

connective and each anther cell showing a prominent horn-like projection which clasps the large rostellum. Stigmas 2.

A peculiar feature of the lobes of the lip, not recorded previously in literature, is the characteristic dichotomous venation seen on them. The other lobes of the perianth do not present this feature. A similar type of venation is also seen on the lip of another orchid, recently collected for the first time in Western Himalaya, viz., *Habenaria dentata* Schlect. (ARORA, in press). *Diplomeris* is stated to bear close affinity to the genus *Habenaria* (sensu lato) and the unique feature of venation of the lip in the above two species is thus of considerable interest.

Specimens examined: On moss covered rocks along the road from Kathgodam to

Nainital (79°33'E. Long., 29°18'N Lat.), 800 m, 14 August 1973 (in flower), 15 September 1973 (fruiting), C. M. Arora 50016 & 52434 (BSD); Tiwary s.n. (Herb. Govt. Pharm. Dept. Ranikhet); Mrs. Acomb, Coloured photo, 30 August 1972.

Distribution: Nepal, Sikkim and Bhutan.

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A NEW SPECIES OF *RHYNCHOSIA* LOUR. (PAPILIONACEAE) FROM SOUTH INDIA

Rhynchosia jacobii Chandr. et Shetty, sp. nov.

R. minimae DC. affinis, sed differt pilis dense hirsutis brevibusque inter pilos longos villososque interjectis; foliolis longioribus quam brevibus, numquam deltoideis; floribus singulis vel interdum binis, rhachidibus gracilibus.

Herbae serpentes, dense hirsutae, pilis brevibus inter pilos longos villososque interjectis, e basi praecipue ramificantes; ramuli effusi, graciles, lignei, teretes, leviter striati; internodia 0.7-8.0 cm longa. Folia alterna, pinnatim trifoliolata; petioli 0.6-3.7 cm longi; stipulae 0.2-1.1 cm longae, lineari-lanceolatae, hirsutae, extus pilis brevibus inter pilos longos villososque interjectis, intus vero (exceptis apicibus) glabrae, inter nervos distincte sulcatae. Foliola ovato-oblonga, elliptico-oblonga vel oblonga, integra, mucronata, subcoriacea, e basi triplinervia, subterminute flavido-glanduloso; nervis lateralibus

4-7 paribus e costa, nervis et nervulis ab utroque facie elevatis; petioluli usque ad 1.8 mm longi; stipellae mullae; foliola terminalia 0.5-4.0 × 0.4-2.2 cm, basi fere rotundata; foliola lateralibus 0.6-3.7 × 0.4-1.9 cm, inequilateralibus. Flores flavidi, axillares, plerumque solitarii, interdum duo, rhachidibus gracilibus; rhachis usque ad 2 cm longa; pedicellus 1.5-2.6 mm longus; bracteae 2-3 mm longae, ovato-lanceolatae, extus hirsutae, pilis brevibus inter pilos longos villososque interjectis, intus glabrae et inter nervos distincte sulcatae. Calyx 6-8.5 mm longus, hirsutus, pilis brevibus inter pilos longos villososque interjectis; tubus ± 2.4 mm longus; dentes 5, lanceolati, inferior ± 4.6 mm longus, caeteri breviores, ± 3.4 mm longi. Corolla papilionacea; vexillum 8.25-9.0 × 4.0-5.25 mm, obovatum, ungue brevo et auriculis basi inflexis, venis rubris; alae 8-9 × 2 mm, oblique oblongo-obovatae, distincte unguiculatae; carinae ± 8.0 × 2.7 mm,

oblique obovate, distincte unguiculatae. Stamina ± 9 mm longa, diadelpia, 9+1. Ovarium $\pm 2.5 \times 1$ mm, subsessile, pilis longis, albis et sericeis vestitum; ovula 2; stylus ± 6 mm longus, gracilis; stigma capitatum. Legumina 1.8-2.3 $\times$ 0.5-0.7 cm, leviter compressa, subfalcata, acuta vel subacuta, rostro brevi usque ad 5 mm longo, hirsuto pilis brevibus inter pilos longos villososque interjectis, plerumque 2-seminalia, raro 1-seminalia, interne continua. Semina $\pm 4.1 \times 3.3$ mm, brunnea, subreniformia turgida, strophilo indistincto (Figs. 1-15).

