

[PD2-36] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Limonoids and Alkaloids from the bark of *Phellodendron amurense*

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As part of our program to isolate bioactive compounds from Korean natural sources, we have screened ca. 20 medicinal plants to inhibit topoisomerase I. Of them, the methanolic extract of *Phellodendron amurense* Rupr. was found to be active. So, the MeOH extract was partitioned between n-hexane, chloroform, BuOH and water. The activity was concentrated into the chloroform extract. The extract was subjected to silica gel column chromatography and resulted in the isolation of 8 compounds (3 limonoids and 5 alkaloids). Their structures were determined by physicochemical and spectroscopic methods. The bioactivity study of the isolated compounds is under going.

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Sessiline, a New Alkaloid from the Fruits of *Acanthopanax sessiliflorum*

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A new alkaloid, sessiline, was isolated from the fruits of *Acanthopanax sessiliflorum*. Its EIMS and CIMS showed $[M]^+$ at m/z 209 and $[M+H]^+$ at m/z 210, respectively. HRCIMS showed $[M+H]^+$ at m/z 210.0776 for the molecular formula $C_{10}H_{11}O_4N$. IR spectrum showed absorption bands for amine at 3184 and 3116 cm^{-1} , aldehyde at 1698 cm^{-1} , lactam C=O at 1669 cm^{-1} and C-O at 1060 and 1033 cm^{-1} . In ¹H-NMR spectrum, the typical furan ring protons were observed at δ 6.73 and δ 7.51, together with an aldehyde at δ 9.58 and oxymethylene at δ 4.59 and δ 4.49. Two methylene protons at δ 2.29, δ 2.21, δ 2.05 and δ 1.89, and oxymethine proton at δ 5.01 were observed. Its ¹³C-NMR spectrum showed an aldehyde at δ 178.1, a carbonyl of lactam at δ 178.0 and an oxymethylene at δ 60.7, respectively. On the basis of spectral evidence, the structure of sessiline was elucidated as 5-(5'- α -pyrrolidonyloxymethyl)furanaldehyde.

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Lectin from the larvae of *Allomyrina dichotoma* as immunomodulator and antitumor agent

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LECTIN FROM THE LARVAE OF ALLOMYRINA DICHOTOMA AS IMMUNOMODULATOR AND ANTITUMOR AGENT

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