

# Studies on Adulteration and Misusage of Marketed Tachi

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## ABSTRACT

The origins of Tachi (大戟) have been regarded as the dried roots of *Euphorbia pekinensis* Rupr (京大戟) of Euphorbiaceae or *Knoxia valerianoides* Thorel ex Pitard (紅大戟) of Rubiaceae. Tachi was found to be adulterated with root of *Salvia yunnanensis* C. H. Wright in a previous experiment, therefore we established approaches to distinguish among *E. pekinensis* Rupr, *K. valerianoides* Thorel ex Pitard, *Salvia miltiorrhiza* Bge. and *S. yunnanensis* C. H. Wright in this study.

Fifty samples of Tachi were purchased from Chinese herbal stores in Taipei, Taichung and Kaohsiung areas. Those samples were distinguished from the authentic materials by morphology, microscopy and thin layer chromatographic analysis. The result showed that forty-two were *K. valerianoides* Thorel ex Pitard, seven were *Morinda officinalis* How. and one was *K. valerianoides* Thorel ex Pitard mixed with other herbs. None of them were *E. pekinensis* Rupr. According to results, most of commercial herbs of Tachi were *K. valerianoides* Thorel ex Pitard.. We suspected the adulterant, *M. officinalis* How., might result from similar pronunciation of “Tachi” and “Pachi” .

Key words : *Euphorbia pekinensis* 、 *Knoxia valerianoides* 、 *Salvia miltiorrhiza* 、 *Salvia yunnanensis* 、 pharmacognosy