Compound 1 is β -sitosterol-3-O- β -D-glucopyranoside. Compound 2 ($C_{44}H_{87}O_6N$) is ceramide (N-acylated phytosphingosine, aglycon of cerebroside). Compound 3 ($C_{44}H_{86}O_7$) 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 s/mL. IC₅₀ of compounds 2 and 3 were obtained at 40.3 and 33.9 μ s/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 lixeris 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 lixeris 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 1. If 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- 2E-enedioic acid from the stem bark of Albizzia julibrissin

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Albizzia 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-2E-enedioic acid on the basis of several data including 2D-NMR. The stererostructure of double bond was determined to be 2E 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]