were identified by comparison with the chemical and spectral data reported.
The flavonoids (1-4) isolated from *L. japonica* were tested for their anti-complement activity against classical pathway complement system. Afzelin (2), astragalin 7-*O*-coumaric acid (3), and quercetin (4) showed inhibitory activity with 50% inhibitory concentrations (IC_{50}) values of 208, 161, and 237 μg/ml, respectively, while epicatechin (1) was only weak activity.

[PD2-22] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Antirheumatoid Arthritis Effect of the Kochia scoparia Fruits and Structure-Activity Relationship between Momordin Ic, its Prosapogenin and Sapogenin

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MeOH extract of *Kochia scoparia* was fractionated into $CHCl_3$, EtOAc and BuOH fractions and the last fraction were hydrolyzed by 3%-NaOH (MeOH-H_2O) to compare the bioactivities on antinociceptive and anti-inflammatory effects. Silica gel column chromatography of BuOH fraction afforded a large amount of 3-O-β-D-xylopyranosyl (1-3)-β-D-glucuronopyranosyl oleanolic acid (momordin Ic, 4) and that of acid hydrolysate of BuOH fraction gave 3-O-β-D-glucuronopyranosyl oleanolic acid (momordin Ib, 3), its 6'-O methylester (2) and oleanolic acid (1). Silica gel column chromatography of alkaline hydrolysate afforded a large amount of 4. MeOH extract and both EtOAc and BuOH fractions were active in the rheumatoidal rat induced Freund's complete adjuvant reagent (FCA) whereas $CHCl_3$ fraction was inactive. Compound 1 and 4 showed significant activities in the same assay but oleanolic acid 3-O-glucuronopyranoside (3) showed no activity. These trends were also observed in carrageenan-induced edema of the rat and in the antinociceptive activity tests undertaken in hot plate and writhing methods. These results suggest that momordin Ic and its aglycone, oleanolic acid, could be active principles for rheumatoid arthritis.

[PD2-23] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

A Polyacetylene and Flavonoid Glycosides from Cirsium rhinoceros Nakai

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Cirsium rhinoceros Nakai (Compositae) is a herbaceous perennial which grows indigenously in Jeju Island, Korea. This plant has been used in folklore medicine for hematemesis, hematuria and hemorrhage. Although several plants of the *Cirsium* genus have been examined for thier chemical constituents, *C. rhinoceros* has not been investigated in detail on phytochemical analysis.
C. rhinoceros was extracted by a standardized extraction method. Its *n*-hexane and BuOH extracts were fractionated by chromatography to provide a polyacetylene and three flavonoid glycosides.

[PD2-24] [04/19/2002 (Fri) 10:00 - 13:00 / Hall E]

Jacaranone and its derivatives from Ternstroemia japonica

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Ternstroemia japonica is a native plant in southern part of Korea, and its fruits have been used for chest pain and numbness in traditional Japanese medicine. In our search for antioxidative compounds from the fruits of *T. japonica*, jacaranone and its three derivatives were isolated along with three known triterpenes,