# ON THE STATUS OF SOME ENDEMICS (?) IN INDIA—II

Lack of data on floristics and uncertain circumscriptions of taxa result in ambiguities in endemism. This series is intended to discuss such cases in Indian flora and evaluate their status.

The first paper in the series (Mehrotra, in Press) dealt with some species of the family Orchidaceae in India. The present paper deals with the status of another four species of the same family which are mainly based on Seidenfaden's (1975, 1976, 1977) revisions of *Cleisostoma* Bl., *Liparis* L. C. Rich and *Habenaria* Willd.

**Cleisostoma striatum** (Reichb. f.) Garay Bot. Mus. Leafl. Harv. 23: 175. 1972. *Echinoglossum striatum* Reichb. f. Gard. Chron. n. s. 12: 390. 1879.

Hooker (1890) described *C. brevipes* Hook. f. from Assam and considered it to be endemic to India. In the same work he mentioned *Echinoglossum striatum*, known from Sikkim Himalaya, as a 'dubia species' Garay (*l. c.*) transferred *E. striatum* to *Cleisostoma*.

Seidenfaden (1975) found that *C. striatum* and *C. brevipes* are conspecific and therefore reduced *C. brevipes* to synonymy. Further, he cited *Saccolabium rogosulum* Ridl. (J. Str. Br. R. As. Soc. 39: 82. 1903) from Malaya, *Sarcanthus krempfii* Guill. (Bull. Soc. Bot. Fr. 77: 329. 1930) and *S. pilifer* Guill. (Bull. Mus. Paris 2. S. 36, 4: 538. 1964) both from Vietnam, as synonyms under *C. striatum*. This effects the endemism of *C. brevipes* and now, the distribution of *C. striatum* can be said to extend from India, China, Hainan and Vietnam to Malaya.

**Habenaria malleifera** Hook. f. Fl. Brit. Ind. 6: 143. 1890.

This species was known only from Sikkim and Meghalaya. Hu (1974) recorded this species from China. Subsequently, Seidenfaden (1977) found that *H. furfurucea* Hook. f. Fl. Brit. Ind. 6: 144, 1890, an endemic species from Khasia, is conspecific with *H. malleifera*. Thus he reduced *H. furfuracea* as a synonym.

As a result of Seidenfaden's treatment, *H. furfuracea* can not be considered as an endemic species, and *H. malleifera* can now be said to be distributed from India to China.

**Liparis distans** C. B. Clarke J. Linn. Soc. 25: 71. t. 29. 1889.

The description of this endemic species was based on a specimen from Kohima. Mukerjee (1953) and Deb (1961) reported this species from Manipur area. Subsequently, Seidenfaden (1973) recorded its occurrence in Laos, Cambodia and Vietnam. Further in (1976), Seidenfaden added two Chinese species namely, *L. yunnanensis* Rolfe (in Forbes & Hemsley, J. Linn. Soc. 36: 8. 1903) and *L. oxyphylla* Schltr. (Fed. Repert. Beih. 4: 63 & 202. 1919), in synonymy of *L. distans*.

Several records of *L. distans* from neighbouring countries like China, Laos, Cambodia and Vietnam clearly indicate that now it can not be regarded as an endemic species.

**Liparis petiolata** (D. Don) Hunt et Summerhayes Kew Bull. 20: 50. 1960. *Acianthus petiolata* D. Don Prodr. Fl. Nep. 29 Feb. 1825.

Hooker (1890) described *L. pulchella* from Khasia and was, for sometime considered to be an endemic species.

Seidenfaden (1976) found similarities between *L. pulchella* and *L. angkae* Kerr. (Kew Bull. 215. 1927), a species from Thailand. Further he stated that these two species are not distinguishable from *L. petiolata* which is distributed from Meghalaya and Sikkim to Nepal. Thus, he reduced these names to synonymy of *L. petiolata* which affected the endemism of. *L. pulchella*.

In view of this, the distribution *L. petiolata* now extends from India to Nepal, Bhutan and Thailand.

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## ON THE REDISCOVERY OF TWO RARE ENDEMIC PLANTS OF INDIA

Intensive floristic studies, paying greater attention to locate the endemic and rare/threatened/vulnerable plants, conducted in the evergreen pockets of the ghat forests of Kanniyakumari district in Tamil Nadu, India, have yielded good results (Henry & Swaminathan 1979, 1980a, 1980b, 1981). Two rare endemic species *viz. Hedyotis villosostipulata* (Gamble) Rao & Hemadri [RUBIACEAE] and *Semecarpus auriculata* Bedd. [ANACARDIACEAE] which need conservation, were rediscovered after a lapse of about eight decades. They are recorded in this paper; the specimens cited are from MH.

**Hedyotis villosostipulata** (Gamble) Rao & Hemadri in Indian For. 99: 379. 1973; Henry *et al.* in J. Bombay nat. Hist. Soc. 75: 690. 1979. *Oldenlandia villosostipulata* Gamble in Kew Bull. 1919: 405. 1919 & Fl. Pres. Madras 2: 423. 1957 (repr. ed.) [RUBIACEAE].

Erect shrubs up to 2 m tall. Leaves 1-6 × 1-3 cm, elliptic to ovate, entire, obtusely acute at apex, narrowed into the petiole at base; stipules ovate, pectinate, villous. Flowers up to 1.3 cm long, in axillary, sessile, fascicled cymes; pedicels up to 8 mm long, slender. Calyx tube *ca* 2 mm long, glabrous; lobes 4, each up to 3 × 1 mm, lanceaate, ciliate. Corolla tube *ca* 5 mm long, campanulate; lobes 4, each *ca* 4 × 2 mm, lanceate, glabrous without, villous within. Stamens exerted. Capsules up to 4 mm long, ovoid, puberulous (Plate).

This rare and threatened plant was described by Gamble *l. c.* based on a single collection of T. F. Bourdillon made in the year 1894 from Muthukuzhivayal, and was so far represented in MH only by a single isotype specimen. The holotype was deposited in K. The plant is not represented in CAL and UCT*. We could relocate this species from the type locality (Muthukuzhivayal) after a lapse of about 85 years. This handsome shrub was found in crevices of rocks along the outskirts of evergreen forests bordering the grassy swards, at an altitude of about 140 m.

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