

Confirming of Origin of Magnoliae Flos on the DNA analysis method and Identification

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Most species in the genus *Magnolia* have been used for oriental medicinal purposes in the name of “*Flos Magnoliae*(Sin-ii)”. Among the “*Magnolia*” species, five species, *Manolia denudata*, *Manolia biondii*, *Manolia liliiflora*, *Manolia sprengeri*, *Manolia kobus* were most used as publicly certified medicinal material in Korea, China. Phylogenetic analysis, using the neighbor joining method of 22 species of the “*Magnolia*” genus and its allies based on tRNA coding leucine/phenylalanine (*trnL-F*) sequences and NADH dehydrogenase subunit F (*ndhF*) sequence in chloroplast DNA were presented in this study. For the identification of “*Magnolia*” species, polymerase chain reaction (PCR) analysis of chloroplast DNA regions such as *trnL-F* and *ndhF* have proven an appropriate method. A single nucleotide polymorphism (SNP) has been identified between genuine “Sin-ii” or their fraudulent and misuse. Specific PCR primers were designed from this polymorphic site within the sequence data, and were used to detect true plants via multiplex PCR.