STUDY THE DIVERSITY OF DENDROBIUM VARIETIES BY ANALYZING THE ITS SEQUENCE

Tran Duc Phuc, Do Nang Vinh, Ha Thi Thuy, Vu Anh Tuan, Vu Hong Van, Mai Thi Van Khanh, Cao Thi Cham, Nguyen Van Toan, Nguyen Thanh Duc, Vu Van Tien

Summary

The Orchidaceae is one of the largest and the most diverse families of flowering plants. Many Dendrobium varieties are very similar in outward appearances, making it difficult to identify one species from another. Therefore, in this study, we have analyzed the ITS (Internal Transcribed Spacer) sequence of 12 Dendrobium species, which were collected and maintained in our greenhouse for evaluating genetic diversity. The results of PCR helped us to classify and distinguish the name for 10 of the 12 Dendrobium species. Specially, the result also showed that not all D. officinale Kimura et Migo sold in Vietnam is exactly D. officinale when the sample D1.9 is similar 99% with Dendrobium denovianum. At the same time, we have distinguished that there were two new Dendrobium species (T3 and TR) which have never named before.

Keywords: Dendrobium, diversity, ITS (internal transcribed space).