

Coelogyne pulverula or *Coelogyne tomentosa*

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In the last *OSGB Journal* issue (*OSGBJ* 56: p250 (2007)), my attention was caught by a well-flowered mature specimen plant from the genus *Coelogyne*. This plant was labelled as *Coelogyne tomentosa* Lindl. but on closer examination appeared to be *Coelogyne pulverula* Teijsm. & Binn. In order to tell both taxa apart, I dived into Dudley Clayton's monograph¹ to confirm this identification. Here are some characteristics that could be useful to distinguish these two commonly encountered species in collections.

First of all, let's just consider the old synonymy of both taxa. Not so long ago, *Coel. pulverula* was known as *Coel. dayana* Rchb.f. and *Coel. tomentosa* plants were labelled *Coel. massangeana* Rchb.f. To deepen the confusion, Henry Nicholas Ridley (1855-1956) considered that there was no difference between them, although it has now been recognised by Kew that these species are distinct (<http://www.kew.org/wcsp/monocots>). However, further molecular evidence is still needed to confirm their position within the genus *Coelogyne*. Up to now, they are placed in the section *Tomentosae* of which *Coel. tomentosa* is the type species.

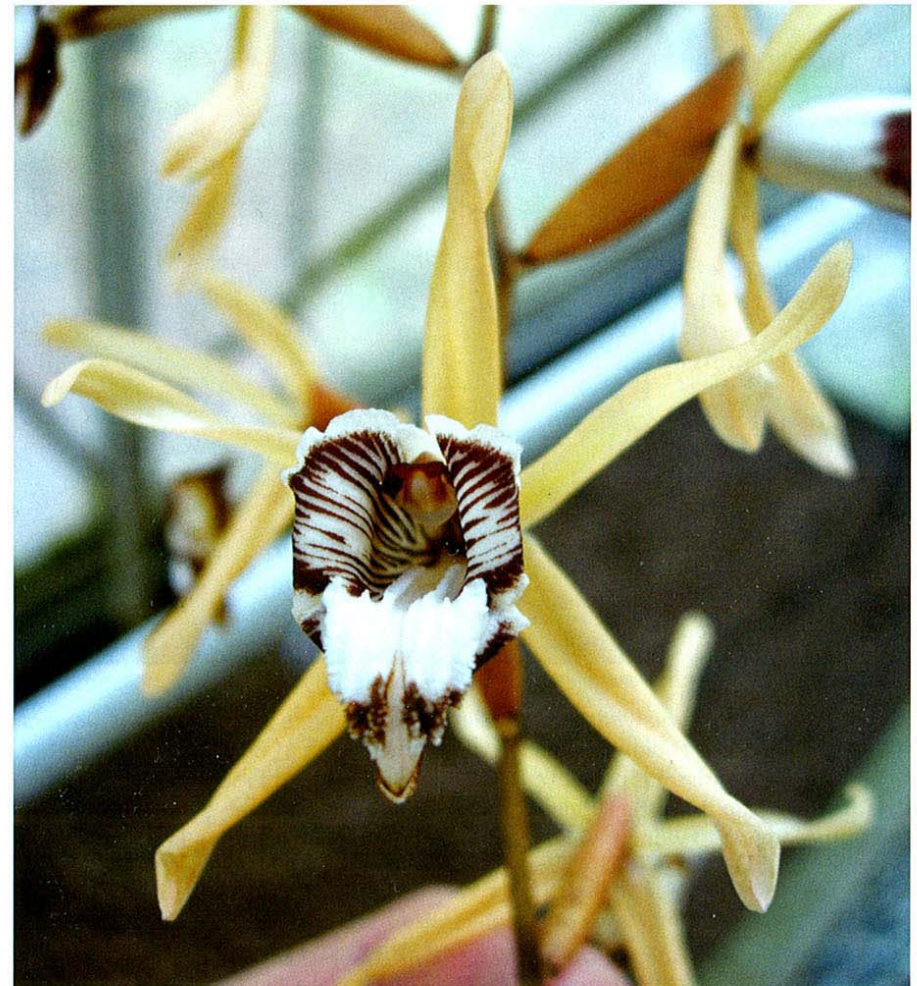
From a vegetative point of view, both species possess pseudobulbs that are close together. No creeping rhizome with well-spaced pseudobulbs (like in *Coel. pandurata* Lindl., the fiddle-shaped so-called Black Orchid) is present. *Coel. pulverula* is proteranthous to synanthous, which means that the inflorescence develops before or during leaf unfolding in the new shoots. On the contrary, *Coel. tomentosa* is heteranthous (flowering after pseudobulb completion). This characteristic is by far the easiest way to differentiate both species.



Coelogyne tomentosa



Coelogyne pandurata



Coelogyne pulverula

Coelogyne pulverula or *Coelogyne tomentosa*

The mid-lobe of the lip of *Coel. tomentosa* presents a callus of three keels extending from the base of the lip whereas the callus of *Coel. pulverula* only displays two keels (see photo). The length of the floral bract (leaf-like structure) relative to the ovary is also clearly different, the ovary of *Coel. pulverula* being completely enclosed within the bract.

I must admit that this note is rather technical but this is another way to describe and understand orchids! I hope that you will find this information useful to confirm the identification of plants present in your collections.

¹Clayton D. (2002) *The Genus Coelogyne: A Synopsis*. Natural History Publications (Borneo) in association with the Royal Botanical Gardens (Kew, Richmond, England), 316pp.