

Two Alkaloids from *Portulaca oleracea* L. and their Antioxidant and Antiacetylcholinesterase Activities

Chunhui HAN¹ #, Qizhen ZHU² #, Aijing LENG¹, Wenjie ZHANG² * & Jing LIU¹ *

¹ Stem Cells Clinical Research Institution, the First Affiliated Hospital of Dalian Medical University, Dalian, People's Republic of China

² School of Pharmacy, Liaoning University of Traditional Chinese Medicine, Dalian, the People's Republic of China

SUMMARY. Three compounds with similar structures were isolated from *Portulaca oleracea* L. by means of preparative UHPLC and identified by ¹H NMR and ¹³C NMR, and the two alkaloids were isolated from *P. oleracea* for the first time. The two alkaloids presented good antioxidant by the assay of scavenging DPPH radical and antiacetylcholinesterase activities by the modified Ellman's method, respectively.

RESUMEN. Se aislaron tres compuestos con estructuras similares de *Portulaca oleracea* L. mediante UHPLC preparativa y se identificaron mediante ¹H NMR y ¹³C NMR, y los dos alcaloides se aislaron de *P. oleracea* por primera vez. Los dos alcaloides presentaron un buen antioxidante mediante el ensayo de eliminación del radical DPPH y las actividades antiacetilcolinesterasa mediante el método de Ellman modificado, respectivamente.

KEY WORDS: alkaloids, antiacetylcholinesterase, antioxidant, *Portulaca oleracea* L.

These authors contributed equally to this work.

* Authors to whom correspondence should be addressed. E-mails: zhangwenjielnzy@163.com (W. Zhang); liujing@dmu.edu.cn (J. Liu).