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 H_2O and successively partitioned with hexane, CH_2Cl_2 and *n*-BuOH. Repeated column chromatography of the hexane soluble fraction afforded two new non-glycosidic iridoids. On the basis of ^1H, ^{13}C-NMR, HMQC, HMBC and ^1H-^1H ROESY spectral data, their structures were established as butonoic acid, 3-methyl-,[(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 butonoic acid 3-methyl-,[(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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Aster scaber Thunb. (Asteraceae) is widespread and cultivated as culinary vegetables in Korea. *Aster* species have been used in traditional Chinese medicine to treat bruises, snakebite, headache and dizziness.[1] Recently, triterpene glycosides and volitile compounds have been reported from *Aster scaber*.[2, 3] In our previous study on the aerial part of this plant, we reported four antiviral quinic acid derivatives and two new monoterpene hydroperoxides.[4, 5] In the course of our search for the topoisomerase I inhibitor from Korean traditional medicine, three cerebrosides and four triterpene glycosides were isolated from the root of *Aster scaber*. In this poster, the structure of isolated compounds are to be discussed.

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4) Kwon,H.C., Jung,C.M., Shin,C.G., Lee,J.K., Choi, S. U., Kim,S.Y., Lee, K. R., *Chem. Pharm. Bull.*, 48, 1796-1798 (2000)
5) Jung, C.M., Kwon, H.C., K.R.Lee, *Planta Medica*, 67, 482-484 (2001)

[PD2-17] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Cytotoxic Saponins from the Starfish Certonardoa Semiregularis

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In our search for cytotoxic metabolites from the starfish Certonardoa Semiregularis, we have isolated ten new glycosides of polyhydroxysterols designated as certonardoside A-J and the known halityloside D from the brine shrimp active fraction of the methanolic extract. The structures were determined based on spectral analysis and chemical manipulation. Certonardoside A-E contained previously undescribed 2-O-methyl-β-D-xylopyranosyl-(1®2)-3-O-sulfonato-β-D-xylopyranosyl unit. The 2,4-di-O-methyl-β-D-xylopyranosyl-(1®2)-β-D-xylofuranosyl unit in certonardoside F-H were also unprecedented.

[PD2-18] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Lactonic Compounds from the Leaves of Litsea japonica and Their Anti-complement Activity

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Three new lactonic compounds, litsenolides KR1-3 (1-3), were isolated from a hexane-soluble fraction of the leaves of *Litsea japonica* (Lauraceae), together with three known hamabiwalactone A (4), hamabiwalactone B (5), and (±)- litsenolide B (6). The structures of new lactones were determined as 5-methyl-3-(1,15,17-octadecadienylidene)-2(5H)-furanone (1), and 5-methly-3-(1,11-teradecadienyl)-2(5H)-furanone (2), dihydro-4-hydroxy-5-methyl-3-(1-dodecane-11-ynyl)-2(3H)-furanone (3), respectively, by chemical and spectroscopic means. The stereochemistry of a hydroxyl group at C-5 in litsenolide KR3 (3) was determined by a modification of Mosher's method.
As anti-complement activity of lactones isolated from *L. japonica*, litsenolide KR1 (1), litsenolide KR2 (2), hamabiwalactone A (4), and hamabiwalactone B (5) showed inhibitory activity against classical pathway complement system with 50% inhibitory concentrations (IC_{50}) values of 17, 227, 186, and 37 μg/ml, respectively, while litsenolide K3 (3) and (±)- litsenolide B (6) were inactive.