



**DETERMINATION OF THE VOLATILE COMPOUNDS FROM MULTIPLE PARTS
OF *CITRUS GRANDIS* (L.) OSBECK FLOWERS GROWN IN TAIWAN**

Chen, H-C¹, Huang, H-H², Chu, L-P³, Wang, N-T⁴, Lay, S-J⁵

d91628004@ntu.edu.tw

¹*Department of Cosmeceutics, China Medical University, Taichung, Taiwan, ROC*

²*Department of Horticulture and Landscape Architecture, National Taiwan University, Taipei, Taiwan, ROC*

³*Department of Orthopedics, Shun Tian Hospital, Taichung, Taiwan, ROC*

⁴*Taichung District Agricultural Research and Extension Station, Council of Agriculture, Executive Yuan, Changhua, Taiwan, ROC*

⁵*Taoyuan District Agricultural Research and Extension Station, Council of Agriculture, Executive Yuan, Taoyuan, Taiwan, ROC*

The volatile compounds obtained from multiple parts of fresh pomelo flowers (*Citrus grandis* (L.) Osbeck grown in Taiwan), including whole flowers, flower buds, petals, filaments, anthers plus pollen, ovaries, stigmas, and receptacles, were identified by solid phase microextraction (SPME) coupled with gas chromatography (GC) and gas chromatography/mass spectrometry (GC/MS). The essential oils of the pomelo flowers were extracted by steam distillation. Fifty compounds were identified. The major volatile compounds present in the whole flowers, flower buds, petals, filaments, and anthers plus pollens were linalool, limonene, α -pinene and α -ocimene while ovaries, stigmas, receptacles, and essential oils were α -pinene, limonene and α -ocimene. Flowers contained a higher percentage of linalool compared with the essential oil extract. Among the flower parts examined, higher percentages of terpene esters were identified in essential oil extracts.