Application and Identification of Chinese Herbal Medicines

Hsien-Chang Chang

Bureau of Food and Drug Analysis, Department of Health, Executive Yuan

Chinese herbal drug materials are the raw materials used for production of herb extracts and piece drugs. They are also important medicinal resources for academic research and industrial manufacturing of Chinese medicine to protect the public health. The authenticity and quality of herbal drug material also plays an important role in affecting the therapeutic effects of finish products. The sources of commercial drug articles are in great chaos. Usually there are several commercial articles sold under the same name, but they are derived from different sources; or there are several articles with different names, which are definitely derived from the same source. Hence, the misuse or the adulteration of herbal drug materials often happen that can greatly affect the health of consumers.

On the Chinese herb drug market in Taiwan, erroneous uses or combined uses of Chinese herb drugs frequently occurs. As a consequence, the homonymic and heteronymous drug trading and difficulty in the purchase of some authentic drugs, adulterated or substituted drugs commonly occur. The most commonly encountered herbal drug materials in this aspect include Taraxaci Herba, Trachelospermi Caulis, Akebiae Caulis, Saposhnikoviae Radix, Drynariae Rhizoma, Cusutae Semen, Aristolochiae Fructus, Pulsatillae Radix, Achyranthis Radix, Vaccariae Semen, Cnidii Monnieri Fructus, Polygoni Avicularis Herba, Artemisiae Capillaris Herba, and so on. Currently, there are improved approaches to identify the raw materials, and as such, the erroneous uses and combined uses of herbal drug materials on the market and among the practitioners of this trade can be avoided. Namely, herbal drug materials can be identified for their authenticity by scientific methods; or for their sources through investigating herbals, discriminating their general properties and phytohistological microscopic examination. These approaches, in combination with a series of pharmacological tests, will enable us to assert the quality and safety of drugs in drug administration.