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Eight compounds were isolated from the MeOH extracts of *Erythrina senegalensis* for HIV-1 protease inhibitors. Their structures were elucidated as eight isoflavonoids by spectroscopic analysis. These compounds showed dose dependent inhibitory activities on HIV-1 protease with IC_{50} values from 0.5 to 30.0 μM.

[PD2-33] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Xanthorrhizol inhibits pro-inflammatory mediators in mouse macrophage cells

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Prostaglandins (PGs) and nitric oxide (NO) are essential to maintain homeostasis and defense systems in human beings. However, overproduced PGs and NO by inducible cyclooxygenase (COX-2) and inducible nitric oxide synthase (iNOS), respectively, cause tissue damages, chronic inflammation, and carcinogenesis. In this view, the potential COX-2 or iNOS inhibitors have been considered as anti-inflammatory or cancer chemopreventive agents. In this study, we investigated the potential capacities of xanthorrhizol, a sesquiterpenoid isolated from the rhizome of *Curcuma xanthorrhiza*, as anti-inflammatory or cancer chemopreventive agent. Xanthorrhizol exhibited potent inhibitory activities against LPS-induced prostaglandin E_2 production (IC_{50} = 0.9 μM) and nitrite formation (IC_{50} = 4.6 μM) in cultured RAW264.7 cells. Using western blot and RT-PCR analysis, xanthorrhizol showed the suppression of COX-2 and iNOS protein expression, and COX-2 mRNA expression in a dose-dependent manner. In addition, xanthorrhizol also suppressed matrix metalloproteinase-2 (MMP-2) mRNA expression in human fibrosarcoma cells, and possessed growth inhibitory activities in colon cancer cells. These findings suggest that xanthorrhizol might be a potential lead candidate for anti-inflammatory or cancer chemopreventive agent.

[PD2-34] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

Antioxidative activity of compounds from cultivated Phellinus linteus

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Phellinus linteus has been used as anti-tumor and immuno stimulating agents in folk remedies. From precipitate of MeOH ex. by activited guided fractionation, 5,8-epidioxy ergosta-6,22-dien-3ol, palmitic acid, linoleic acid, and methyl linolate, 3,4-dihydroxybenzoic acid methylester and 4-(3'4'-Dihydroxyphenyl)-3-butene-2one were isolated. DPPH method was used to examine of antioxidative activity of the isolated compounds. As the result, 3,4-dihydroxybenzoic acid methylester, and phenolic compound, 4-(3'4'-Dihydroxyphenyl) -3-butene-2one were found to be a scavenger of 1,1-diphenyl-2-picrylhydrzyl radical.

[PD2-35] [10/17/2002 (Thr) 09:30 - 12:30 / Hall C]

In vitro antioxidant triterpenoids from *Prunus serrulata* var. *spontanea*

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