

# BOOK REVIEW

**Nepalese Orchids.** Many botanists and especially those interested in orchids will welcome this attempt to produce an up-to-date account\* of the Orchid-Flora of the Nepalese part of the Himalayan Range by two scientists who for many years have devoted their research to this area. For the adjoining western and eastern regions—the NW Himalaya from Kashmir to Kumaon and Sikkim on the other side—two notable publications have existed since the turn of the century: Duthie's *Orchids of the North-Western Himalaya* (1906) and King & Pantling's *Orchids of the Sikkim-Himalaya* (1898). Both portray, with detailed text and large coloured plates, the diversity of the orchids in the region. The gap in between the two floral domains has been little studied until recently, mainly due to the relative inaccessibility of the high mountain range. It is therefore gratifying that this new publication steps into the breach. Essential preliminary work has already been undertaken by one of the authors (Banerji), together with P. P. Thapa, in a series of studies from 1968-1977, all published in *J. Bombay Nat. Hist. Soc.* (summarized in the series 'International Bioscience Publishers' as no. 4, by T. M. Varghese (ed.), 1978). The present book is the result of a close cooperation between two authors: M. L. Banerji, a knowledgeable expert in Himalayan Orchids since 1948 and P. Pradhan, a young enthusiastic scientist working with the Botanical Survey of Nepal, who took the opportunity of working on the rich collections from the Eastern Himalaya in the British Museum (Nat. Hist.). Both have long experience in the field which is extremely important when dealing with orchids.

The main source for the accounts and illustrations in the book was the Herbarium of the Botanical Survey of Nepal in Kattmandu (KATH) which, with time, has built up a highly representative collection of the Nepalese flora. The drawings were prepared by Banerji, skilfully assisted by Mrs Sikha Chatterjee. The figures show the habit of the plants and enlarged details of the flowers. The presentation of the proportions and of the often complicated fine structure of the column, so important for the delimitation of the genera, is mostly well done, although in some cases one would have wished the accuracy of certain details to be depicted more clearly.

Preceding the taxonomic part, the history of the exploration and the general distribution pattern of orchids in the approx. 800 × 200km country are briefly summarized. The sequence in the treatment of genera follows R. Schlechter's system (1926). Keys are provided for genera represented by more than one species in KATH, but there is no key to genera. Cited synonymy is restricted to the basionyms of accepted names. The taxa are briefly but clearly described, followed by key-words on flowering time, distribution (East-, 'Central- and West-Nepal), altitudinal range and the number of specimens in KATH. Chromosome numbers are given, if available, from the literature, with citation of bibliographical sources (unfortunately not, as far as I could see, from Nepalese plants). A few additional taxa, not represented in KATH, are enumerated in the text with some diagnostic characters, but are not illustrated. The nomenclature follows the recent check-list of Hara, Stearn & Williams (*An Enumeration of the Flowering Plants of Nepal*. Vol. 1. Brit. Mus. (Nat. Hist.), 1978), and the influence of G. Seidenfaden and his papers on Thai orchids (1975-82) is apparent throughout.

The two maps depict with dots the distribution of epiphytic and terrestrial orchids. For both, a distinct increase in number is evident towards the East.

In all, 341 species belonging to 86 genera are described, of which 247 are illustrated, each on a full page. In addition to those in the checklist of Hara et al. the following 30 taxa are treated:

- Agrostophyllum khasianum* Griff.
- Esmeralda clarkei* Reichb. f. (Syn: *Arachnis clarkei* (Reichb. f.) J. J. Sm.)
- Bulbophyllum eublepharum* Reichb. f.; *B. sarcophyllum* (King & Pantl.) J. J. Sm.; *B. xylophyllum* Par. & Reichb. f.
- Calanthe chloroleuca* Lindl.
- Cymbidium cuperifolium* Lindl.
- Dendrobium farmeri* Paxt.; *D. hookerianum* Lindl.

\*Banerji, M. L. & Pradhan, P., *The Orchids of Nepal Himalaya*. J. Cramer (A. R. Gantner Verlag, FL-9490 Vaduz), 534 pp., 2 maps and 247 plates of line drawings, size 34 × 24cm, 1984. DM480.

*Eria acervata* Lindl.; *E. discolor* Lindl.  
*Eulophia hormusjii* Duthie; *E. mackinnonii* Duthie; *E. obtusa* (Lindl.) Hook.f.  
*Gastrochilus affinis* (King & Pantl.) Schltr.  
*Goodyera schlechtendaliana* Reichb.f.; *G. viridiflora* (Bl.) Bl.  
*Habenaria malleifera* Hook.f.  
*Kingidium decumbens* (Griff.) P. F. Hunt (probably identical with *K. deliciosum* (Reichb.f.) Sw.)  
*Liparis bootanensis* Griff.; *L. caespitosa* (Thou.) Lindl.; *L. deflexa* Hook.f.  
*Malaxis calophylla* (Reichb.f.) O. Ktz.  
*Nervilia carinata* (Roxb.) Schltr.  
*Oberonia pachyphylla* King & Pantl.; *O. prainiana* King & Pantl.; *O. pyrulifera* Lindl. (?)  
*Peristylus densus* (Lindl.) Santap. & Kapad.; *P. parishii* Reichb.f.; *P. prainii* (Hook.f.) Kränzl.

Confirmation of the presence of the eurasiatic *Gymnadenia conopsea* is needed; records may be based on misidentifications of *G. orchidis* which extends from Kashmir to Bhutan. Certainly the genus *Stelis* (p. 358) with '*S. biflora* Sm.' has to be excluded; this plant is probably a *Sunipia* or a *Bulbophyllum*.

On the other hand, 5 taxa given in the checklist (1978) are not treated: *Galeola lindleyana* (Hook.f. & Thoms.) Reichb.f., *Herpysma longicaulis* Lindl. ex Wall., *Porpax meirax* (Parish & Reichb.f.) King & Pantl., *Schoenorchis gemmata* (Lindl.) J. J. Sm., and *Dendrobium transparens* Wall. ex Lindl. The *Galeola* and *Porpax* are only listed in the introductory chapter (p. 14) dealing with the distribution of orchids in the eastern part of the country.

Only two new combinations are proposed, both in *Peristylus*, a genus still poorly circumscribed:

*Peristylus albomarginatus* [as *albomarginata*] (King & Pantl.) comb. nov.

Basionym: *Habenaria albomarginata* King & Pantl.

*Peristylus nematocaulon* (Hook.f.) comb. nov.

Basionym: *Habenaria nematocaulon* Hook.f.

Only *P. nematocaulon* is illustrated, but the structure of the column is not very clearly delineated. *P. albomarginatus* has already been shifted from *Habenaria* to *Platanthera*, and now to *Peristylus*—which is still not satisfactory.

Also, the delimitation between *Habenaria* and *Platanthera* is not yet settled: the two entities here designated as *Platanthera edgeworthii* (Hook. ex Collett) Gupta and *P. latilabris* Lindl. do not conform with *Platanthera* s. str. The reviewer favours their inclusion in *Habenaria*.

As a desideratum for a later edition I propose that full synonymy is given, as this instructively reflects the manifold changes in the interpretation of a taxon.

This long-awaited Orchid-Flora is authoritative and will stimulate future research from which additions and new results can be expected. It is therefore to be hoped that it will not only find a wide diffusion among specialists but also among all who are interested and engaged in such disciplines as systematics, plant-geography, ecology, horticulture and plant conservation.

JANY RENZ