

Development and Application of Primers for the Detection of *Cinnamomum burmannii* BI

陳季倫、李世傑、梁志欽

E-mail: 387166@mail.dyu.edu.tw

ABSTRACT

Cinnamomum osmophloeum Kaneh. is a native species of Lauraceae Arbor in Taiwan. International use of *C. osmophloeum* has considerable years of history, and is widely used in medicine, food, water and soil conservation, afforestation and cosmetics industry. It is very high economic crops. In recent years, the seed industry introduction *Cinnamomum burmannii* BI of alien to the name of *C. osmophloeum* is for the purpose of environmental greening tree species. Due to the appearance of morphological is the similar for that of *C. osmophloeum* and *C. burmannii*, and are difficulty to resolution between two species. Create the disputes of Species, and studies have found that *C. osmophloeum* and *C. burmannii* who has the possibility of a natural hybrid, deepened the difficulties of identified. In this study, PCR-based DNA molecular marker technology - RAPD (randomly amplified polymorphic DNA) was designed the gene specific primers were used to identify the endemism DNA bands of *C. burmannii*, and. A specific bands at 323bp by electrophoretic analysis will be observed. As a results, *C. burmannii* will be identified and distinguished. This molecular authentic methodology will be provided other than currently used traditional morphological way. The PCR amplified specific bands which correspond to *C. osmophloeum* and *C. burmannii* has revealed the possibility of natural hybridization in these two species. Our results can be provided as a references of valuable for further research.

Keywords : *Cinnamomum osmophloeum*、*Cinnamomum burmannii*、RAPD、Gene Specific primers

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