

Isolation and Structure Determination of Cytotoxic Compounds with Topoisomerase I and II Inhibitory Activity from the spikes of *Prunella vulgaris var. lilacina*

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*Prunella vulgaris var. lilacina* (Labiatae) has been used as a Korean traditional medicine for the treatment of fever, inflammation, urinary disadvantage and cancer. We previously isolated three  $\alpha$ -amyrin triterpenoids from *n*-butanol-1 extract. They are 3 $\alpha$ -hydroxyurs-12-ene-28-oic acid (ursolic acid), 2 $\alpha$ , 3 $\alpha$ -dihydroxyurs-12-ene-28-oic acid and 2 $\alpha$ , 3 $\alpha$ , 19 $\alpha$ -trihydroxyurs-12-ene-28-oic acid (euscaphic acid) exhibiting cytotoxicity and topoisomerase I inhibition.

In our continuous research for anti-cancer compounds from this plant, we found that the methylene chloride extract as well as *n*-butanol-1 extract of this plant showed cytotoxic activity against HepG2 cell line and topoisomerase I and II inhibition. By activity-guided isolation, we isolated several compounds from methylene chloride extract.

[PD2-11] [ 10/17/2002 (Thr) 09:30 - 12:30 / Hall C ]

Comparison of Ginsenosides Composition in Various Panax Ginseng Roots Cultivated in Different Places and Years

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This study was carried out to obtain basic informations that can be used in index for Korea ginseng (*Panax ginseng* C.A. Meyer) cultivated in East Asia (Geumsan, Ganghwa, Punggi, Umsong, Jinan, Hongchon, Jilin, Nagano). Ginsenosides composition in various Panax ginseng roots cultivated in different places and years were carried by the Shibata method. The average about total saponins and each ginsenosides content of four year-age Ginseng *Radix aquosa* cultivated in Korea were higher than those of ginseng cultivated for its longer period. The order of the total saponins content per unit weight was four year-age > five year-age > six year-age > three year-age Ginseng *Radix aquosa*. Especially, four year-age Ginseng *Radix aquosa* cultivated in Geumsan contained the highest ginsenosides among the East Asia area. But, six year-age Ginseng *Radix aquosa* cultivated in Ganghwa contained the highest ginsenosides among the cultivated in Korea.

[PD2-12] [ 10/17/2002 (Thr) 09:30 - 12:30 / Hall C ]

Quantitative Analysis of 6-gingerol in the Zingiberis Rhizoma by Processing Methods

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On the quality control of commercial Zingiberis Rhizoma and its processed product, quantitative determination of 6-gingerol using HPLC method has been conducted. Quantitative analysis of 6-gingerol in Zingiberis Rhizoma showed average 0.359% in 14 samples collected throughout the regions of Korea. The contents of 6-gingerol in Zingiberis Rhizoma were decreased during the processing procedure (0.306%).

[PD2-13] [ 10/17/2002 (Thr) 09:30 - 12:30 / Hall C ]

Three New Diarylheptanoids from the Roots of Juglans mandshurica