

Miscellaneous note

Natural fruit set in *Vanilla wightiana* Lindl., an endangered species from Andhra Pradesh, India. Y S Rao, K Mary Mathew, K J Madhusoodanan, M R Sudharshan, V Krishna Kumar & S N Potty, *Indian Cardamom Research Institute, Kochi - 682 025, India.*

Vanilla wightiana Lindl., described as an extremely endangered wild species, occurs in the Eastern Ghat forest ranges of East Godavari District of Andhra Pradesh, India. This species grows in restricted elevated mounds at more than 100 scattered patches surrounding Surampalem, Kondapalli, Sharabhavaram, Manjuvaram, Labbarthi, Lagarai, Kindra, Vayyedu, Ammirekula and Bornegudem villages of Rajavommangi Taluk of East Godavari District and Kakarapadu and

Pittachalam villages of neighbouring Kovvuru Taluk of Visakhapatnam District. Hemadri & Rao (1997) also reported this species from Kuppam forest range in Chittoor District and it could presumably be a new record for the sub-arid zone of Rayalseema. The plant is a herbaceous perennial root climber characterized by a succulent stem and absence of leaves. The most peculiar feature of this species is its capability for natural fruit set (Fig. 1), unlike in majority of cultivated vanilla, where hand pollination is an essential requisite. This species is more adapted to adverse climatic conditions like low rainfall and high temperatures. Moreover, the plants were free of diseases/pests in their natural habitat. Hemadri & Rao (1997) reported that this species is popular among the local people for its use in veterinary medicine.

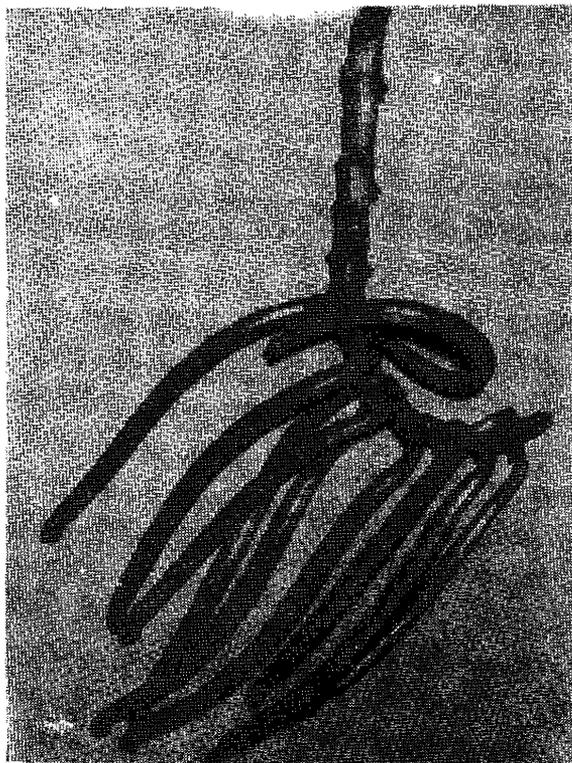


Fig. 1. Naturally set pods of *Vanilla wightiana*

Flowers are white and smaller when compared to those of *V. planifolia*. Sepals are oblong and lanceolate and the upper two petals resemble sepals in the case of cultivated species. Likewise, the lower petal is modified as the labellum. Gynostemium which is attached to the labellum as well as the flab like rostellum are much reduced in size when compared to that in *V. planifolia*. Black ants and butterflies frequently visited the flowers, which indicated the possibility of insect pollination directly or indirectly. The mature processed beans had vanillin comparable to that of *V. planifolia*.

Our survey indicated that this rare species of *Vanilla* would be wiped out if stringent measures are not taken up for preventing indiscriminate cutting of host trees for firewood and other purposes by the local people. The potentiality of this species in breeding programmes is to be exploited as it has desirable characters such as natural fruit set and adaptability to dry and warm climate.

Reference: Hemadri K C & Rao S S 1997 Discovery of *Vanilla wightiana* Lindl. an endangered orchid from Chittoor District (AP). Ind. Med. December : 4.