Typus *Shetty et Chandrabose* 27989 A et isotypi *Shetty et Chandrabose* 27989 B-P lecti die 25 Julii 1966, apud Thulukkamparai, clivo orientali collium Mahendragiri, regione Tirunelveli (olim Tinnevely), ditone Tamil Nadu (olim Madras), altitudine circa 425 m. Paratypus *Rangachari* 13545 (accessionis No. 16860) eodem loco lectus die 18, Septembris 1916. Typus positus in CAL; isotypi et paratypus in MH.

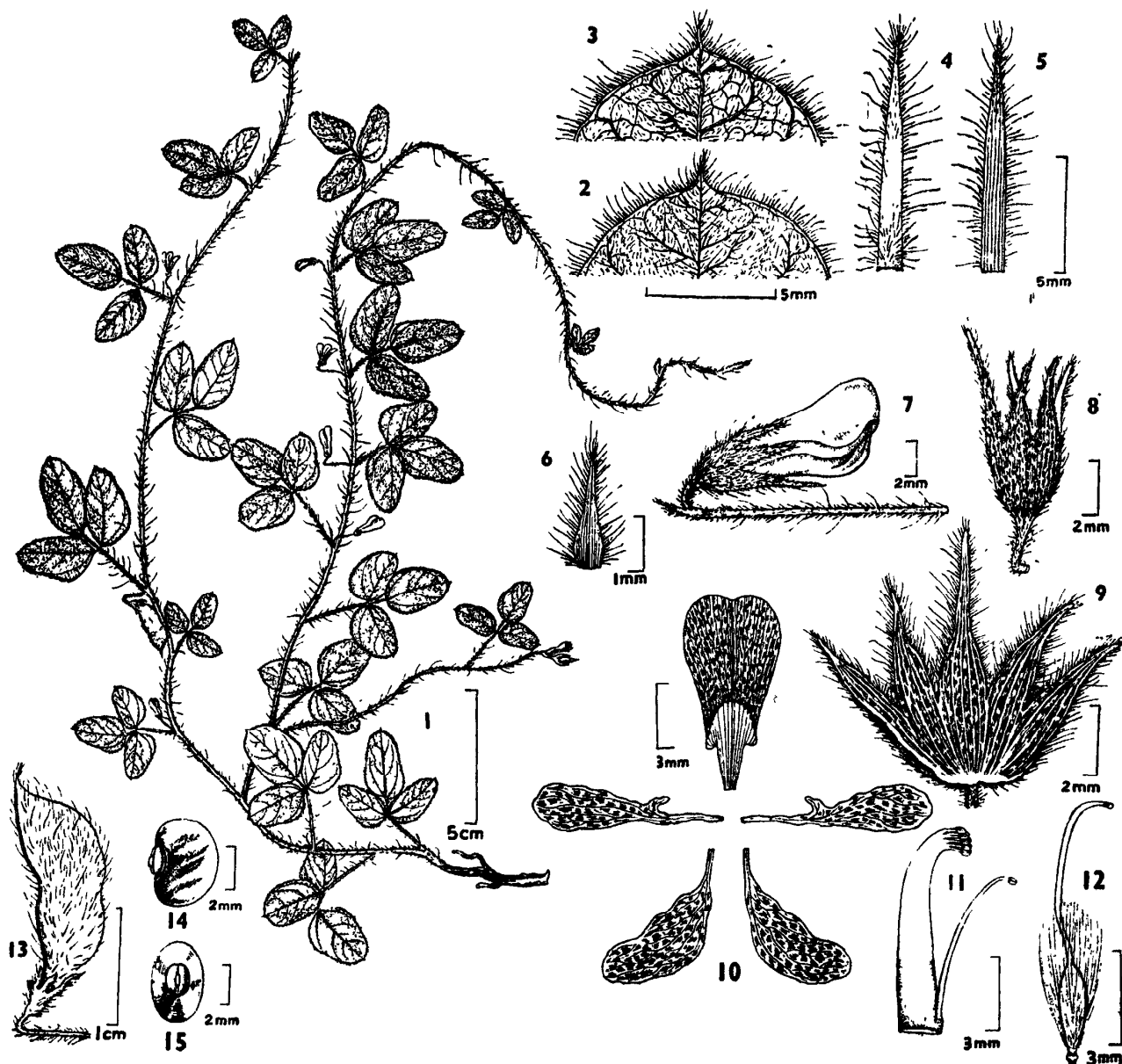
Rhynchosia jacobii Chandr. & Shetty, sp. nov.

