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The roots of *Juglans mandshurica* Maximowicz (Juglandaceae) have been used as a folk medicine for treatment of cancer in Korea. Several naphthoquinones and naphthalenyl glucosides from *Juglans* species have been reported (1-7). In the course of isolating cytotoxic compounds from the roots of this plant, we have isolated six naphthalene glycosides, four tetralone, one naphthalene carboxylic acid glucoside and nine diarylheptanoids (8-13). In this poster, we report three novel diarylheptanoids (1-3) from the roots of *Juglans mandshurica* and their structures were elucidated on the basis of spectroscopic studies.

[PD2-14] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

In vivo Antinociceptive and Anti-inflammatory Effect of the Two Triterpenes, Ursolic Acid and 23-Hydroxyursolic Acid, of *Cussonia bancoensis*

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Triterpenoids, Ursolic acid (1), 23-hydroxyursolic acid (2), and tormentic acid (3) were obtained by the hydrolysis of BuOH fraction of *Cussonia bancoensis* extract and further chromatographic isolation to test antinociceptive and anti-inflammatory effect of *C. bancoensis* (Araliaceae). Compound 1 and 2 exhibited anti-nociceptive effects, which were determined by acetic acid-induced writhing test and hot plate test. However, the effect of tormentic acid was not significant. The effect of 2 was much more potent than 1. Compounds 1 and 2 significantly inhibited 1%-carrageenan-induced edema in the rat. These results suggest that ursolic acid and 23-hydroxyursolic acid are responsible for the anti-nociceptive and anti-inflammatory effect of *C. bancoensis*.

[PD2-15] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Antimicrobial effects of ocotillone isolated from the stem bark of *Ailanthus altissima*

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Bioassay-directed chromatographic fractionation of a methylene chloride extract of *Ailanthus altissima* indicated the presence of 20(S), 24(R), epoxy-25-hydroxydammarane-3-one (compound 1, ocotillone), which was isolated from this plant for the first time. Antimicrobial activity of compound 1 was measured by its degree of growth inhibition against bacterial and fungal cells and by a hemolytic assay with human erythrocytes, respectively. The results revealed potent antibacterial activity against Gram-negative bacteria, *P. aeruginosa*, and *S. typhimurium* that were without hemolytic activity, whereas compound 1 had weak antimicrobial activity against Gram-positive bacteria and fungi. These results demonstrated that compound 1 has a more essential role in antibacterial activity against Gram-negative bacteria that is without hemolytic activity than Gram-positive bacteria and fungi. This is the first report of the biological activities of compound 1.

[PD2-16] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Structure-Activity Relationship of Oleanane Disaccharides isolated from *Akebia quinata* on Both Cytotoxicity against Cancer Cells and NO inhibition against LPS-induced Macrophage 264.7

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