

# The rDNA sequence analysis of Three Dendrobium species

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摘要

## **Abstract**

Positive molecular identification of medicinal plants is necessary to their misuse. *Dendrobii Caulis* is a famous Chinese herbal medicine traditionally used in ophthalmology. However, the identification of the species based on morphology is difficult. In this study, three *Dendrobium* species were collected and differentiated by the sequences of partial rDNA (ribosomal DNA) sections which contain the ITS 1, 5.8S, and ITS 2 regions. The *Dendrobium* species used in this research included *Dendrobium tosaense*, *Dendrobium officinale*, and *Dendrobium moniliforme*. The length of PCR products are 632 nt for *D. tosaense*, 627 nt for *D. officinale*, and 628 nt for *D. moniliforme*, respectively. The similarities of the rDNA region between the species pairs shown range from 91% to 95%. The results we present here may be helpful in identifying other species of *Dendrobium*.  
Key words: *Dendrobium*, phylogeny, rDNA, ITS