CHEMICAL CONSTITUENTS OF ARTOCARPUS ALTILIS

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In a continuation of our studies on search for biologically active compounds from Sri Lankan plants the present study was carried out on the fruits of *Artocarpus altilis* (Park.) Fosb.. A. altilis of the family Moraceae is a tree of moderate size, commonly known as bread fruit growing in tropical countries.

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$$\frac{1}{3}$$
 $\frac{1}{8}$ $\frac{1}{6}$ $\frac{1}{9}$ $\frac{1}{3}$ \frac

The dried powdered fruits of *Artocarpus altilis* were defatted with *n*-hexane and extracted with ethyl acetate and methanol at room temperature. Preliminary investigation indicated the presence of antifungal active compounds against *Cladosporium cladosporioides* in both ethyl acetate and methanol extracts in the same R_f region by TLC bioautography method. In order to isolate antifungal active compounds, both ethyl acetate and methanol extracts were combined and separated by a combination of chromatographies over column of silica gel, Sephadex LH-20, reverse phase silica gel and reverse phase HPLC to give seven compounds. Four of them were identified as (*E*)-4-(3-methyl-E-but-1-enyl)-3,5,2',4'-tetrahydroxystilbene (1), (*E*)-3,5,2',4'-tetrahydroxystilbene (2), 2-(2,4-dihydroxyphenyl)-5,7-dihydroxychroman-4-one (3) and 2-(3,5-dihydroxyphenyl)benzofuran-4,6-diol (4). Structure elucidation of isolates was based on the detailed analysis of ¹HNMR, ¹³CNMR, MS and direct comparison of the reported data. All these compounds showed radical scavenging properties towards 2,2'-diphenyl-1-picrylhydrazyl (DPPH) radical by TLC bio-autography method. Structure elucidation of the other three compounds and determination of antioxidant activity (IC₅₀) and antifungal activity (MIC) of isolates are in progress.