

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

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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

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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*

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The roots of *Juglans mandshurica* has been used as a folk medicine for treatment of cancer in Korea. In the course of isolating cytotoxic compounds from this plant, we isolated two new and two known diarylheptanoids along with one known sesquiterpenoid and their structures were elucidated on the basis of spectroscopic studies. Four of these compounds exhibited moderate cytotoxicities in ranges of IC₅₀ from 2 to 25 µg/ml against human colon carcinoma and human lung carcinoma cell lines.

[PD2-14] [04/19/2002 (Fri) 10:00 – 13:00 / Hall E]

Constituents from the roots of *Hemerocallis fulva*

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Besides chrysophanol and friedelin, five mixtures of *n*-hydrocarbons [pentacosane(72.6%), heptacosane (14.6%), tetracosane(5.8%), nonacosane(4.1%) and hexacosane(2.9%)], *n*-hydrocarbon alcohols [octacosanol(70.5%) and hexacosanol(29.5%)], 1-monoacyl glycerols [acyl part, behenic acid(43.5%), lignoceric acid(32.4%), cerotic acid (9.3%), tricosanoic acid(8.9%), pentacosanoic acid(2.6%), octacosanoic acid(2.3%), heneicosanoic acid(1.0%)], waxes [behenic acid(56.3%); lignoceric acid(23.0%) cerotic acid(19.8%), tricosanoic acid(4.6%), octacosanoic acid(4.0%), pentacosanoic acid(1.7%), triacontanoic acid(0.6%)/ octacosanol(33.7%), hexacosanol(21.0%), tetracosanol(15.6%), triacontanol (10.5%); docosanol(6.0%), tricosanol(6.0%), heptacosanol(4.2%), nonacosanol(3.0%)] and sterols [β -sitosterol(73.2%), stigmasterol(14.6%), campesterol(12.2%)] were isolated from the roots of *Hemerocallis fulva*. A mixture of 1-monoacyl glycerols is the first isolation from this plant. All compounds were identified on the basis of spectral data and chemical reactions.

[PD2-15] [04/19/2002 (Fri) 10:00 – 13:00 / Hall E]

Two new non-glycosidic iridoids from *Patrinia saniculaefolia*

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Patrinia saniculaefolia Hemsley (Valerianaceae) is an endemic species in Korea. The whole plant was extracted with methanol, then suspended in H₂O and successively partitioned with hexane, CH₂Cl₂ and *n*-BuOH. Repeated column chromatography of the hexane soluble fraction afforded two new non-glycosidic iridoids. On the basis of ¹H, ¹³C-NMR, HMQC, HMBC and ¹H-¹H ROESY spectral data, their structures were established as butanoic acid, 3-methyl-1-[(1R,3R,5S,7aS)-1, 3, 5, 7a-tetrahydro-3, 5-dimethoxy-7-(hydroxymethyl)-1-(3-methyl-1-oxo-but-oxy)cyclopenta[c]pyran-4-yl]methyl ester(1) and butanoic acid 3-methyl-1-[(1R,3R,5R,7aS)-1, 3, 5, 7a-tetrahydro-3, 5-dimethoxy-7-(hydroxymethyl)-1-(3-methyl-1-oxo-but-oxy)cyclopenta[c]pyran-4-yl]methyl ester(2), which were named patridoid I and patridoid II, respectively.

[PD2-16] [04/19/2002 (Fri) 10:00 – 13:00 / Hall E]

Cerebrosides and Triterpene Glycosides from the root of *Aster scaber*

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