

**TERRESTRIAL WILD ENDEMIC ORCHID *EULOPHIA EPIDENDREA*
(KOENIG) OF PENINSULAR INDIA, KANYAKUMARI DISTRICT****Dr. R. Mary Suja* and Dr. B. Christudhas Williams**

Assistant Professor Department of Botany and Research Centre, Scott Christian College
(Autonomous) Nagercoil - 629 003.

Article Received on
06 June 2017,

Revised on 26 June 2017,
Accepted on 16 July 2017

DOI:10.20959/wjpr20178-8944

***Corresponding Author**

Dr. R. Mary Suja

Director William Research
Centre Nagercoil - 629001.

ABSTRACT

Orchids are most abundant in the forest of Western Ghats of India have been threatened in their natural habitat. The gathered orchid was further identified to the respective genus and species with general description and illustrations. The terrestrial orchid, *Eulophia epidendrea* (Koenig) endangered to Peninsular India, was floristically explore and preserved in the natural habitat of Pulathoor Hills, Kanyakumari District.

KEYWORDS: Orchid, *Eulophia epidendrea* (Koenig), Peninsular India, endemic, terrestrial, Kanyakumari District.

INTRODUCTION

The terrestrial orchid *Eulophia epidendrea* (Koenig) observed in bushes and rock cervices has an endemic and rare status due to increased plant exploration, critical taxonomic analysis of orchids in different regions with comparable climate and inadequate application of weedicides. The endemism in the flora of a country or geographical region provides an important insight into the biogeography of that region and also to the centres of diversity and adaptive evolution of the floristic components (Cooke, 1958). Orchids are very sensitive to habitat degradation and fragmentation (Misra, 2007). The Indian subcontinent has diverse climatic regimes and drifting of the Indian continents led to immigration and extinction of species (Axelrod, 1971).

MATERIALS AND METHODS

The morphological characters and distributional patterns of terrestrial orchid observed from the bushes and rock cervices at an altitude of about 1000 to 1500 feet of Pulathoor Hills,

Kanyakumari District. The southernmost end of peninsular India lies between 8°-20° North of the equator and between 70°-85° in longitude was recorded using GPS of the sites of occurrence. Photographs of the vegetative and reproductive (inflorescence) parts were compared with the description published in orchids of Nilgiris (Joseph, 1987).

ECOLOGY

Terrestrial shade loving bushes on rock cervices are ideal habitats of the Peninsular India. Humming birds and Butterflies visit the *Eulophia* species for nectar.

DISTRIBUTION

Endemic and rare in India



Plate 1: *Eulophia epidendrea* (Habit).



Plate 2: *Eulophia epidendrea* (Koenig) (Flower).

Eulophia R. Br. Ex Lindl. *E. epidendrea* (Koenig) Schltr., Die orchideen 346. 1915; Fischer in Bull. Misc. Inform. 1928: 283, 1928 & in Fl. Pres. Madras 1434. 1928 (Repr. ed). 3: 1003. 1957) *Serapias epidendracea* Koenig in Retz., Obs. Bot. 6:65. 1791. *Limodorum virens* Roxb.,

P1. Corom. t. 38. 1795. *Eulophia virens* (Roxb.) (R.Br.ex Lindl., Bot. Reg.7:subt.573.1821; Wight, Ic.3(1):10.t.913. 1845; Hook.f., Fl.Brit.Ind. 6:1:1890.

***Eulophia epidendrea* (Koenig)**

Terrestrial herbs, pseudobulbs ovoid-conical with narrow rings. Fresh ones covered by sheaths, older ones naked with sheath fibres. Leaves 22-45 x 5-10 cm, alternate, distichous, linear, acuminate, sheathing at base. Inflorescence raceme, 91-219 cm arises from the sides of the bulb, 45 flowered, lax with sheathing sterile bracts. Flowers 2.2-2.9 cm across, green with pink veins. Bracts 2.2 x 2.5 mm, ovate - lanceolate, acute. Pedicel 2.5-3cm. Sepals 0.4-0.5 cm, oblanceolate, acute, recurved towards the apex. Lip 0.7 x 1 cm, trilobed, trumpet-shaped, green towards the base, white towards the tip, obovate-oblong in outline, with three erect longitudinal ridges, margins of the ridges entire at the proximal end and crenulate-pectinate at the distal end. There are two more short lateral ridges at the distal end; sidelobes erect, with overlapping margins above the column; midlobe emarginated at tip; margins incurved, pink-streaked along the sides within and along the ridges. Spur 3.3 cm long, vermiform.

Flowering & Fruiting: October – November.

Specimen Examined: Barber 6556, Kallar; 100-700m.

ACKNOWLEDGEMENT

Authors are thankful to UGC Authorities and experts for providing financial assistant.

REFERENCES

1. Axelrod, D. I. Plate tectonics in relation to the history of angiosperm vegetation in India. Birbal Sahni Institute Paleobotany Special Publication, 1971; 1: 5-18.
2. Cooke, T. Flora of Bombay. Vol. 3. (Repd. Ed), Botanical Survey of India, Calcutta, 1958; 649.
3. Misra, S. Orchids of India – A Glimpse. Bishen Singh Mahendra Pal Singh, Dehradun, 2007; 402.
4. Joseph J. Orchids of Nilgiris, Printed by the Director Botanical Survey of India, New Delhi, India, 1987.