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_2CI_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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