*determined by the interpretation of spectroscopic data obtained from various NMR techniques.* A variety of bioassay for them are in progress.

[PD2-5] [ 04/19/2002 (Fri) 10:00 - 13:00 / Hall E ]

## A New Uracil Derivative and A New Acylglycosyl Sterol from Quisqualis Fructus

Kwon HakCheol°, Choi SangZin, Min YongDeuk, Lee SungOk, Kim SooHak, Kim KyungRan, Lee JongSoon, Lee KangRo

Natural Products Laboratory, College of Pharmacy, SungKyunKwan University, Suwon 440-746, Korea and Department of Biochemistry, YeungNam University, GyongSan, 712-749, Korea.

*Quisqualis Fructus is a Korean traditional medicine to treat ascariasis.*[1] *Quisqualic acid and trigonelline* were reported from Quisqualis Fructus.[2] In the course of our searching for topoisomerase I inhibitor from Korean traditional medicine, Quisqualis Fructus exhibited moderative activity. The research of this source led *to isolate a new uracil derivative and a new acylglycosyl sterol together with five known compounds. On the* basis of spectroscopic data, their structures have been elucidated as 1-(2-amino-1,4-dioxan-3-yl)-uracil, 3-*O*-[6-*O*-(8-octadecenoyl)-glycosyl] epicodisterol, 3-amino-acrylamide, pyridylglycine, epicodisterol, betulinic acid and ursolic acid methyl ester. The topoisomerase I inhibitory effect of these compounds are under study.

1) Shanghai Science and Technologic Publisher and Shougakukan, The Dictionary of Chinese Drugs, Shougakukan, Tokyo, pp.1035-1037 (1985)
2) Takemoto, T., Takagi, N. Nakajima, T. and Koike, K., Yakugaku Zasshi, 95 (2), 176-179 (1975)

[PD2-6] [ 04/19/2002 (Fri) 10:00 - 13:00 / Hall E ]

## Antioxidative activity of Acanthopanax chiisanensis Fructus

Kim JIYeon°, Yang KiSook

college of Pharmacy,Sookmyung Women's University.Seoul140-742,Korea

Acanthopanax spp. are one of the traditional tonic agents.They has been used as analgesics,stimulant of immune system and replenishment of body functions.In order to estimate the antioxidative activity of *Acanthopanax chiisanensis Fructus,we measured anti-lipid peroxidative efficacy on human low density* lipoprotein(LDL)with TBARS(2-thiobarbituric acid)assay from it's MeOH extract.And we tested superoxide scavenging activity by Free radical scavenging assay.Superoxide radicals are generated in a phenazin *methosulfate(PMS)-beta-nicotinamide adenine dinucleotide(reduced from,NADH)system by oxidation of* NADH and assayed by the reduction of nitroblue tetrazolium(NBT).

[PD2-7] [ 04/19/2002 (Fri) 10:00 - 13:00 / Hall E ]

## Antiinflammatory and Antinociceptive Principles of the Acanthopanax senticosus Stem Bark

Jung Hyun-Ju°[1], Park Hee-Juhn[1], Lee Kyung-Tae[2], Choi Jongwon[3]

[1]Division of Applied Plant Sciences, Sangji University, [2]College of Pharmacy, Kyung-Hee University, [3]College of Pharmacy, Kyungsung University

MeOH extract of the stem bark of *Acanthopanax senticosus* (Araliaceae) was fractionated to test anti-inflammatory in the rat induced by carrageenan and Freund's complete adjuvant reagent (FCA),

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

Lee Hakju°, Park Youngki, Kwon Yeonghan, Lee Sungsuk, Choi Donha, Oh Jungsoo, Yeo Woonhong

Div. Wood Chemistry & Microbiology, Korea Forest Reserch Institute, Seoul 130-712, Korea. Dept. of Forest Resources Dongguk Univ. Seoul, Korea and Nambu Forest Experiment Station, KFRI, Chinju, Korea.

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

Yoo Sang Woo°, Kim Ju Sun, Kang Sam Sik, Son Kun Ho, Kim Hyun Pyo, Chang Hyeun Wook, Bae KiHwan, Lee Chong Ock

Natural Products Research Institute, Seoul National University

*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

Nguyen TienDat°, Bae KiHwan, Kim YoungHo

College of Pharmacy, Chungnam National University

*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