subjected to successive solvent partitioning to give n-hexane (32g), methylene chloride (20g), ethyl acetate (8g) and BuOH (30g) soluble portions. The repeated column chromatographic separation of the n-hexane layer resulted in the isolation of eight terpenoids. Their structures have been established by spectroscopic means. The isolation and characterization of the compounds will be discussed in this poster. 1) Imann, F., Jakupovic, J., Hashemi-Nejad, M., Huneck, S., Clerodane diterpenoids from Aster alpinus. Phytochemistry, 24(3), 608-610 (1985) 2) Cheng, D., Shao, Y., Terpenoid glycosides from the roots of Aster tataricus. Phytochemistry, 35(1), 173-176 (1994)

[PD2-12] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Hepatoprotective flavonol glycosides from the aerial parts of Rodgersia podophylla

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Activity-guided separation for the aerial parts of Rodgersia podophylla A. Gray gave a new acylated flavonoid, quercetin 3-O-α-L-(5²-acetyl)-arabinofuranoside (1), together with six known flavonoids (2-7). Their hepatoprotective activities were determined by using the primary cultures of rat hepatocytes injured by H_2O_2. Quercetin 3-O-α-L-(3²-acetyl)-arabinofuranoside (3), kaempferol 3-O-α-L-rhamnopyranoside (5) and quercetin 3-O-α-L-rhamnopyranoside (6) exhibited hepatoprotective activities comparable to silybin at the concentration of 50 mM (45.7, 50.8 and 57.3 %, respectively), and the new flavonoid 1 showed hepatoprotective activity at the concentration of 100 mM (50.1 %).

[PD2-13] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Nitric Oxide and PGE_2 production Inhibitory Activities of Phenolic Compounds from Sophora japonica Linne

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Phytochemical examination of Sophorae Fructus yielded six phenolic compounds. The structures were elucidated as genistein(1), genistin(2) and genistein 7-O-α-L-rhamnopyranoside(3) by phytochemical and spectral evidences. The other compounds(4, 5, 6) are understudied by 2D-NMR. Nitric Oxide and PGE_2 production inhibitory activities in INF-γ, LPS stimulated RAW 264.7 cell were examined. Compound 2 and 4 showed significant nitrogen monoxide(NO) production inhibitory activity in IFN-γ, LPS stimulated RAW 264.7 cell. These compounds also showed significant PGE_2 production inhibitory activity. These results suggest that the phenolic compounds which were isolated from Sophora japonica might be developed as a anti-inflammatory agent.

[PD2-14] [2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function]

Platelet Anti-aggregating and Anti-oxidative Activities of 12-O-(4'-O-methyl-galloyl)-bergenin, a Novel Compound Isolated from Crassula cv. "Himaturi"

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Platelets play critical roles in both hemostasis and thrombosis. It was reported that platelet aggregation is associated with an increase in superoxide production and can be inhibited by hydroxyl radical scavengers. In the course of our search for the anti-platelet, anti-coagulant and/or anti-oxidative components from plants, the MeOH extract of Crassula cv. "Himaturi" (Crassulaceae) was observed to have both anti-aggregatory and anti-coagulant effects. A novel compound, 12-O-(4'-O-methyl-galloyl)-bergenin (1), was isolated as an active component from the EtOAC soluble fraction. The structure of the compound was determined by IR, MS, ^1H- and ^{13}C-NMR spectral data including HMBC and COSY etc. Compound 1 showed 100~140 folds higher potency on arachidonic acid induced platelet aggregation (IC_{50} ; 0.64μM) than acetylsalicylic acid. It also showed strong antioxidative