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Salix species have been used for antipyretic, analgesic and diuretic agents. Ten flavonoids (diosmetin-7-O-β-D-glucopyranoside(I), diosmetin-7-O-β-D- glucopyranoyl(1→6)β-D-glucopyranoside(II), diosmetin-7-O-β-D-xylopyranoyl(1→6)β-D-glucopyranoside(III), hyperoside(IV), quercetin-7-O-β-D-glucopyrano side(V), rutin(VI), luteolin(VII), luteolin-7-O-β-D-glucopyranoside (VIII), Kaempfrol-3-O-α-L-rhamnopyranosyl(1→6)-β
-D-glucopyranoside (IX), and (+)-catechin(X)) have been isolated from the leaves of *Salix hallaisanesis* and their anti-oxidative activity were determined with DPPH method. Six compounds showed significant anti oxidative efficacy. Among these compounds, quercetin glycosides and luteolin glycoside were more potent radical scavenging activity as compared to ascorbic acid.

[PD2-69] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Phenylpyropene C, a New Inhibitor of Acyl-CoA: Cholesterol Acyltransferase Produced by Penicillium griseofulvum F1959

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Acyl-CoA: cholesterol acyltransferase (ACAT, EC 2.3.1.26) is responsible for intracellular esterification of cholesterol and plays a key role in intestinal absorption of cholesterol, hepatic production of lipoproteins and accumulation of cholesteryl esters within macrophages and smooth muscle cells of the atheroma. Therefore, ACAT is an attractive target for new treatments of hypercholesterolemia and atherosclerosis. In the course of our search for ACAT inhibitors from microbial sources, phenylpyropene C was isolated from the fermentation broth of Penicillium griseofulvum F1959. The structure of phenylpyropene C was determined by NMR and MS spectroscopy. Phenylpyropene C inhibited ACAT activity with the IC50 value of 16.0 uM in a dose dependent fashion. The structural modification and its analogues are now in progress.

[PD2-70] [10/19/2001 (Fri) 14:00 - 17:00 / Hall D]

Sesquiterpenoidal compounds from Plants of Carpesium genus

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Three novel guainaolides were isolated from *Carpesium macrocerum*
. Their structures determined to be 1*b*H,5*b*H,7*b* H,8*a*H-4*a*,10*a*-dihydroxy-guaia-8,12-olide (I), 1*b*H,5*b*H,7*a*H,8*b*H-4*a*,10*a*-dihydroxy-guaia-8,12-olide (II) and 5*b*H,7*b*H,8*a*H-4*a*,10*a*-dihydroxy-1(2),11(13)-guaiadien-8,12-olide (III)from NOE and various spectroscopic data.
Isolation of the compounds(I, II, III) was performed as follows , The MeOH extract of *Carpesium macrocephalum* was partitioned between H_2O and Hexane. The resulting H_2O layer was extracted with CH_2Cl_2, EtOAc and n-BuOH, successively. The CH_2Cl_2 extract was chromatographed twice on silica ge column and RP-HPLC, which afforded the three novel sesquiterpene lactones.

One sesquiterpene lactones, a germacranolide, 2*a*, 5-epoxy-5,10-dihydroxy-6*a*-angeloyloxy-9*b*-