ethyl-sodium-sulphonate, is a product formed by reacting sodium bisulphate with houttuynin, which is obtained from a medicinal herb Houttuynia cordata Thunb. The effects of S. chinensis Root(SAM-R), S. chinensis Growth (SAM-G), S. chinensis Fermentation(SAM-F), H. cordata Root(HUT-R), H. cordata Growth (HUT-G), H. cordata Fermentation (HUT-F) and S. chinensis + H. cordata (SAM+HUT) were investigated in the levels of liver tissue total homogenates of SD-rats intoxicated with carbon tetrachloride(CCl4). Lipid peroxide content in liver was increase by CCl4-induced rats. It was decrease when the extracts from *Saururus Chinensis Baill & Houttuynia* cordata thunb was treated to the rat. Extracts of SAM-R, SAM-G, SAM-F treated group markedly inhibited lipid peroxidation by 37.7%, 26.9%, 29.5% and HUT-R, HUT-G, HUT-F 32.9%, 43%, 50.4%, SAM+HUT 22% respectively.
SOD(Superoxide dismutase), CAT(catalase) and GPX(glutathione peroxidase) activities were increased and MDA (malondialdehyde) decreased in the liver tissue homogenates

[PC1-23] [10/17/2002 (Thr) 13:30 - 16:30 / Hall C]

In vitro Antiinflammatory Activity of 23-Hydroxyursolic Acid Isolated from Cussonia bancoensis in Murine Macrophage RAW 264.7 Cells

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We investigated the effect of various triterpenoids isolated from the Cussonia bancoensis, such as ursolic acid, 23-hydroxyursolic acid, 3-O-α-L-arabinopyranosyl-23 -hydroxyursolic acid, 3-O-β-D-glucopyranosyl-23-hydroxy-ursolic acid and 28-O-α-L-rhamnopyranosyl(1-4)-β-D-glucopyranosyl(1-6)-β-D-glucopyranosylester of 23-hydroxyursolic acid, have been evaluated on lipopolysaccharide (LPS)-induced nitric oxide (NO) and prostaglandin E2 (PGE2) release by the macrophage cell line RAW 264.7. Among the tested triterpenoids, 23-hydroxyursolic acid was the most potent inhibitor of NO production, and it also significantly decreased PGE2 release. Consistent with these observations, the expression level of iNOS and COX-2 protein was inhibited by 23-hydroxyursolic acid in a concentration-dependent manner. Furthermore, 23-hydroxyursolic acid inhibit NF-κB DNA binding. Thus, this study suggests that sugar attachment to 23-hydroxyursolic acid significantly reduced in vitro anti-inflammatory effect and the sapogenin could be an active moiety of the isolates.

[PC1-24] [10/17/2002 (Thr) 13:30 - 16:30 / Hall C]

Sophoricoside analogs inhibit COX isozymes but not iNOS and TNF in LPS-stimulated macrophages Raw264.7

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Macrophages activated by lipopolysaccharide (LPS) are known to induce several proinflammatory proteins including COX-2, iNOS and TNF which produce chemical mediators involved in inflammatory response. Sophoricoside and its analogs (genistin, genistein and orobol) from Sophora japonica (Leguminosae) showed differential inhibitory effects on COX-1 and 2 activities. Sophoricoside and genistin showed IC50 values of 4 uM and 6 uM on COX-2 activity and of 1,497 uM and 135 uM on COX-1 activity, respectively. Genistein and orobol showed IC50 values of 3 uM and 1 uM on COX-2 activity and of 28 uM and 18 uM on COX-1 activity, respectively. Therefore, the legume isoflavonoids seems to be selective COX-2 inhibitors. However, sophoricoside and its analogs did not show inhibitory effects on synthesis of COX-2, iNOS and TNF transcripts, which were identified by the RT-PCR.

[PC1-25] [10/17/2002 (Thr) 13:30 - 16:30 / Hall C]

Isolation, structure, and NF-κB modulatory activity of Harzianum A and B: trichothecene from fungi (B000527)

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