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alpha-glucosidase inhibitors isolated from Mimosa pudica L.

By: [Tasnuva, ST](#) (Tasnuva, S. T.)^[1]; [Qamar, UA](#) (Qamar, U. A.)^[1]; [Ghafoor, K](#) (Ghafoor, Kashif)^[2]; [Sahena, F](#) (Sahena, F.)^[3]; [Jahurul, MHA](#) (Jahurul, M. H. A.)^[4]; [Rukshana, AH](#) (Rukshana, A. H.)^[5]; [Juliana, MJ](#) (Juliana, M. J.)^[1]; [Al-Juhaimi, FY](#) (Al-Juhaimi, Fahad Y.)^[2]; [Jalifah, L](#) (Jalifah, L.)^[6]; [Jalal, KCA](#) (Jalal, K. C. A.)^[3] ...More
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Abstract

The aim of the study was to isolate digestive enzymes inhibitors from Mimosa pudica through a bioassay-guided fractionation approach. Repeated silica gel and sephadex LH 20 column chromatographies of bioactive fractions afforded stigmasterol, quercetin and avicularin as digestive enzymes inhibitors whose IC50 values as compared to acarbose (351.02 +/- 1.46 mu g mL(-1)) were found to be as 91.08 +/- 1.54, 75.16 +/- 0.92 and 481.7 +/- 0.703 mu g mL(-1), respectively. In conclusion, M. pudica could be a good and safe source of digestive enzymes inhibitors for the management of diabetes in future.

[GRAPHICS]

Antwidiabetic active principles (stigmasterol, quercetin, avicularin) isolated from neglected weed Mimosa pudica

Keywords

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Author Information

Reprint Address: Zaidul, ISM (reprint author)

Int Islamic Univ Malaysia, Fac Pharm, Kuantan, Malaysia.

Addresses:

- [1] Int Islamic Univ Malaysia, Fac Pharm, Kuantan, Malaysia
- [2] King Saud Univ, Dept Food Sci & Nutr, Riyadh, Saudi Arabia
- [3] Int Islamic Univ Malaysia, Fac Sci, Kuantan Campus, Kuantan, Malaysia
- [4] Univ Malaysia Sabah, Fac Food Sci & Nutr, Kota Kinabalu, Malaysia
- [5] Univ Sci & Technol Chittagong, Fac Basic Med & Pharmaceut Sci, Chittagong, Bangladesh
- [6] Univ Kebangsaan Malaysia, Fac Sci & Technol, Bangi, Malaysia
- [7] Univ Malaya, Nanotechnol & Catalysis Res Ctr NanoCat, Kuala Lumpur, Malaysia

E-mail Addresses: zaidul@iium.edu.my

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