

[PD2-24] [ 2003-10-11 09:00 - 12:30 / Grand Ballroom Pre-function ]

### **Studies on chemical constituents form roots of *Angelica koreana***

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To investigate biological active constituents from natural products, we have studied the roots of *Angelica koreana* Max. (Umbelliferae). Fifteen compounds were isolated from the MeOH extract by column chromatography on a silica gel. The compounds were identified as isoimperatorin, oxypeucedanin, oxypeucedanin hydrate, osthol, nodakenin, 2-hydroxy-4-methylacetophenone, cimifugin, falcariindiol, heraclenin, pabulenol, umbelliferone, demethylsuberosin, hamaudol, sec-O-glucosylhamaudol, and prim-O-glucosylcimifugin, respectively, by spectroscopic means. Among these, the latter eight compounds were isolated for the first time from this plant.

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### **In vitro Inhibitory Effect of *Coptidis Rhizoma* before and after Processing and Berberine on the Advanced Glycation Endproducts(AGEs) formation**

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One of the consequences of hyperglycemia is the excessive nonenzymatic glycation of proteins known as Millard reaction. Under hyperglycemia the irreversibly formed advanced glycation endproducts(AGEs) do not return to normal when hyperglycemia is corrected and continue to accumulate over the lifetime of protein. AGEs are largely involved in the pathogenesis of diabetic complications. To find possible AGEs inhibitor, BSA was added to a mixture of sugars and unprocessed-, processed *Coptidis Rhizoma*, Berberine, its standard compound or AG(Aminoguanidine HCl: positive control). After incubating during 30days, it was found that Berberine and unprocessed *Coptidis Rhizoma* showed significant inhibiting effects on the AGEs formation with  $IC_{50}(\%)$  at concentration of  $6.73 \pm 0.16 \mu\text{g/ml}$  and  $17.05 \pm 5.96 \mu\text{g/ml}$  relative to AG( $35.16 \pm 4.84 \mu\text{g/ml}$ ) and two kinds of processed *Coptidis Rhizoma* ( $66.58 \pm 0.56 \mu\text{g/ml}$ ,  $80.01 \pm 1.60 \mu\text{g/ml}$ ). These results revealed that *Coptidis Rhizoma* without processing and its major compound(Berberine) had a more potent inhibitory action on AGEs formation than AG, suggesting the possibility of developing candidate for diabetic complications such as diabetic retinopathy and nephropathy.

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### **Flavonoids from the stem bark of *Albizzia julibrissin***

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From the EtOAc fraction of the MeOH extract of *Albizzia julibrissin* (Leguminosae), a rare 5-deoxy flavone (geraldone), a 3',4',7,8-tetrahydroxyflavanone, an isoflavone (daidzein), and five prenylated flavonoids (sophoflavescenol, kurarinone, kurarinol, kuraridin and kuraridinol) were isolated and identified based on the analysis of spectral data. This is the first report of their occurrence in *A. julibrissin*

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### **Antinociceptive and Antiinflammatory Effects of Niga-ichigoside F<sub>1</sub> and 23-Hydroxytormentonic Acid Obtained from *Rubus coreanus* in Animals**