

Phytochemical investigations from Polygonum Hydropiper, Laksa, and Dandelion

T. L. Huang

Department of Safety, Health and Environmental Engineering, Ming Chi University of Technology, 84 Gong-Juan Rd., Taishan, New Taipei 24301, Taiwan, ROC

R. S. Chang

Master & PhD Program in Biotechnology Industry, Chang Gung University, 259 Wen-Hwa 1st Road, Kwei-Shan Dist, Tao-Yuan City 33302, Taiwan, ROC

R. M. Wu*

Center for Environmental Sustainability and Human Health, Ming Chi University of Technology, Taishan, New Taipei 24301, Taiwan, ROC

Abstract:

This study analyzes the major chemical constituents of two Polygonaceae plants and one Asteraceae plant using a water extraction method. The selected plants are Persicaria hydropiper (water pepper), Persicaria odorata (laksa leaf), and Taraxacum officinale (dandelion), chosen for their traditional use as liver-protective foods. The results indicate that the primary chemical compound in Persicaria hydropiper is rutin, in Persicaria odorata is miquelianin, and in Taraxacum officinale is neochlorogenic acid. These compounds—rutin, miquelianin, and neochlorogenic acid—exhibit significant antioxidant and anti-inflammatory functions and health benefits.

Keywords:

Dandelion, Hydropiper, Laksa, neochlorogenic acid, rutin.