

## PCR-RFLP and RFLP analysis of intergeneric hybrids combining for *Ascocenda* and *Phalaenopsis*

Tsai, Chi-Chu, I-Szu Weng and Wen-Lin Liu<sup>1</sup>

### Abstract

The *Phalaenopsis* is one of potential and high economic crops in Taiwan. The genetic inheritance of intergeneric hybrids combining *Ascocenda* John De Biase "Blue" (♀) and *Phalaenopsis* Chih Shang's Stripes (♂) (F<sub>1</sub>) were detected by PCR-restriction fragment length polymorphism (PCR-RFLP). Twenty-seven lines were randomly selected for following DNA analysis. In ITS analysis, those hybrids showed biparental patterns. Furthermore, the *trnL* intron of chloroplast genome (cpDNA) was also analyzed by RCR-RFLP. The result showed that cpDNA was maternal inheritance in the intergeneric hybrids.

Key words: PCR-restriction fragment length polymorphism, nuclear ribosomal DNA, internal transcribed spacer, chloroplast genome, maternal inheritance

---

<sup>1</sup>Associate researcher, assistant researcher and assistant, respectively, Kaohsiung District Agricultural Research and Extension Station, Pingtung County, Taiwan, ROC.