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**G.V. Gegi**

Research Scholar, Department  
of Botany and Research  
Centre, Scott Christian College  
(Autonomous) Nagercoil,  
Tamil Nadu, India

**Dr. B. Christudhas Williams**

Assistant Professor  
Department of Botany and  
Research Centre, Scott  
Christian College  
(Autonomous) Nagercoil, India

**Dr. R. Mary Suja**

Director  
William Research Centre  
Nagercoil -I, Tamil Nadu,  
India

**Correspondence:**

**Dr. B. Christudhas Williams**

Assistant Professor  
Department of Botany and  
Research Centre, Scott  
Christian College  
(Autonomous) Nagercoil, India

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### Orchids in Teak Plantation of Arukani Hills, India

G.V. Gegi, Dr. B. Christudhas Williams, Dr. R. Mary Suja

**Abstract**

The epiphytic orchids *Aerides ringens* (Lindl.) and *Acampe praemorsa* (Roxb.), were identified in the teak plantation of Kanyakumari District, India.

**Keywords:** Orchids, *Aerides ringens* (Lindl.), *Acampe praemorsa* (Roxb.), Kanyakumari district, species

**Introduction**

Orchidaceae is one of the largest flowering plant families with cosmopolitan in distribution. Orchids are profuse particularly in the humid tropics and sub-tropics so far 17,000 species have been known in the world and about 1,500 species in India. In peninsular India there are about 200 species in 60 genera and about 80 species in 29 genera in Kanyakumari District among these 22 species are found to be endemic, i.e. only confined to peninsular India. The Royal Botanical Gardens of Kew list 880 genera and nearly 22,000 accepted species but the exact number is unknown (perhaps as many as 25,000) because of taxonomic disputes. Increased plant exploration and critical taxonomic analysis of orchids in different regions with comparable climate and elevation is bound to throw more light on the inter and intra-specific variations of orchids and better knowledge of their distribution pattern and illustrated orchid floras help in stimulating the efforts (Joseph, 1987). Orchids are most abundant in the forest of Western Ghats of India have been threatened in their natural habitat. Orchids were further identified to the respective genus and species with general description and illustrations. The epiphytic orchid *Acampe praemorsa* grow luxuriously in teak plantations of Kanyakumari district (Christudhas and Suja, 2016).

**Materials and Method**

The epiphytic orchids *Aerides ringens* (Lindl.) and *Acampe praemorsa* (Roxb.), observed from the teak (*Tectona grandis*) plantation, at an altitude of about 500 to 1500 feet of Kanyakumari District, the southernmost end of the peninsular India lies between 8°-20° north of the equator and between 70°-85° in longitude. Photographs of the vegetative and reproductive (inflorescence) parts were compared with the description published in orchids of Nilgiris (Joseph, 1987)

**Description: *Aerides* Lour**

Flowers small, 1.5 cm across; midlobe ovate, entire; spur projecting downwards, more or less funnel shaped-----*A. ringens*

***Aerides ringens***

*A. ringens* (Lindl.) Fischer in Bull. Misc. Inform. 1928: 284.1928 & in Fl. Pres. Madras 1442. 1928. (Repr.ed.3:1008.1957); Sant & Kapad., Orch.Bombay 119.1966. *Saccolabium ringens* Lindl., Gen & Sp. Orch. 221.1833. *Aerides radicata* A. Rich., Ann. Sci.Nat. Bot.Ser.2,15:65.1841; Hook. f., Fl. Brit.Ind. 6:46, 1890. *Saccolabium paniculatum* Wight, Ic. 5(1): 9.t.1676.1851. *S. rubrum* auct. non Lindl: Wight, Ic.5(1): t.1673. 1851. *Aerides lineare* Hook f., Ic.1890.

Robust epiphytes, thick stem with persistent sheathing base of the leaves. Leaves alternate, distichous, articulate and sheathing at base, 6.5-24.5 x 1.0-2.5 cm, linear, unequally cleft at

