

**SCREENING OF  $\alpha$ -GLUCOSIDASE INHIBITORY ACTIVITY FROM SOME PLANTS OF  
*RUBIACEAE***

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**ABSTRACT**

Diabetes mellitus (DM) is a metabolic disorder characterized by high blood sugar levels as a result of insulin resistance, insulin secretion insufficiency, or both. Type 2 DM is more common in diabetic populations. In this type of DM, inhibition of  $\alpha$ -glucosidase is a useful treatment to delay the absorption of glucose after meals. As a mega biodiversity country, Indonesia still has a lot of potential unexploited forests to be developed as a medicine source, including as the  $\alpha$ -glucosidase inhibitor. In this study, we determine the  $\alpha$ -glucosidase inhibitory activity of 80% ethanol extracts of leaves and twigs of some plants from the Rubiaceae. Inhibitory activity test of the  $\alpha$ -glucosidase was performed *in vitro* using spectrophotometric methods. Compared with the control acarbose (IC<sub>50</sub> 117.20  $\mu$ g/mL), eight of ten samples were shown to be more potent  $\alpha$ -glucosidase inhibitors with IC<sub>50</sub> values range 3.64-80.27  $\mu$ g/mL

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