Allied to *R. minima* DC., but differs in having short dense hirsute hairs intermixed with long villous hairs; leaflets being longer than broad, never deltoid and in having usually solitary and occasionally two flowers on the slender rachis.

Trailing herbs, densely hirsute with short hairs, intermixed with long villous hairs, branching mainly from the base; branches spreading, slender, woody, terete, faintly striate; internodes 0.7-8.0 cm long. Leaves alternate, pinnately trifoliolate; petioles 0.6-3.7 cm long; stipules 0.2-1.1 cm long, linear-lanceolate, hirsute with short hairs, intermixed with long villous hairs without, glabrous within excepting at the tip, distinctly grooved within in between the nerves. Leaflets ovate-oblong, elliptic-oblong or oblong, entire, mucronate, subcoriaceous, 3-nerved from the base, minutely yellowish gland-dotted beneath; lateral nerves 4-7 pairs from the

midrib, nerves and nervules raised on both the sides; petiolules upto 1.8 mm long; stipels absent; terminal leaflets 0.5-4.0 $\times$ 0.4-2.2 cm, nearly rounded at base; lateral leaflets 0.6-3.7 $\times$ 0.4-1.9 cm, inequilateral. Flowers yellow, axillary, usually solitary, occasionally two on the slender rachis; rachis upto 2 cm long, pedicel 1.5-2.6 mm long; bracts 2-3 mm long, ovate-lanceolate, hirsute with short hairs intermixed with long villous hairs without, glabrous and distinctly grooved within in between the nerves. Calyx 6-8.5 mm long, hirsute with short hairs, intermixed with long villous hairs; tube ± 2.4 mm long; teeth 5, lanceolate, the lower one ± 4.6 mm long, the rest shorter, ± 3.4 mm long. Corolla papilionaceous; standard 8.25-9.0 $\times$ 4.0-5.25 mm, obovate with a short claw and inflexed auricles at the base, with red veins; wings 8-9 $\times$ 2 mm, obliquely oblong-obovate, distinctly clawed; keels $\pm 8 \times 2.7$ mm, obliquely obovate, distinctly clawed. Stamens ± 9 mm long, diadelphous, 9+1. Ovary $\pm 2.5 \times 1$ mm, subsessile, clothed with long white silky hairs; ovules 2; style ± 6 mm long, slender; stigma capitate. Legume 1.8-2.3 $\times$ 0.5-0.7 cm, slightly compressed, subfalcate, acute or subacute with a short beak up to 5 mm long, hirsute with short hairs, intermixed with long villous hairs, usually 2-seeded, rarely 1-seeded, continuous within. Seeds $\pm 4.1 \times 3.3$ mm, brown, subreniform, turgid, with an indistinct strophiole (Figs. 1-15).

The holotype *Shetty and Chandrabose* 27989 A and the isotypes *Shetty and Chandrabose* 27989 B-P were collected on 25-7-1966 from Thulukkamparai, eastern slope of Mahendragiri Hills, Tirunelveli Dt., (formerly Tinnevely Dt.), Tamil Nadu (formerly Madras State) at an altitude of about 425 m. The paratype *Rangachari* 13545 (Acc. No. 16860) was collected from the same locality on 18-9-1916. The holotype has been deposited in the Central National Herbarium, Calcutta (CAL) and the



Rhynchosia jacobii Chandr. & Shetty, sp. nov.

Figs. 1-15: 1. Branch with flowers and legume. 2. Portion of leaf showing the upper surface. 3. Portion of leaf showing the lower surface. 4. Dorsal view of stipule. 5. Ventral view of stipule. 6. Ventral view of bract. 7. Flower with pedicel, bract and rachis. 8. Calyx. 9. Calyx split open, showing the inner side. 10. Petals. 11. Androecium. 12. Gynoecium. 13. Legume. 14 & 15. Two views of seed.

isotypes and the paratype in the Southern Circle Herbarium, Botanical Survey of India, Coimbatore (MH).

The species is named in honour of late Mr. K. Cherian Jacob, who after examining a specimen of *Rhynchosia* collected by Rangachari on 18-9-1916 from Mahendragiri, Tirunelveli Dist., which is deposited in the Madras Herbarium, Coimbatore under the Accession number 16860, indicated on the herbarium sheet that it belonged to a new species of *Rhynchosia*. He, however, left it undescribed.

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