Studies on Authenticity of Marketed Pa-Chi-Tien

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ABSTRACT

Pa-chi-tien (Morindae Radix), commonly abbreviated as Pa-chi (巴戟), has been widely used for millennia as a type of traditional Chinese medicine. The traditional usage indicates that it could warm kidney, supplementing male potency, and strengthen muscles and bones. The root of *Modinda officinalis* How (巴戟天) (Rubiaceae) is adopted as the authentic origin of Morindae Radix. In order to clarify the botanical origins of the marketed raw materials in Taiwan, we collected three samples with similar appearances including the root of *Morinda umbellata* L. (羊角藤), *Damnacanthus indicus* L. (恩施巴戟), and *Damnacanthus officinarum* Hiang (四川虎刺) as the reference specimens. Thirty samples were compared to the Pa-chi-tien and the above reference specimens by pharmacognosy study and chemical identification. In this investigation, all the samples were identified as *Modinda officinalis* How (巴戟天).

Key words: *Modinda officinalis* How, *Morinda umbellata* L, *Damnacanthus indicus* L, identification