3,4-Seco-Lupane triterpene from uniripe fruits of Acanthopanax divaricatus var. sachunensis Yook

Ro SHO*, Chang SY**, Park SY, Whang WK***, T.Nohara****, Jeong JH, Yook CS

College of Pharmacy, Kyung Hee University*, FDA**, College of Pharmacy, Chung Ang University***, Faculty of Pharmaceutical Sciences, Kumamoto University*** 862, Japan

Three 3,4-seco-lupane triterpenoids compound I ~III were isolated from ether extract of unripe fruits. Compound I: 3,4-seco-lupane triterpene. a $22-\alpha$ -hydroxychiisanogenin, in the form of $1(R)-1\alpha,11$ $\alpha,22-\alpha$ -trihydroxy-3,4-seco-lup-4(23),20(30)-dien-3,28-oic acid 3,11-lactone ($C_{30}H_{44}O_6$) Compound II: a 3,4-seco-lupane triterpene, in the form of isochiisanogenin methylester ($C_{31}H_{46}O_6$) Compound III: a 3,4-seco-lupane triterpene, in the form of chiisanogenin, $1(R)-1\alpha,11\alpha$ -dihydroxy-3,4-seco-lup-4(23),20-(30)-dien-3,28-dioic acid 3,11-lactone $C_{30}H_{44}O_5$). Part of ^{13}C -NMR assignents for this compound reported by Oh, O-Jin was reassigned through 2-D NMR

[PD3-4] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Lupane-Triterpene Glycosides from Leaves of Acanthopanax divaricatus var. sachunensis Yook(I)

Ro SHO*, Chang SY**, Park SY, Ryu JH, Rho YS, T. Nohaya***, Yook CS

College of Pharmacy, Kyung Hee University*, FDA**. Faculty of Pharmaceutical Sciences, Kumamoto
University 862, Japan***

Acanthopanax divaricatus var. sachunensis Yook is distributed in south Korea. The dried leaves(1Kg) of A. divaricatus var. sachunensis were extracted with hot MeOH repeatedly to give an extract(70.9g), which was chromatographed on silica gel with CHCl₃-MeOH (9:2:0.1→8:2:0.2), Sephadex LH-20 (MeOH) and Chromatorex ODS, (with gradient elution by from 6:4 MeOH/H₂O to 100% MeOH) to provide five triterpene glycosides of lupane type. They were identified as chiisanoside(1), divaroside(2), 22α-hydroxychiisanoside(3), isochiisanoside(4) and isochiisanoside methyl ester(5), on the basis of their NMR spectral data, positive FAB-mass spectral data and physical properties.

[PD3-5] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Anti-platelet aggregation constituents from Magnolia oboyata

Pyo MiKyung^o Koo YeanKyung Lee YongYook Yun-Choi HyeSook

Natural Products Research Institute, Seoul National University, Seoul 110-460, Korea

Magnolia obovata (Magnoliaceae) has long been used for the treatment of the thrombotic stroke, typhus fever, headache, gastrointestinal disorders, asthma and urinary problems. In the course of continuous work for the discovery of anti-platelet constituents from plants, compounds with anti-platelet activities were isolated from the methanol extract of barks, leaves and fruits of Magnolia obovata. They were identified as 4-hydroxybenzaldehyde, 4-hydroxybenzoic acid, 4-hydroxybenzoic acid, 4-hydroxybenzoic acid, 4-hydroxycinnamic acid, methyl caffeate, syringin, magnolol, honokiol, obovatol, syringaresinol, quercetin 3-rhamnoside, rutin (quercetin 3-rutinoside), quercetin 3-2G-rhamnosylrutinoside with the spectroscopic data. And the effects of them on platelet aggregation induced by ADP, collagen epinephrine, sodium arachidonate, and U46619 were evaluated.