Latin American Journal of Pharmacy
(formerly *Acta Farmacéutica Bonaerense)*
Lat. Am. J. Pharm. **28** (2): 284-7 (2009)

Short Communication

Received: October 27, 2008
Accepted: January 3, 2009

Free Radical Scavenging Activity and Flavonoids Contents of *Polygonum orientale* Leaf, Stem and Seed Extracts

Xinyu JIANG, Xiaoqing CHEN * & Yan WEI

College of Chemistry and Chemical Engineering,
Central South University, Changsha 410083, PR China

SUMMARY. **The present study was designed to explore the total flavonoid and taxifolin contents and the radical scavenging activity of 50% ethanol extracts of Polygonum orientale leaf, stem and seed by 2,2-diphenyl-1-picrylhydrazyl (DPPH) assay. The extract with higher total flavonoid content has higher radical scavenging activity. Taxifolin (IC50 = 2.83 μmol/L) has stronger antioxidant activity than that of rutin (IC50 = 3.08 μmol/L). The free radical scavenging potential of the chloroform, ethyl acetate, water, ethanol and methanol extracts of *P. orientale* seed were also investigated. The free radical scavenging abilities of various extracts were determined as: methanol > ethanol > water > ethyl acetate > chloroform.**

KEY WORDS: Extract, Flavonoid, Free radical scavenging, Polygonum orientale, Taxifolin.

* Author to whom correspondence should be addressed. *Email:* xqchencsu@yahoo.com

ISSN 0326-2383