第27屆 27th Symposium On Natural Products 天然藥物研討會

主辦單位

高雄醫學大學藥學院天然藥物研究所
衛生署中醫藥委員會

協辦單位

國家科學委員會、國立海洋生物博物館、高雄市政府
中華天然藥物學會、財團法人高醫藥學文教基金會

高雄醫學大學
Kaohsiung Medical University
天然藥物研究所
GRADUATE INSTITURE OF NATURAL PRODUCTS
807 高雄市三民區十全一路100號
TEL：(07) 3121101 轉 2685

李家琳

P-131

Anti-neutrophilic Inflammatory Secondary Metabolites from Traditional Chinese Medicine, Tiankuizi

Chia-Lin Lee,[†,‡] Yang-Chang Wu,*[,†,‡,§] Tsong-Long Hwang,[⊥] Chieh-Yu Peng,[†,‡] Chao-Jung Chen,[∥,▽] and Yuan-Shiun Chang[○]

[†]*School of Chinese Medicine, China Medical University, Taichung 40402, Taiwan.*

[‡]*Natural Medicinal Products Research Center, China Medical University Hospital, Taichung 40402, Taiwan.*

[§]*Graduate Institute of Natural Products, Kaohsiung Medical University, Kaohsiung 80708, Taiwan.*

[⊥]*Graduate Institute of Natural Products, Chang Gung University, Taoyuan 33302, Taiwan.*

[∥]*Graduate Institute of Integrated Medicine, China Medical University, Taichung 40402, Taiwan.*

[▽]*Proteomics Core Laboratory, Department of Medical Research, China Medical University Hospital, Taichung, 40402, Taiwan.*

[○]*School of Chinese Pharmaceutical Sciences and Chinese Medicine Resources, China Medical University, Taichung 404, Taiwan.*

Through bioassay-guided fractionation, thirteen compounds (**1-13**) isolated from the dry root of *Semiaquilegia adoxoides*, which is called as Tiankuizi in the traditional Chinese medicine. Among these secondary metabolites, four benzoic acid derivatives (**1**, **2**, **4**, **5**), one 2*H*-pyran-2-one, 4,6-dimethoxy-5-methyl (**10**) and one 1,2,3-propanetriol (**13**) were first found in *S. adoxoides*. Compound **10** was a naturally occurring constituent first isolated from natural resource as well. 4-Hydroxybenzoic acid (**1**) and 3,4-dihyroxybenzoic acid (**2**) showed selective inhibition against elastase release and superoxide anion generation with IC_{50} values of 3.20 and 6.21 μg/mL, respectively. Overall, our studies identified isolates **1** and **2** as promising lead compounds and Tiankuizi (*S. adoxoides*) as a potential plant source of new agents for neutrophilic inflammatory diseases.

Key words: *Semiaquilegia adoxoides*, Tiankuizi, Ranunculaceae, anti-neutrophilic inflammatory activity