apex, conduplicate in the axils of the upper leaves, erect, rigid, lax flowered. Peduncle is thick and terete with few sterile bracts at long intervals. Flowers are pink to creamy white or mauve, long pedicellate, bracts 5x3 mm, small triangular and acute. Ovary possess pedicel 2.0 x-1.9 cm long, dorsal sepal 9.5 x 4.0 mm, oblong and obtuse. Lateral sepals 6.5 x 5.9 mm, broader than the dorsal sepal, orbicular-obovate, attached to the sides of the foot of the column. Lateral petals 5.9 x 4.7 mm, shorter than the sepals, spreading, obovate-orbicular and obtuse. Lip trilobed, spurred, dark pink; side lobes small 1.7 x 2.5 mm, erect, obtuse; midlobe ovate, 9 x 5.1 mm, obtuse, with a median, ovoid, cleft callus at the mouth of the spur. Spur 6.3 mm long, bent forward, infundibuliform and obtuse at apex. The plants do not have pseudobulbs. Fruits 3.3 cm long, obovoid-oblong and ribbed. **Flowering:** March- April **Fruiting:** March – July Dec 31560, 31604; Ellis 38484, 43282; Lawson s.n (MH Acc. No. 50555); Rangachari 15252, 15256; Rathakrishnan 38051; Sebastine 3292; Sharma 35897; Shetty 34103; Subramanian 10553; Vajravelu 3499, 36797, 38225, 38427, 39651, 41756, 42871, 44985; Vivekanthan 40385; Wight s.n.(MH Acc.No 51054). Very common: Gudalur Cherambadi area, Kunnakombai, Kundha, Lakkadi, Karia shola, Kodanad shoal, Curzon valley; Alt. 600-2275 (**Plate- 1**).



**Plate-1** *Aerides ringens* – Habit

Robust plants; leaves thickly coriaceous spur shorter than the rest of the Lip-----**Acampe**

#### **Acampe Lindl.**

*Acampe praemorsa* (Roxb.) Blatt in Journ, Bomb.Nat.Hist.Soc. 35: 495. 1932; Snat. & Kapad., Orch Bombay 233.t.54.1966. *Epidendrum praemorsum* Roxb.Cor, Pl.34.t.43.1795. *Saccolabium praemorsum* (Roxb.) Hook.f.,Fl.Brit.Ind.6:1890. *Acampe wightiana* Lindl., Fol.Orch. *Acampe* 2.1853; Fischer in Fl.Pres. Madras 1447, 1928 (Repr.ed.3:1011.1957). *Saccolabium wightianum* (Lindl.) Hook.f.Fl.Brit.Ind.6:1890.

Robust plant with stout stem, 16 cm long, covered by sheathing bases of leaves, with persisting old inflorescence axis and long stout aerial roots among the leaves. Leaves alternate distichous, large and coriaceous, 8-17cm oblong, unequally deeply cleft at apex. Single branch possess 4 leaves, first leaf 22-2.5cm, second leaf 28-2.5cm, third leaf 18-2.5cm and fourth leaf 18-2.2cm. Inflorescence short, erect, corymbose panicles, 6-10 cm long, leaf opposed, peduncle stout with several copular sheathing bracts. Flowers dense, not wide opening, yellow, mildly sweet scented. Bracts 3.0 x 3.5 mm, broadly ovate, obtuse,

persistent ovary with pedicel 13 mm long, perianths fleshy with horizontal dark purplish streaks. Dorsal sepals 13.5x7.5 mm, obovate-oblong and obtuse with a mucro. Lateral petals 7.5x3.0 mm, oblanceolate-spathulate and obtuse. Lip 8.7 mm long, fleshy, trilobed, saccate at base; sidelobes small, narrow, erect, thick; midlobe 6.5x4 mm, ligulate, ovate-oblong, more or less reflexed, obtuse, fleshy, irregularly crenulate at margins, tuberculate on the upper surface; base saccate, long slender, papillose within. Column short, stout, 2 mm long with two small terminal horns, on each side. Fruits sub-sessile, erect, more or less in cluster, sub-cylindric, longitudinally ribbed; young fruits 7 cm long. **Flowering:** May **Fruiting:** June Vajravelu 45021, Nellithorai forest: Alt. 350 m. (**Plate-2**).



**Plate-2** *Acampe praemorsa* (Roxb.) - Habit

#### **Conclusion**

The presence of large number of orchid species in Indian forests are now at the verge of extinction and some of them have become so rare that a large number of botanical teams were unable to trace them. Burning and falling of forest trees for timber has been the major cause for the depletion of Indian orchid wealth therefore mitigation measures related to conserving the natural wealth ought to be supposed in order to enduring the growth of orchids affected by the anthropogenic activities.

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#### **References**

1. Abraham and Vatsala, 1981. Introduction to orchids, printed by the St. Josephs Press Trivandrum, South India.
2. Christudhas Williams. B. and Mary Suja, R. 2016. Orchids in teak (*Tectona grandis*) plantation of Kanyakumari district, Tamil Nadu – India. *International Journal of Engineering Research and Modern Education* 1(1):11-13
3. Joseph.J, 1987 Orchids of Nilgiris, Printed by the Director Botanical Survey of India, New Delhi, India.
4. Judd, Walter S., Christopher S. Campbell, Elizabeth A. Kellogg, Peter F. Stevens, Michael J. Donoghue: 2007. *Plant Systematics: A Phylogenetic Approach*, Sinauer Associates Inc.