

Studies on Adulteration and Misusage of *Trichosanthis Radix* in Taiwan Market

Hsien-Chang Chang*, Mei-Shu Chuang and Jer-Huei Lin

Division of Pharmacognosy

ABSTRACT

Trichosanthis Radix (Kua-lou-ken) is a commonly used Chinese herbal medicine that has been used to "clear heat, moisten dryness, discharge pus, disperse swelling, promote secretion of fluids, and quench thirst." *Trichosanthis Radix* was first appeared in the Tu Ching Pen Tsao under the name Tien-hua-feng, as derived from the whitish powder grounded from the roots. It is presented in the Shen Nung Pai Taso Ching as a medium-grade drug. The sources of *Trichosanthis Radix* are mainly the roots of *Trichosanthes kirilowii* Maxim., *Trichosanthes rosthornii* Harms of the Cucurbitaceae family, and other closely related plants.

In order to ascertain the botanical origins of this herb, we purchased fifty samples of kua-lou-ken from Chinese herbal stores in Taipei, Taichung, and Kaohsiung areas, and collected *T. kirilowii*, *T. rosthornii*, *T. cucumeroides* (Seringe) Maxim. Ex Fr. & Sav., *Melithria heterophylla* (Lour.) Cogn. And *Momordica cochinchinensis* (Lour.) Spreng as the authentic materials. Samples were compared with authentic materials with their characteristics identified by morphology and microscopy.

The results showed that the forty-six samples were identified as *Trichosanthes kirilowii* Maxim., three were *Trichosanthes rosthornii* Harms and one was *Trichosanthes laceribractea* Hayata.

Keyword : *Trichosanthis Radix*, *Trichosanthes kirilowii*, Kua-lou-ken, Adulteration.