

Abstract

In order to search the chemical foundation of bioactivity, develop quality control method and production process, chemical studies of two traditional chinese medicine *Eclipta prostrata* L. and *Corydalis yanhusuo* W. T. Wang were carried out.

The dried whole plant of *Eclipta prostrata* L. is known as ‘Mo-han-lian’ in traditional Chinese medicines. It belongs to Asteraceae family. The main cultivating places of *E. prostrata* are Jiangsu, Jiangxi, Zhejiang and Guangdong province. It has been used for the treatment of haemorrhage, hepatitis and snake venom poisoning, *et al.*. In order to elucidate the chemical compositions in this Chinese materia medica, systematical isolation was carried out by using several chromatographic separation techniques. Finally, 11 compounds was isolated and purified, 6 of them was identified as Pomalic acid (**EP-1**), Echinocystic acid (**EP-2**), oleanolic acid (**EP-3**), luteolin-7-*O*- β -D-glucoside (**EP-4**), stigmasterol-3-*O*- β -D-glucopyranoside (**EP-5**), stigmasterol (**EP-6**). Among them, **EP-1** was isolated from this plant for the first time.

Corydalis yanhusuo W. T. Wang (family Papaveraceae), yan-hu-suo in Chinese, is a famous traditional Chinese medicine. It is used in China to relieve pain of chest, abdomen and dysmenorrhea. It was reported that the benzyloisoquinoline alkaloids, which are the main chemical components in *C. yanhusuo*, had anti-tumor activities. Study on the chemical compositions in *C. yanhusuo* is helpful for its anti-tumoral activity studies. Therefore, in present study, we had systematically investigated on the chemical constituents of *C. yanhusuo*. 19 compounds had been isolated from the 70% EtOH extract of this plant. By spectroscopic methods as well as the physical and chemical properties of separated compounds, the structures of 17 compounds were identified as dihydrochelerythrine (**CY-1**), dehydrocorydaline (**CY-2**), tetrahydrocolumbamine (**CY-3**), berberine (**CY-4**), palmatine (**CY-5**), tetrahydropalmatine (**CY-6**), isocorybulbine (**CY-7**), corydaline (**CY-8**), tetrahydrocoptisine (**CY-9**), jarrorrbizine (**CY-10**), coptisine (**CY-11**), emodin (**CY-12**), physcion (**CY-13**), 3 β -hydroxy-olean-11,13 (18)-dien-28-oic acid (**CY-14**), stigmasterol (**CY-15**), β -sitosterol (**CY-16**) and daucosterol (**CY-17**). Among them,

CY-1 and **CY-12~CY-14** were isolated from this plant for the first time.

Key words: *Eclipta prostrata* L., Pomalic acid, *Corydalis yanhusuo*, Isoquinoline alkaloids, Anthraquinones