

# **The anti-nociceptive effects of a marine-derived compound WPJ-3 in neuropathic rats**

Li-Pei-Jyuan(李佩娟)<sup>1</sup>,  
Shi-Ying Huang (黃世英)<sup>1</sup> Ping-Jyun Sung (宋秉鈞)<sup>2</sup>, Zhi-Hong Wen (溫志宏)<sup>1</sup>

<sup>1</sup>Department of Marine Biotechnology and Resources, National Sun Yat-sen University, Kaohsiung, Taiwan

<sup>2</sup>Taiwan Coral Research Center, National Museum of Marine Biology and Aquarium, Pingtung, Taiwan

Recent studies have reported that natural marine compounds may offer great potential for the development of novel drugs, including anti-inflammatory drugs and analgesics. Chronic neuroinflammation, which involves sustained inflammatory states within the central nervous system, can lead the development and maintenance of neuropathic pain. Neuropathic pain syndromes, often characterized by hyperalgesia and allodynia in patients, are resistant to clinical treatment with opioids and other analgesics. In the present study, we utilized the chronic constriction injury (CCI) model, a well-established rat model of neuropathic pain, for characterization of the potential antinociceptive properties of WPJ-3. The present study showed that WPJ-3 significantly produced analgesic and CCI-induced effects in neuropathic rats.