

A New Indole Alkaloid from *Portulaca oleracea* L. and its Antiacetylcholinesterase Activity

Wen XU ¹#, Fangxuan LIU ²#, Haibo WANG ¹, Wenjie ZHANG ¹, Fan HE ¹* & Xixiang YING ¹*

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

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

SUMMARY. A new indole alkaloid, identified as (*E*)-1-(5,6-dihydroxy-1H-indol-1-yl)-3-(3,4-dihydroxyphenyl)prop-2-en-1-one, named oleraindole C was obtained from *Portulaca oleracea* L. Its structure was determined by spectroscopic methods, including the 1D and 2D NMR, high-resolution electrospray ionization time-of-flight mass spectrometry. The compound presented antiacetylcholinesterase activity with IC₅₀ value of 44.75 ± 0.08 μM.

RESUMEN. Un nuevo alcaloide indol, identificado como (*E*) -1- (5,6-dihidroxi-1H-indol-1-il) -3- (3,4-dihidroxi-fenil) prop-2-en-1-ona, llamado oleraindol C se obtuvo de *Portulaca oleracea* L. Su estructura se determinó por métodos espectroscópicos, que incluyen la espectrometría de masas de tiempo de vuelo de ionización por electrospray de alta resolución de RMN 1D y 2D. El compuesto presentó actividad antiacetilcolinesterasa con un valor de IC₅₀ de 44.75 ± 0.08 μM.

KEY WORDS: antiacetylcholinesterase activity, indole alkaloid, isolation, *Portulaca oleracea* L.

* Authors to whom correspondence should be addressed. *E-mails:* yingxixiang@163.com (X. Ying); nisahe@126.com (F. He).

Wen Xu and Fangxuan Liu contributed equally to this work.