

Two New Natural Products from *Portulaca oleracea* L. and their Antioxidant and Antiacetylcholinesterase Activities

Haoran XU¹, Wenjie ZHANG¹, Aijing LENG^{2*} & Xixiang YING^{1*}

¹ School of Pharmacy, Liaoning University of Traditional Chinese Medicine,
Dalian, People's Republic of China

² Department of Pharmacy, First Affiliated Hospital of Dalian Medical University,
Dalian, People's Republic of China

SUMMARY. Two new natural products already known from synthesis, benzoic acid, 4-[(2-hydroxyethyl)amino] carbonyl]-methyl ester (**1**) and benzoic acid, 3-[(2-hydroxyethyl)amino]carbonyl]-methyl ester (**2**) were isolated from *Portulaca oleracea* L. for the first time and their structures were identified using spectroscopic methods including ¹HNMR, ¹³CNMR and HR-ESI(+)-TOF-MS. Both compounds presented antioxidant activity with IC₅₀ of 56.49 and 54.89 μg/mL and antiacetylcholinesterase activity with IC₅₀ of 28.95 and 24.38 μg/mL, respectively.

RESUMEN. Dos nuevos productos naturales ya conocidos por síntesis, el éster 4-[(2-hidroxi-etil) amino] carbonil]-metilo del ácido benzoico (**1**) y el éster 3-[(2-hidroxi-etil) amino] carbonil] -metilo del ácido benzoico (**2**) se aislaron de *Portulaca oleracea* L. por primera vez y sus estructuras se identificaron utilizando métodos espectroscópicos que incluyen ¹HNMR, ¹³CNMR y HR-ESI(+)-TOF-MS. Ambos compuestos presentaron actividades antioxidante con IC₅₀ de 56.49 y 54.89 μg/mL y actividad antiacetilcolinesterasa con IC₅₀ de 28.95 y 24.38 μg/mL, respectivamente.

KEY WORDS: antiacetylcholinesterase activity, antioxidant activity, *Portulaca oleracea* L., two new natural products.

* Authors to whom correspondence should be addressed. E-mail: yingxixiang@163.com (Xixiang Ying), L18098877517@163.com (Aijing Leng)