

Wild Orchids Ecstasy in Karnataka Sector of the Western Ghats

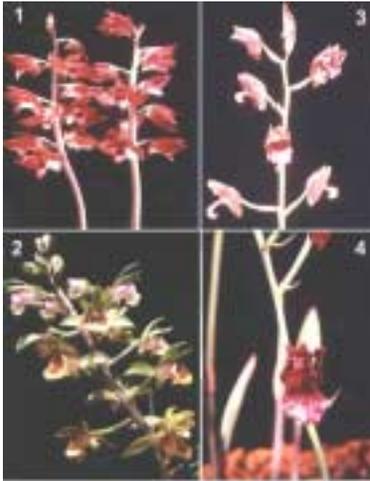


Plate 38 : Fig. 1. *Eulophia sessilifera*,
2. *Eulophia pulchra*, 3&4. *Eulophia spectabilis*



Plate 39 : *Chlorochilus pinnatifidus*



Plate 5 : *Acriodes maculosa*

Orchids are a unique group of flowering plants occurring in abundance in humid tropics and also in temperate areas. In India about c. 1200 species occurs of which the Western ghats has c. 275 species and Karnataka in particular has c. 175 species.

Orchids are either epiphytes or terrestrial. Among the terrestrial a few are saprophytes growing on decaying materials found in the soil. Such ground orchids have tubers with well developed roots, which are infested with mycorrhiza, a benevolent partner to absorb nutrition from the soil. As a contrast, epiphytic orchids are tree dwellers without any organic connection with their hosts. They develop aerial roots which have a capacity to absorb moisture from the atmosphere and swollen fleshy stems at the bottom which constitute pseudobulbs.

Orchids have herb like growth rarely shrub like growth forms with simple leaves in pairs or in clusters. A few orchids have variegated colours or patterns, externally. Internally, they have a distinct idioblastic pattern leading to their identification when they are not in flowering phase (Rao, 1998).

The most unique features of flowers are their shape, size and odour. They are symmetrical or asymmetrical in floral parts unlike the other flowers of plant kingdom. They exhibit an infinite variations in having dissimilar sepals and petals, with a varied lips, and a columns with fused style, stigma and stamen (Gynospemium). Another distinct features of the flowers are spurs and pollen grains aggregated together to form a pollinium with sticky base.

Flowers show a mimicry which is an indication of a deceitful pollination mechanism in the form of insects, spiders and animals. Another distinct feature in orchid flower is resupination, a phenomenon of twisting 180° to bring the lip into a position favourable for insect to land safely and bring about pollination.

Commercially a few orchids and their hybrids in cut flower trade are important in flower industry. Among the Indian orchids. *Dendrobium*, *Vanda*, *Cymbidium* have been much used in producing hybrids.

Orchids grow in nature by means of tiny seeds or by developing additional fresh seedlings (kekii). Commercially, they are grown in test tubes in special base in ascpitic conditions or by means of detached growing portion of leaves for large scale commercial production.



Plate 19 : *Clisostoma tenuifolium*

Wild orchids are to be protected from the rapacity of men like some of the wild animals. Hence, IUNC has a survival service commission with a red book for orchids alone.

In India, there are a very few books on orchids written by Indian specialists. In Karnataka, Santapau and Kapadia book, namely orchids of Bombay has a good account on orchids of Uttara Kannada District. In recent years two books exclusively dealing with orchids of Kodagu district have been published with detailed descriptions, photos and sketches supported by WWF for Nature - New Delhi. Further three orchidaria at regional levels, namely Cauvery Nisargadhama, Kushalnagar, Bhagavathi Nature Camp. Kudremukh and Dandeli Wildlife Sanctuary, Dandeli and at state level at Bannerghatta National Park, Bangalore (UNDP-Funds) with an objective view to study them in detail, to conserve them and eventually to help those who desire to breed and multiply them especially the ornamental orchids.

To date, it is well know that a recently published book namely conservation or orchids of Kodagu in the Western Ghats is virtually an illustrated orchid flora of a region recognised as a hot spot in Karnataka part of the western ghats. The orchid survey work is being continued, especially in the other recognised orchid hot spots namely, Kudremukh-Kemmanagundi sector and also in and out of Dandeli Wildlife sanctuary. The proposed survey when completed will comprises compendium of orchid flora of the Karnataka state composing representation of all orchids along with a few orchids reported in the past and their presence was not traced in the field at present. Further a few of the orchids which were collected during the present survey are also included. This is being done to complete the orchid ecstasy of the Karnataka state.

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