

Natural History Snippets

Brief reports by members based on their observations of nature

Some Indigenous Orchids of Sri Lanka

Many of the native orchids in Sri Lanka have small to very small flowers. But they all have a charm of their own, especially when magnified. Many can be seen by the wayside, while walking on village paths or in jungle areas. One stunning clump that I found, many years ago, and which thrived in my Colombo garden at Borella was *Thrixspermum pulchellum* (Figs. 1 & 2). One of three in the genus in the country, it is found in the wet south-west. The flowers are ephemeral, lasting just one day, one or two at a time at the ends of long peduncles. The seed capsules are long and cylindrical (arrowed).



densiflorum (Lam.) Schltr. Most orchids practice *resupination*, where the flower pedicel twists to bring the dorsal sepal (modified into the lip) into an inferior position,

facilitating the attraction of pollinators. In this orchid the whole peduncle bends through 180° to orientate the flowers, that do not open fully. After pollination, when the seed capsules start developing, the peduncle begins to straighten (l-hand insert). Mature capsules are seen on erect peduncles.



Collected together with a fallen branch at Bodhinagala many years ago on an SLNHS excursion, *Cleisostoma tenuifolium* is flourishing in my garden (Figs. 4, 5, 6). The very narrow leaves are 8 cm long, the flower spikes are 3 cm, and the flowers just 5 mm. It forms untidy, branching, dependent clumps, loosely attached by thin roots.



Pholidota imbricata, the necklace orchid (Fig. 7), grows both in the low country wet zone, as well as in the hill country where, however, its leaves are short. The low country plants have single, 35 cm long leaves on each pseudobulb. It gets its common name from the

necklace-like inflorescences (Fig. 8) that droop from long peduncles. The seed capsules are shown in Fig. 9, and flower details in Fig. 10.

Photography by Malik Fernando

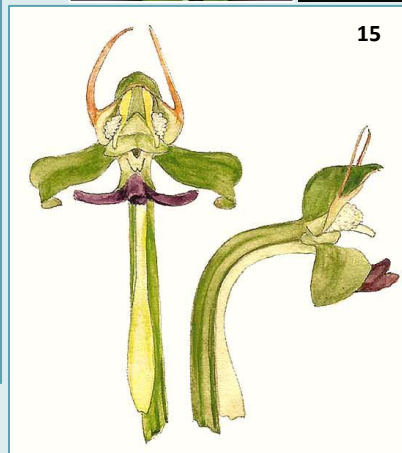
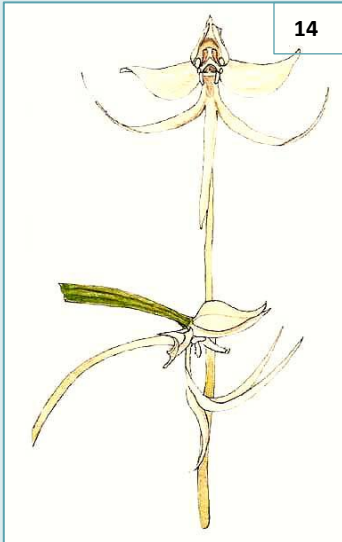
Flower drawings by Malik Fernando, coloured by Dorothy Fernando



The pollen of orchids falls into two groups: in one the pollen grains form waxy lumps; in the other group, the pollen is granular, powdery, or lamellate. *Habenaria*, a genus of ground orchids, falls into the latter group, with complex flowers that take weird, but beautiful, shapes. *Habenaria crinifera*—‘narilatha’ or ‘ahas makuluwa’ in Sinhala—is one of the better-known species on account of its fanciful shape (Fig. 11).



The flowers are clustered at the ends of tall peduncles that grow from a rosette of leaves, similar to the plants of *H. plantaginea* (Figs. 12, 13). These flowers are pollinated by moths—hence the white colour and the very long, nectar bearing spurs that the flowers have. The record for spur length must surely go to the ‘comet orchid’ *H. pterocarpa* (Fig. 14).



