

HUVEC (Human Umbilical Vein Endothelial Cell) as well as cytotoxicity on L1210 cell and A549 cells. Among the materials tested, *Adonis amurensis* (Ranunculaceae) showed strong antiangiogenic activity. Activity-guided fractionation resulted in isolation of three cardenolides which possessed antiangiogenic activity. One of them exhibited a selective antiangiogenic effect on HUVEC. The others showed cytotoxic activity on A549 cells, but hardly on L1210 cells.

[PD2-21] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

New cytotoxic dilignans from underground parts of *Saururus chinensis*

Huh MS, Kim JH, Sung SH, Kim YC

College of Pharmacy, Seoul National University

Two new dilignans including two known dilignans, manassantin A and B were isolated from underground parts of *Saururus chinensis* (Lour.) Baill. (Saururaceae). Their chemical structures were evaluated using several spectroscopic data. These lignans showed selective cytotoxic activities against HL-60 cell line.

[PD2-22] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Additional Cytotoxic Polyacetylenes from the Marine Sponge *Petrosia* sp.

Lim YJ^o, Park HS, Im KS, Lee CO, Hong JK, Kim DK, Jung JH,

College of Pharmacy, Pusan National University, Pusan 609-735, Korea, Korea Research Institute of Chemical Technology, Taejon, Korea, Korea Basic Science Institute, Taejon, Korea, and Department of Chemistry, Inje University, Kimhae, Korea

Ten new polyacetylenic alcohols (1-6, 8-11), along with a known compound petrocortyne C (7), were isolated from the marine sponge *Petrosia* sp. The gross structures were established based on NMR and MS data, and the absolute configuration was determined by the modified Mosher's method. These compounds displayed considerable cytotoxicity against a small panel of human solid tumor cell lines. Compounds 1-11 were further evaluated for in vitro inhibitory activity on DNA replication.

[PD2-23] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Isolation of Virus-Cell Fusion Inhibitory Components from *Eugenia caryophyllata*

Kim HJ¹, Lee JS¹, Woo ER², Yang BS¹, Seo SH¹, Kim MK¹, Lee YS¹, and Park H¹

¹Division of Life Sciences, KIST; ²College of Pharmacy, Chosun University

HIV (human immunodeficiency virus) is a retrovirus that causes acquired immune deficiency syndrome (AIDS).¹ In order to get successful anti-AIDS therapeutic medicines, simple and sensitive tests to identify agents that interfere with viral replicative cycle need to be developed. The syncytia formation inhibition assay, which is based on the inhibition of the interaction between the HIV-1 envelope protein gp120 and the cellular membrane protein CD4. In a previous study,⁸ methanolic extracts of various plants and crude drugs representing about 50 plants were tested for their activity to inhibit virus-cell fusion.

By means of bioassay-directed chromatographic fractionation, four tannins, eugenin (1), casuarictin (2), 1,3-di-O-galloyl-4,6-(S)-hexahydroxydiphenyl- β -glucopyranose (3) and tellimagrandin I (4), and two chromones, biflorin (5) and isobiflorin (6) were isolated from *E. caryophyllata*. Among the isolated compounds, tellimagrandin I (4) and eugenin (1) showed strong inhibition of virus-cell fusion with IC₅₀ values of 15.14 and 18.62 μ g/ml, respectively.