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Volume 10, Issue 9, 2015, Pages 1585-1587 **α -Glucosidase and 15-lipoxygenase inhibitory activities of phytochemicals from *Calophyllum symingtonianum*** (Article)Aminudin, N.I.^a, Ahmad, F.^a, [✉](#) Taher, M.^b, Zulkifli, R.M.^c [🔍](#)^aDepartment of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, Skudai Johor, Malaysia^bKulliyah of Pharmacy, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, Kuantan, Pahang, Malaysia^cDepartment of Bioscience and Health Sciences, Faculty of Biosciences and Medical Engineering, Universiti Teknologi Malaysia, Skudai Johor, Malaysia

Abstract

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A phytochemical investigation of the crude extracts of the bark and leaves of *Calophyllum symingtonianum* has resulted in the isolation of inophyllum D, inophyllum H, calanone, isocordato-oblongic acid, amentoflavone, carpachromene and lupenone. Their chemical structures were elucidated and confirmed by spectroscopic analysis. All flavonoids and coumarins showed significant α -glucosidase inhibitory activity, while amentoflavone gave a positive result against 15-lipoxygenase inhibition.

Reaxys Database Information

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Author keywords

15-lipoxygenase [Calophyllum symingtonianum](#) [Coumarins](#) [Flavonoids](#) [\$\alpha\$ -Glucosidase](#)

Indexed keywords

EMTREE drug terms: [acarbose](#) [alpha glucosidase](#) [amentoflavone](#) [antidiabetic agent](#) [arachidonate 15 lipoxygenase](#) [calanone](#) [Calophyllum symingtonianum extract](#) [carpachromene](#) [coumarin derivative](#) [flavonoid](#) [inophyllum D](#) [inophyllum H](#) [isocordatooblongic acid](#) [lupenone](#) [plant extract](#) [plant medicinal product](#) [quercetin](#) [unclassified drug](#) [alpha glucosidase](#) [arachidonate 15 lipoxygenase](#) [glycosidase inhibitor](#) [lipoxygenase inhibitor](#) [plant medicinal product](#)

EMTREE medical terms:

[Article](#) [bark](#) [Calophyllum](#) [Calophyllum symingtonianum](#) [controlled study](#) [drug activity](#) [drug isolation](#) [drug screening](#) [drug structure](#) [enzyme inhibition](#) [nonhuman](#) [plant leaf](#) [spectroscopy](#) [chemical structure](#) [chemistry](#) [metabolism](#)

MeSH:

[alpha-Glucosidases](#) [Arachidonate 15-Lipoxygenase](#) [Calophyllum](#) [Glycoside Hydrolase Inhibitors](#) [Lipoxygenase Inhibitors](#) [Molecular Structure](#) [Phytochemicals](#) [Plant Bark](#) [Plant Leaves](#)

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acarbose, 56180-94-0; alpha glucosidase, 9001-42-7; amentoflavone, 1617-53-4; arachidonate 15 lipoxygenase, 82249-77-2; quercetin, 117-39-5;

alpha-Glucosidases; Arachidonate 15-Lipoxygenase; Glycoside Hydrolase Inhibitors; Lipoxygenase Inhibitors; Phytochemicals

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Cytotoxic and antibacterial evaluation of coumarins and chromanone acid from *Calophyllum symingtonianum*

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