Plants of *H. acuminata* (Fig. 15), are grass-like, and found amidst grasses. The drawing shows its bipartite petals with ‘horns,’ attached to the dorsal sepal to form a hood, the spreading lateral sepals, and forked lip with a long spur curving down along the pedicel. The pollinia project forward, with adhesive tips that attach to the pollinating moth as it sips nectar.

The small orchids have varied and interesting flower shapes, best seen under magnification, as exemplified by Fig. 15. Some other orchid flowers are reproduced below. They were painted by Dorothy Fernando in the early nineteen-seventies, on enlarged drawings made by the writer.

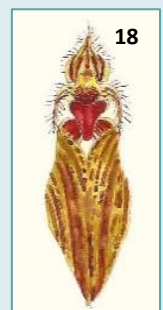
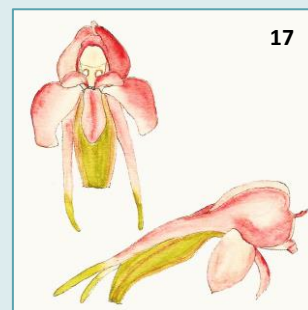
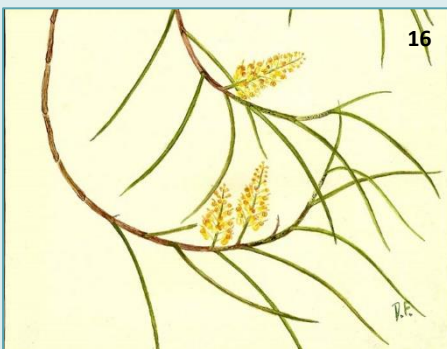


Fig. 16: *Seidenfadeniella filiformis* (Rchb.f.) Christenson & Ormerod is an up-country orchid. The pendulous stems have terete (cylindrical) leaves and small flowers on erect peduncles. Water colour by Dorothy Fernando, 1969, from Galway’s Land, Nuwara Eliya.

Fig. 17: *Satyrium nepalense*, the hyacinth orchid, is an up-country ground orchid found on patnas. The flowers, with two spurs, are clustered around tall peduncles.

Fig. 18: *Bulbophyllum wightii*, an epiphyte of the sub-montane zone, is a stunning sight in the wild. The lateral sepals are united, the dorsal sepal and the petals are hairy. The two or more flowers are borne in a spreading fan-shape. It is endemic, being one of 8 endemics of the genus out of a total of 11.

Fig. 19: *Malaxis discolor* is an endemic ground orchid, with the lip uppermost. The 3 mm flowers are yellow on opening and become maroon later. The leaves are attractively coloured, maroon, or green with maroon veins.

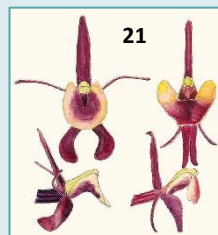
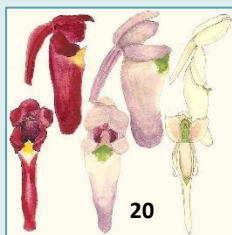
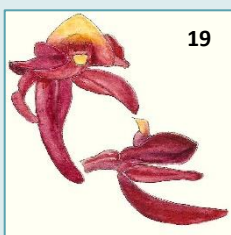


Fig. 20: Three species of *Robiquetia* – *brevifolia*, *rosea*, and *virescens* – growing on upcountry trees. They all have large, bulky, sac-like spurs.

Fig. 21: *Liparis walkerae* is a montane zone ground orchid, growing in shady, forested areas.

Fernando, S.S. & P. Ormerod, 2008. An Annotated Checklist of the Orchids of Sri Lanka, *Rheedea* 18(1): 1-28.

Jayaweera, D.M.A. in Dissanayake, M.D. & F.R. Fosberg, Eds., 1981. A Revised Handbook to the Flora of Ceylon, Vol. II Orchidaceae:1-386.

The National Red List 2020 – Conservation Status of the Flora of Sri Lanka, 2020. Sri Lanka: Biodiversity Secretariat, Ministry of Environment and the National Herbarium, Department of National Botanic Gardens. pp 254.

Kew Plants of the World Online – Royal Botanic Gardens, Kew.