

2nd International Conference and Exhibition on **Pharmacognosy, Phytochemistry & Natural Products**

August 25-27, 2014 DoubleTree by Hilton Beijing, China



Yuan-Shiun Chang

China Medical University, Taichung, Taiwan

Authentication and quality control of TCM herbs and herbal preparations

Traditional Chinese Medicine has been very popular in Taiwan in the past. TCM was incorporated in the National Insurance since 1995. TCM herbs and herbal preparations are indispensable in TCM. The quality control of TCM herbs and herbal preparations are of crucial importance to the clinical efficacy of TCM. Through a study analyzing the TCM extract preparations used in Taiwan's National Health Insurance; it was found out that there were 305 compound formulae extract and 353 single herb extracts used. The total amount of each extract used annually was sorted in descending order. Among the 301 compound formulae, the top 135 account for 90% of the total amount used. Among the 353 single herb extracts, top 157 account for 90% of the total amount used. Due to geographic or historical reasons, different Chinese herbal materials may be called the same names or the same material be called with different names. Using the wrong plant species, may not lead to the expected clinical efficacy and may cause poisoning or death. Therefore the authentication of TCM herbs is of crucial importance to the quality control of TCM herbs. The major identification methods of TCM herbs such as species identification, morphological identification, microscopic identification, chemical identification, biological identification and genetic DNA identification need to be discussed. The current regulations and quality control practice of TCM herbs and herbal preparations in Taiwan together with some of the work we did in related areas will be discussed. The contents includes major identification methods of TCM herbs, compilation of Taiwan Herbal Pharmacopeia (THP) 2013, commonly misused herbal species, chemical specifications such as loss on drying, total ash, acid insoluble ash, water soluble, alcohol soluble and assay of marker constituents. The sulfur dioxide residue, heavy metal contents, organochlorine pesticides residues in the herbs and herbal preparations also need to be addressed. The quality control of TCM herbs is much more difficult than that of active pharmaceutical ingredients in western medicines. Good quality of TCM herbal preparations only comes from TCM herbs with good quality and the authenticity of TCM herbs is the first point of concern for quality.

Biography

Yuan-Shiun Chang completed his PhD in Pharmacognosy from University of Illinois at Chicago, USA. He is currently serving as a Professor of Pharmacognosy in School of Chinese Pharmaceutical Sciences and Medicine Resources, College of Pharmacy, China Medical University. He is also a Consultant at Chinese Crude Drug Pharmacy, University Hospital, China Medical University. He has also served as a Director of Institute of Chinese Pharmaceutical Sciences, China Medical University and Chief Secretary of China Medical College. He has more than 60 publications in various journals of repute. His research majors are Medicinal Botany, Pharmacognosy, Chinese Materia Medica, Phytochemistry, Quality Control of Crude Drugs and Pharmacology.

yschang0404@gmail.com