

Peroxidative disintegration of cells and organellar membranes by free radicals has been implicated in various pathological processes and especially involved in the pathogenesis of diseases such as myocardial and cerebral ischemia, atherosclerosis, diabetes, rheumatoid arthritis, and cancer-initiation, and aging process. Thus free radical scavengers have the potential as protective agents against these diseases. In our continuing investigation for biologically active novel constituents, especially free radical scavengers, from basidiomycetes, we have isolated two new leucomentin analogues, leucomentin-5, and -6 from the methanolic extract of fruit body of *Paxillus panuoides*. Leucomentin-5, and -6 were purified through solvent partition, silica gel and sephadex LH-20 column chromatographies and reserve-phase HPLC. Their structures were assigned as new *p*-terphenyl compounds on the basis of spectroscopic analysis. Leucomentin-5, and -6 showed strong lipid peroxidation inhibitory activities with IC₅₀ values of 0.11 and 0.06 mg/ml, respectively. Leucomentin-6 was about twenty times as active as vitamin E (IC₅₀ 1.5 mg/ml) used as a control

[PD3-1] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Studies on the Standardization of Korean Herbal Pharmacopeia

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The efficiency of crude drugs cannot be demonstrated by just one component or special constituents, so it must be controlled comprehensively by several components such as total norms, description, identification, purity, ash, acid-insoluble ash, extracts, volatile oil and assay. In 1998, it was carried out that substantial evaluation of 16 crude drugs. As the second study we carried out specification of 51 crude drugs which are domestic and imported ones, compared analysis with the standard values of Japan and China.

The result of this study showed that it is required that amendment of standards of 26 crude drugs : Chrysanthemi flos, Arctii semen, Asteris radix, Osterici koreani radix, Angelicae decurisivae radix, Alpiniae officinari rhizoma, Cinnamomi ramulus, Pruni nakaii semen, Sanguisorbae radix, Codonopsis pilosulae radix, Psoraleae semen, Aconiti tuber, Clematidis radix, Euryales semen, Agastachis herba, Raphani semen, Viticis fructus, Scirpi rhizoma, Ligustri fructus, Olibanum, Cistanchis herba, Uncariae ramulus et uncus, Aurantii fructus, Kochiae fructus, Kalopanacis cortex and Ulmi cortex. We hope that this study will be contributed to successful quality control of crude drug, which is widely used through the establishment of proper specification.

[PD3-2] [04/21/2000 (Fri) 14:50 - 15:50 / [1st Fl, Bldg 3]]

Antraquinones from *Hedyotis diffusa*

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Antraquinones are potently bioactive compounds characterized as anticancer agents. *Hedyotis diffusa* Willd is one of several species of the genus *Hedyotis* (Rubiaceae) which are growing throughout China and Korea and it has been used in Chinese medicine as useful drug for some tumours.

From this whole plant, we reported recently two novel furocoumarins and two coumarin derivatives. To continue our search for new constituents from this plant, a methanolic extract of this plant was investigated, using SRB bioassay to direct the fractionation. This work has resulted in the isolation and structure elucidation of three antraquinones. This is the first report of the occurrence of these compounds from *H. diffusa*.