

α -glucosidase inhibitors isolated from *Mimosa pudica* L.

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 stigmaterol, quercetin and avicularin as digestive enzymes inhibitors whose IC₅₀ values as compared to acarbose ($351.02 \pm 1.46 \mu\text{g mL}^{-1}$) were found to be as 91.08 ± 1.54 , 75.16 ± 0.92 and $481.7 \pm 0.703 \mu\text{g mL}^{-1}$, respectively. In conclusion, *M. pudica* could be a good and safe source of digestive enzymes inhibitors for the management of diabetes in future.