[PD2-1] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Relationship Between Flavonoid Structure and Inhibition of Farnesyl Protein Transferase

Kang HyunMi[O], Kim JongHan, Son KwangHee, Yang DeokCho, Kwon ByoungMog

Korea Research Institute of Bioscience and Biotechnology, School of Life Sciences, College of Natural Sciences, Chungbuk National University

Flavonoids are a diverse group of phytochemicals that are produced by various plants in high quantities. Dietary flavonoids in edible plants can be further subdivided into several structural groups. The large number of compounds arises from various combinations of multiple hydroxyl and methoxyl groups substituting the basic flavonoid skeleton. The chemopreventive activity of flavonoids is dependent on their structural features. The studies of structure-FPTase inhibitory activity indicated that the number, position and substitution of hydroxyl groups of the A and B rings, and saturation of the C2-C3 bond are important factors affecting flavonoid inhibition on FPTase.

[PD2-2] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Discrimination of Cnidium Rhizome using PCR-mediated RFLP

Cho So Yean[O], Ze Keum Ryon, Seong Rack-Seon, Lee Jong Pill, Ju young Park Park Sang Yong, Jung Young Ja, Cho Chang Hee, Ha Kwang Won, Suh Young Bae

1Division of Herbal Medicine Standardization, KFDA 2Natural Products Research Institute, Seoul National University

Cnidium Rhizome is a frequently prescribed herbal medicine in Korea, Japan as well as China, which has been successfully used in these countries for the treatment of diseases related to gynecology, blood circulation and dental troubles in the name of 川芎. And it is circulated as the same chinese character, which is 川芎, although original plants are different as *Cnidium officinale* in pharmacopoeia of Korea or Japan and *Ligusticum chuanxiong* Hort. in that of China. Furthermore, other plants such as *Conioselinum kamtschaticum* Ruprecht, *Angelica polymorpha* and *Ligusticum chuanxiong var. officinale* have been alternated or substituted for Cnidium Rhizome as folk medicines in Korea.
Recently a lot of herbal medicines are imported from China and it is very difficult to distinguish a *Cnidium officinale* Makino, which is prescribed as original plants of Cnidium Rhizome in Korean Pharmacopoeia from others by organic or physicochemical experiments. In this report, PCR-mediated RFLP method using ITS primers and restriction enzymes such as *Hae III, Nla IV, Apo I, Eco RV, Sma I* and *Mbo II* was given a trial to identify origin of these herbal medicines. The ITS regions of nuclear ribosomal DNA were analyzed to determine original plants and to design a molecular identification method for the herbal medicine in Korea, Japan and China.

[PD2-3] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Ginsenosides Content of The Manufactured Ginseng Radices Extracts

Ko SungKwon[O], Lee ChungRyul, Choi Yong Eui, Im ByungOk, Sung Jong Hwan, Chung SungHyun

Korea Ginseng Institute, Chung Ang University,Ansung 456-756, Korea;ILHWA CO., LTD. Central Research Institute, Guri 471-711, Korea;School of Pharmacy, Kyung Hee University, Seoul 130-701, Korea

The ginsenosides content of ginseng radices extracts were investigated in the Food Code and the Shibata

methods. Crude saponins and each ginsenosides content of the manufactured ginseng radix alba extracts were revealed to be higher than those of the manufactured ginseng radix rubra extracts. A large amount of a ginseng radix rubra specific component(ginsenoside Rg3) was shown in the manufactured ginseng radix rubra extracts. Also, a large amount of ginsenoside Rg3 was shown in the manufactured ginseng radix alba extracts.

[PD2-4] [10/17/2002 (Thr) 09:30 ~ 12:30 / Hall C]

On the Contents of Alkaloids in the Cho O by Processing Methods

Kim HoKyoung°, Lee HyeWon, Jeon WonKyung]

Quality Control of Herbal Medicine Department, Korea Institute of Oriental Medicine, Seoul 135-100, Korea

Mesaconitine and hypaconitine were isolated from Cho O and identified by the spectroscopic methods. The contents of alkaloid (mesaconitine, aconitine and hypaconitine) in the Cho O and its proessed products were determined by high performance liquid chromatography. Processed 1 and 2 methods reduced the contents of alkaloid than those of processed 3 and commercially processed Aconiti Tuber powder. The contents of aconitine and hypaconitine in MeOH extract by 10 min irradiation processing and mesaconitine by 5 min were comparable to those of commerciallized Aconiti Tuber Powder.

[PD2-5] [10/17/2002 (Thr) 09:30 ~ 12:30 / Hall C]

Five compounds from leaves of Hovenia dulcis T.

Chon InJu°, Cho HyoungKwon, Ham InHye, Kim HoHyun, Whang WanKyun

College of pharmacy Chung-Ang University

Fruits of Hovenia dulcis T. (Rhamnaceae) was called ' jiguja ' in oriental medicine which has been used for diuresis, remove of hangover and leaves has been used for detoxified the alcohol.
From the MeOH Extraction, five compounds were isolated by column chromatography and elucidated as quercetin, quercetin-3-O-rhamnose, quercetin-3-O-gal(6"→1")rha, quercetin-3-O-glc(6"→1")glc, and kaemferol through specroscopic methods.

[PD2-6] [10/17/2002 (Thr) 09:30 ~ 12:30 / Hall C]

Three Cytotoxic compounds isolated from the seeds of *Pharbitis nil*

Lee JE°, Byun SJ, Son JK*, Lee JS**, Lee SH*, Woo MH

College of Pharmacy, Catholic University of Daegu, *College of Pharmacy, Yeungnam University, **Department of Biochemistry, College of Science, Yeungnam University

Pharbitis nil Choisy (convolvulaceae) is an annual vine plant and grows at the wayside of Korea, Japan, China and India. The seeds of blue or red *Pharbitis nil* Choisy, Pharbitidis Semen, is black or red-brown. This seeds have been used as a purgative. From a preliminary experiment, Pharbitidis Semen exhibited anti-cancer activity. MeOH extract of this seeds was subsequently fractionated into four parts : methylene chloride, ethylacetate, n-butanol and water fractions. Ethylacetate and n-butanol fractions showed cytotoxicity against HT-29 and HepG2 cell lines and DNA Topoisomerase I and II inhibitory activity.
Chromatographic seperation of the ethylacetate fraction has yielded three compounds. Their structure were elucidated by chemical and spectral evidences.