

P125

### Whitening effects about melanoma B16 cells of propenone derivative

Choi, Jeong-sook and Choi, Hyun-sook\*

Dept. of Beauty design, Gyeongdo Provincial College Gyeongsangbuk-do  
Dept. of Beauty art design, Daegu Technical college (Lecturer)\*

The results of the research for effect about whitening function of propenone derivative are as follow : propenone was observed to have toxicity of over 100  $\mu$ M for the mouse melanoma B16 cells, and thus the experiment was conducted on the concentration in which toxicity was not observed. propenone derivative inhibited the activity of tyrosinase concentration-dependently. propenone derivative inhibited concentration-dependently the biosynthesis of protein for tyrosinase, TRP-1 and TRP-2. propenone derivative inhibited the generation of melanin by inhibiting the biosynthesis of tyrosinase, TRP-1 and TRP-2. Compared with the biosynthesis-inhibiting effect of biosynthesis of tyrosinase, TRP-1 and TRP-2, however, the inhibiting effects of tyrosinase enzyme activation was relatively weak. Therefore, in this experiment, it was verified that propenone derivative derivative can be possibly used as the material of cosmetics for whitening by primarily inhibiting the biosynthesis of enzymes related to the generation of melanin

P126

### The Classification of Genus *Malus* and Detection of Specific Band of Species Using ISSR Markers

Joo Soo Choi, Bok Kyu Lee and Man Kyu Huh

Dept. of Molecular Biology, Dong-eui University

*Malus* is a long-lived woody species mostly distributed in East Asia. *K. pictus* has been regarded as ecologically important species in Korea. Inter simple sequence repeat (ISSR) markers were performed in order to analyse the phylogenetic relationships of eight taxa of *Malus asiatica*: *Malus pumila* var. *dulcissima*, *Malus sieboldii*, *Malus micromalus*, *Malus baccata*, *Malus baccata* var. *mandshurica* and *Malus baccata* for. minor. Genetic and taxonomic relationships of eight species of genus *Malus* were investigated using inter simple sequence repeat (ISSR) markers. Of the 11 primers screened, Many produced highly reproducible ISSR bands. Analysis of ISSR from individual plants of Korean *A*. The phylogenetic tree clearly distinguished the eight Korean *Malus* taxa. The narrow genetic basis of these gene pools may be the results of local adaptation. It is suggested that the isolation of geographical distance and reproductive isolation among genus *Malus* species may have played roles in shaping of these species. ISSRs appear to be useful taxonomic studies at levels ranging from populations to species and perhaps genera.