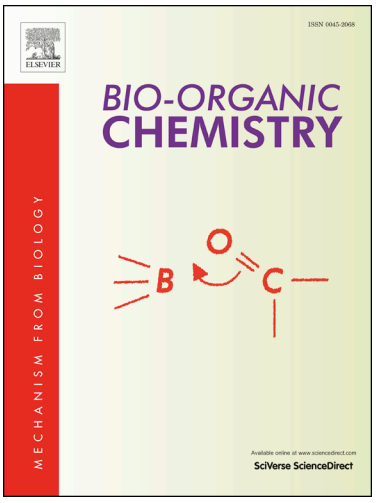

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Biological evaluation of New imidazole derivatives tethered with indole moiety as Potent α-Glucosidase Inhibitors

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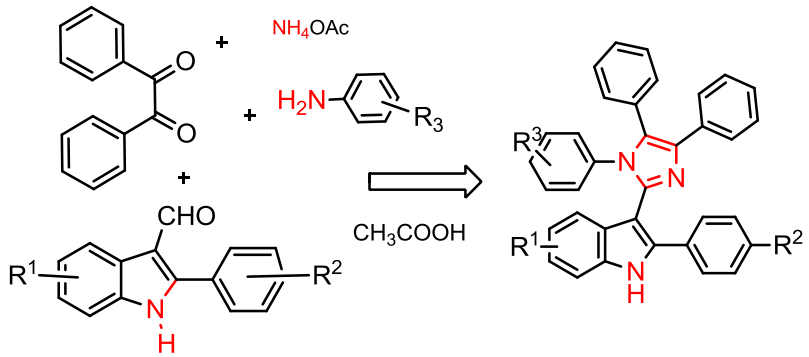
Keywords Diabetes; α-Glucosidase inhibition; Multicomponent reactions; 2-Arylindoles; NMR spectra

Abstract

A series of triarylimidazoles substituted with 2-arylindoles (**4a-4j**) were prepared and evaluated for their *in vitro* α-Glucosidase inhibition. α-Glucosidase inhibition assay displayed a new class of highly potent agents The new compounds showed significant α-glucosidase inhibitory activity as compared to the standard inhibitor acrabose. Structures of synthesized compounds were determined by using Mass spectrometry FT-IR,^{1}H NMR and ^{13}C NMR**.**

Graphical Abstract:

α-Glucosidase inhibition by triarylimidazoles substituted with 2-arylindoles



R^1= H, Cl, F