

## RESEARCH ARTICLE

# Phyto - chemical and morpho-anatomical studies with ecological implications in *Coelogyne flaccida* Lindl. (Orchid) of India

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### SUMMARY

The ecological adaptability of *Coelogyne flaccida* Lindl. is based on morphological, anatomical and preliminary phytochemical compounds present in the leaf, stem/pseudo bulb and root. The anatomical features of leaf showing absorbing trichomes, large mid-rib vascular bundle, abundant small vascular bundles on the adaxial side, and also the adaxial cells below the epidermis showing chloroplast pigment. The pseudo bulb showing the cortical cells with pitted thickening and the root with fibrous mat on the exodermis. The preliminary phytochemicals, recorded in the leaf are flavonoids, steroids, terpenoids and tannins. From the observations it is showing, the Darjeeling readings are more when compared to Kerala collection due to its elevation and climatic factors.

**Key Words :** Anatomy, Phytochemical, *Cflaccida*, Root, Stem, Leaf

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