

Morphological Characteristics, Effective Component Contents and Genetic Relationships of Honeysuckle Germplasm

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Honeysuckle (*Lonicera japonica*), a staple traditional Chinese medicine, has been widely used in China. Morphological characteristics, effective component contents and genetic relationships of 21 honeysuckle germplasm were investigated. Morphological characteristics analysis showed that the 21 honeysuckle germplasm were divided into 4 groups: i) 8 cultivars from different provinces, ii) 4 cultivars with red flowers, iii) 6 wild germplasm, iv) 3 cultivars from Hunan province. Contents of chlorogenic acid were very different among the 21 germplasm. The contents ranged from 0.992% to 3.275%. Higher contents of several honeysuckle cultivars or wild germplasm were detected. Based on the ITS sequence (723 bp), 21 honeysuckle germplasm were clustered into 2 clades. One clade included the 3 cultivars from Hunan province and 1 wild germplasm from Zhejiang province, and other germplasm formed the other clade. Mantel test showed significant correlation between genetic distances based on morphology characteristics and ITS sequence of 21 honeysuckle germplasm ($P < 0.01$). The results are useful for the effective and sustainable utilization of honeysuckles germplasm.

Evaluation and HPLC Analysis of Nanoscale TCM Formulation

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Nanotechnology is one of the modern technologies in 21 Century. Nanotechnology covers a wide range of industries, and therefore the potential benefits are also widespread, including Medicine, Pharmacy and Traditional Chinese Medicine. Nanoscale traditional Chinese medicine have a larger surface area and easy to be absorbed. Property comparisons between the nanoscale traditional Chinese medicine and classic traditional Chinese medicine by conventional extraction process are then executed through chemical and biological analysis. This study had established the dry methods for preparing nanoscale traditional Chinese medicine, quality control and safety evaluation.

To evaluate the nanoscale San Huang Xie Xin Tang, including the measurement of particles size by TEM and SEM, MTT assay and HPLC analysis. In this study we will report part of our results, and give some comments for quality control of nanoscale TCM. And the results will be provided as references for Committee on Chinese Medicine and Pharmacy, DOH, Executive Yuan and GMP pharmaceutical factories

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