. Petal. E. Stipule showing glandular bristles. F. Bract. G. Sepal. H. Hypanthium showing sepals and stigmas.