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A long chain alkylated α -methylene- γ -butyrolactone from *Artabotrys odoratissimus* fruit

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Abstract

As part of our ongoing programme for isolation of bioactive molecules from the flora of the Indo-Burma biodiversity belt, an unusual long chain alkylated α -methylene- γ -butyrolactone was isolated from the juice of ripe fruit of *Artabotrys odoratissimus* R.Br. Its structure was determined as 3-methylene-4-pentadecyldihydrofuran-2-one by spectroscopic methods. It was found to have good antifungal activity against *Alternaria tenuissima* Kunze Ex Pers. isolated from solasodine producing plant *Solanum khasianum* Clarke. Minimum Inhibitory Concentration (MIC) and IC₅₀ for 3-methylene-4-pentadecyldihydrofuran-2-one were found as 300 and 51.37 μ g/ml, respectively. The standard captan was found to have an MIC and IC₅₀ of 200 and 35.52 μ g/ml, respectively.

Graphical abstract

An unusual long chain alkylated α -methylene- γ -butyrolactone was isolated from the juice of ripe fruit of *Artabotrys odoratissimus* R.Br. Its


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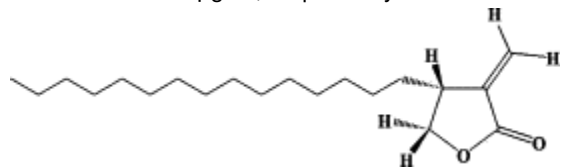
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Keywords: *Artabotrys odoratissimus*; Annonaceae; Chenichampa phool; 3-Methylene-4-pentadecyldihydrofuran-2-one; Antifungal; *Solanum khasianum*; *Alternaria tenuissima*

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