Constituents from Hedyotis diffusa protect against glutamate –induced neurotoxicity in primary cultures of rat cortical cells

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In a bioassay-guided search for neuroprotective compounds from medicinal plants, a MeOH extract of whole plants of Hedoytis diffusa yielded five flavonol glycosides: kaempferol 3-O-[2-O-(6-O-E-feruloyl)- -D-glucopyranosyl]- -D-galactopyranoside (1), quercetin 3-O-[2-O-(6-O-E-feruloyl)- -D-glucopyranosyl]- -D-galactopyranoside (2), quercetin 3-O-[2-O-(6-O-E-feruloyl)- -D-glucopyranosyl]- -D-glucopyranoside (3), kaempferol 3-O-(2-O- -D-glucopyranosyl)- -D-galactopyranoside (4), and quercetin 3-O-(2-O- -D-glucopyranosyl)- -D-galactopyranoside (5) and four O-acylated iridoid glycosides: 6-O-Z-p-methoxycinnamoyl scandoside methyl ester (6), 6-O-E-p-methoxycinnamoyl scandoside methyl ester (7), 6-O-Z-p-coumaroyl scandoside methyl ester (8), 6-O-E-p-coumaroyl scandoside methyl ester (9). Compounds 1 and 2 are previously unreported natural products and all these 9 compounds exhibited significant neuroprotective activity in primary cultures of rat cortical cells damaged by L-glutamate.

[PD2-8] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

Isolation and Quantitative Determination of Ursolic acid from Prunellae Herba

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Ursolic acid was isolated from Prunellae Herba(Prunella vulgaris) and identified by direct comparison with an authentic sample. A method of analysis for the evaluation of rusolic acid was developed based on extraction of ground plant material, followed by quantitative determination using capillary gas chromatography of the TMS derivative. Quantitative analysis by GC after derivatisation under mild silylating conditions showed 0.31% ursolic acid in 20 samples collected throughout regions of Korea while no ursolic acid was detected in the samples of the whole plant of Thesium chinense, a substitute for Prunellae Herba in southern regions of Korean peninsula.

[PD2-9] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

An Enzyme-linked Immunosorbent Assay for IH-901, an Active Metabolite of Ginsenoside Rb1

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