

ethylacetate fraction by repeated column chromatography. Their structures were elucidated by the physicochemical and spectral data such as UV, IR and NMR to be germanicyl acetate, β -sistosterol, oleanolic acid and 8 β -15-dihydroxy-1(10),3,11(13)-guaianatrien-12,6-olide-15-O-glucopyranoside, the later compound is first reported from this plant.

[PD2-11] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Inhibitory Effects of the Essential Oils on Acetaminophen-Induced Lipid Peroxidation in the Rat

Choi Jongwon¹, Lee Kyung-Tae², Jung Won-Tae³, Jung Hyun-Ju⁴, Lee Seung-Hyung⁴, Park Hee-Juhn⁰⁴

¹College of Pharmacy, Kyungsung University, ²College of Pharmacy, Kyung-Hee University, ³Central Research Institute, Il-Yang Pharmaceutical Co., ⁴Division of Applied Plant Sciences, Sangji University

Inhibitory effects of the essential oils obtained from ten herbs were tested on acetaminophen-induced lipid peroxidation in the rat. The oil of *Artemisia princeps* var. *orientalis* buds (AP-oil) showed the most significant hepatic malondialdehyde value which was comparable to those of ascorbic acid and methionine. This was warranted by the protective effect on hepatic glutathione depletion. Overview of the data on the activities of hepatic microsomal enzymes, aminopyrine N-demethylase and aniline hydroxylase led to the notice that the suppressed activities of those enzymes are mainly responsible for the anti-lipid peroxidation. The interpretation of GC-MS data on the AP-oil revealed the ingredient of cineol, thujone, carvone, borneol, camphor and terpineol.

[PD2-12] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Apoptosis-Inducing Activity of Lactonic Compounds from *Actinodaphne lancifolia* in HL60-c15 Cells

Min ByungSun⁰, Kwon OkKyoung, Oh SeiRyang, Ahn KyungSeop, Kim TaeJin, Kim MiRan, Jung HyunJu, Kim TaeJin, Lee HyeongKyu

Immunomodulator Research Laboratory, Korea Research Institute of Bioscience and Biotechnology, Taejeon 305-600, Korea

Three C₁₆-lactonic compounds, isolancifolide (1), lancifolide (2), and actinolide B (3), were isolated from a hexane-soluble fraction of the stems of *Actinodaphne lancifolia* (Lauraceae). Their structures were determined by chemical and spectroscopic means, which included the determination of a chiral center by a modification of Mosher's method. These compounds (1-3) examined for their apoptosis-inducing activity in human promyelocytic leukemia HL60-c15 cells. Isolancifolide (1) and lancifolide (2) induced apoptosis as found by fluorescein labeled Annexin V and activated caspase?. While actinolide B (3) was only weak active.

[PD2-13] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Cytotoxic Diarylheptanoids from the Roots of *Juglans mandshurica*

Li Gao^{0†}, Xu MingLu†, Kim JaeHyon†, Seo ChangSeob†, Lee KyungSeon†, Lee ChongSoon‡, Woo MiHee§, Lee SeungHo†, Son JongKeun†*

College of Pharmacy, Yeungnam University, Gyongsan, 712-749, Korea, Department of Biochemistry, College of Science, Yeungnam University, Gyongsan 712-749, Korea and College of Pharmacy, Catholic University of Daegu, Gyongsan, 712-702, Korea