

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

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Mesaconitine and hyaconitine were isolated from Cho O and identified by the spectroscopic methods. The contents of alkaloid (mesaconitine, aconitine and hyaconitine) in the Cho O and its processed 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 hyaconitine in MeOH extract by 10 min irradiation processing and mesaconitine by 5 min were comparable to those of commercialized Aconiti Tuber Powder.

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

Five compounds from leaves of Hovenia dulcis T.

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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 spectroscopic methods.

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

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

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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 separation of the ethylacetate fraction has yielded three compounds. Their structure were elucidated by chemical and spectral evidences.

Compound 1 is β -sitosterol-3-*O*- β -D-glucopyranoside. Compound 2 (C₄₄H₈₇O₆N) is ceramide (N-acylated phytosphingosine, aglycon of cerebroside). Compound 3 (C₄₄H₈₆O₇) is the long chain ester which has five hydroxy groups and a double bond. Compound 1 showed 99.9 % cytotoxicity for HT-29 cell line at the concentration of 50 μ g/mL. IC₅₀ of compounds 2 and 3 were obtained at 40.3 and 33.9 μ g/mL for HT-29 cell line , respectively.

[PD2-7] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Additional Sesquiterpene Lactones from *Ixeris sonchifolia*

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In our previous study, the leaves of *Ixeris sonchifolia* afforded two new and two known guaiane type sesquiterpene lactones by activity-guided fractionation. Now we report additional isolation of sesquiterpene lactones from the roots of *Ixeris sonchifolia*. They are glucozaluzanin C and ixerin H. Ixerin H is germacranolide type sesquiterpene glucoside. Their structures were determined by 1D and 2D NMR spectroscopy.

[PD2-8] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Biological Activities and Constituents of the Semen of *Rumex crispus*

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Rumex crispus (Polygonaceae) is a well known perennial plant, which is called So-Ri-Jaeng-Yi, growing in the field and on the roadside. It has been used as a Korean Folk medicine in treating of acute and chronic cutaneous disease, cathartics, fever and jaundice. Also, the seed of this plant has been used as only a folk medicine for the treatment of digestion problems, liver diseases and many sorts of tumor. So we examined analgesic activity, anti-inflammatory activities and hepatoprotective activity using MeOH extraction and BuOH fraction in this plant. From a butanol fraction of semen of this plant, compounds I, II and III were isolated and the structures were elucidated by spectroscopic analysis. These compounds were identified as a mixture of β -sitosterol glycoside, methyl(25R5)-3- β -hydroxy-5-cholesten-26-oate, and stigma-5-en-3-ol

[PD2-9] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

A new 4-hydroxy-dodec-2*E*-enedioic acid from the stem bark of *Albizia julibrissin*

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Albizia julibrissin Durazz (Leguminosae) is a small domed to flat-topped, spreading tree with smooth, gray-brown bark and doubly pinnate leaves. It grows abundantly in Korea. The dried stem bark of *A. julibrissin* is used as a tonic in China, Japan and Korea. From the stem bark of *A. julibrissin*, a new unsaturated hydroxy fatty acid was isolated and characterized as 4-hydroxy-dodec-2*E*-enedioic acid on the basis of several data including 2D-NMR. The stereostructure of double bond was determined to be 2*E* by coupling patterns of related proton signals in the ¹H-NMR and COSY experiments.

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