

Anti-HIV and Antihepatotoxic Constituents from Medicinal Plant Resources

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Abstract

Medicinal plants were screened for the inhibitory effects on human immunodeficiency virus type 1 protease. Of the extracts tested, the strong inhibitory effects were observed in the acetone extracts of the pericarp of *Camellia japonica*. Camelliatannin H from the pericarp of *C. japonica* showed a potent inhibitory activity on HIV-1 protease. Effects of the extract and compound from leaves of *Zanthoxylum piperitum* on the enzyme activities were investigated in the liver of bromobenzene-treated rats. The methanol extract and protocatechuic acid isolated from *Z. piperitum* reduced the activity of aniline hydroxylase that increased by bromobenzene, while did not affect the activities of aminopyrin N-demethylase and glutathione S-transferase. The extract and protocatechuic acid recovered significantly the activity of epoxide hydrolase decreased by bromobenzene.