respectively. EtOAc-soluble fraction showed the significant inhibition of edema in the two assays. Phytochemical isolation afforded kalopanaxsaponin A, hederagenin 3-O-β-D-glucopyranosyl (1-2)-α-L-arabinopyranoside, caffeic acid and liriodendrin. The three main components, caffeic acid, kalopanaxsaponin A and liriodendrin exhibited significant antiinflammatory action by intraperitoneal administration at 10 ㎎/㎏ dose ($p<0.01$), respectively. The three components also exhibited antinociceptive actions in writhing- and hot plate tests. These results suggest that the stem bark of *A. senticosus* will be applicable for the treatment of rheumatoid arthritis.

[PD2-8] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Phenolic Compounds from Sophora japonica wood

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Sophora japonica is called as Chinese scholar tree or Japanese pagoda tree. This species which belongs to Leguminosae family, is used in the traditional medicine. To isolate compounds, column chromatography was used with various solvent system in silica gel and Sephadex LH-20. To identify compounds, instrumental analyses(NMR spectrometry including 1H-1H COSY, NOESY, HMQC, HMBC and Mass spectrometry) were performed.
From the Wood of S. japonica, eight phenolic compounds were isolated and identified as follows : irisolidone, biochanin A, formononetin, 7-hydroxy-4'-methoxyisoflavanone, puerol A, 5-hydroxypseudobaptigen-2'-O-β-D-glucopyranoside, biochanin A-7-O-β-D-xylopyranosyl-(1-6)-β-D-glucopyranoside and (-)maackiain. Among these compounds, 5-hydroxypseudobaptigen-2'-O-β-D-glucopyranoside is the new compound.

[PD2-9] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Flavonoid glycosides and coumarins from Euodia danielli

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Euodia daniellii HEMSLEY(Rutaceae) is a plant endemic to Korea. It has been used as a folkmedicine for gastric inflammation, extermination of noxious insects, and headache. Four flavonoid glycosides, vitexin, hesperidin and evodioside B from leaves and flavaprin and evodioside B from fruits were isolated. And also, three coumarins, bergapten, xanthotoxin and isopimpinellin from fruits were isolated. Among them, six compounds with the exception of bergapten were isolated from this plant for the first time. Bergapten showed cyclooxygenase-2 inhibitory activity with an IC50 value of 6.2 μg/ml. All the isolates exhibited no cytotoxicity against the human tumor cell lines, A549, SKOV-3, SKMEL-2, XF498, and HCT15.

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

Terpenoid constituents from Youngia x. koidzumiana

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Youngia x. koidzumiana is an indigenous plant growing in Mt. Chiri. In our ongoing research for indigenous plant growing in Korea, we investigated the chemical constituents from the MeOH extract of *Y x. koidzumiana* whole plants. The MeOH extract was partitioned with hexane, ethylacetate, BuOH, successively. Four known compounds (YK-4-C, YK-6-D, YK-10-B, YK-18-B) were isolated from

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 8β
,15-dihydroxy-1(10),3,11(13)-guaiatrien-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 C_{16}-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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