

Two Alkaloids Isolated from *Portulaca oleracea* L. and their Activities

Shengnan GUO ¹ #, Lei SHI ² #, Wenjie ZHANG ¹, Hui LENG ² *, & Xixiang YING ¹ *

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

² Affiliated Hospital, Liaoning University of Traditional Chinese Medicine,
Shenyang, the People's Republic of China

SUMMARY. Two alkaloids, identified as tardioxopiperazine B and variecolorin G, were for the first time isolated from *Portulaca oleracea* L., which presented antiacetylcholinesterase activity with IC₅₀ of 43.23 and 47.22 µg/mL, respectively. In addition, the anti-inflammatory effects of tardioxopiperazine B on lipopolysaccharide-stimulated macrophages was also investigated.

RESUMEN. Dos alcaloides, identificados como tardioxopiperazina B y variecolorina G, se aislaron por primera vez de *Portulaca oleracea* L., que presentó actividad antiacetilcolinesterasa con IC₅₀ de 43.23 y 47.22 µg/mL, respectivamente. Además, también se investigaron los efectos antiinflamatorios de la tardioxopiperazina B sobre macrófagos estimulados con lipopolisacáridos.

KEY WORDS: antiacetylcholinesterase, anti-inflammation, indole diketopiperazine alkaloids, *Portulaca oleracea* L.

* Authors to whom correspondence should be addressed. E-mails: yingxixiang@163.com (X. Ying); lengh1976@163.com (H. Leng).

These authors contributed equally to this work.