Poster Presentations - Field D2. Pharmacognosy

[PD2-1] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

The DNA Strand-Scission principles of Mucunar birdwoodiana

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During our research program to find DNA strand-scission agents from higher plants, the MeOH extracts of the wood bark of Mucunar birdwoodiana Tutcher. (Leguminosae) exhibited the most potent activity with an IC_{50} value of 4.9 μ g/ml. Thus, detailed laboratory investigation was performed, and led to the isolation of the known compounds, catechin (1) and epicatechin (2) as the active principles. Isolates 1 and 2 showed significant activity with IC_{50} values of 10.8 and 7.5 μ g/ml, respectively (positive control, bleomycin: IC_{50} 3.3 μ g/ml). More details will be discussed in the presentation.

[PD2-2] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Monoamine Oxidase Inhibitory Components from the Fruits of Cudrania tricuspidata

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Monoamine oxidase (MAO) is flavin-containing enzyme that catalyzes the oxidation of variety of amine-containing neurotransmitters such as catecholamines and serotonin to yield the corresponding aldehyde. Thus, MAO activity might play important roles in some pathological states of central nervous system diseases such as depression, alcoholism, and schizophrenia. Two known pyranoisoflavones, alpinumisoflavone (1) and 4'-O-methylalpinumisoflavone (2), were isolated from the fruits of Cudrania tricuspidata (Moraceae) by activity-guided isolation method. The structures of these compound were elucidated on the basis of spectral data including 2D-NMR experiments. The isolation, structure determination, and MAO inhibitory effect on these isolates will be discussed in this presentation.

[PD2-3] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

A Chemical Component of the Marine Alga Ishige Okamurae

Kim EunSook^o, Choi ByoungWook, Lee BongHo