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Phytochemical Screening and Alphasglucooxidase Enzyme Inhibitory Activity Test of Secang Wood (*Caesalpinia sappan* L.) Ethanol Extract

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ABSTRACT

It is known that secang wood (*Caesalpinia sappan* L.) is a part of the Secang plant which is widely used to treat various diseases, including diabetes. Based on previous research, Secang wood contains flavonoids which have the potential to inhibit the α -glucosidase enzyme. The research aims to determine the potential of ethanol extracted by maceration using 96% ethanol. Inhibition of activity was tested using an ELISA (Enzyme-Linked Immunosorbant Assay) reader which was measured at a wavelength of 405 nm with acarbose as a comparison. The results of the research show that the ethanol extract of Secang wood has inhibitory activity, including it in the active category based on the % inhibition value obtained at 83.63%. Meanwhile, acarbose has inhibitory activity, including it in the very active category with a %inhibition value of 79%.

Keywords: *Caesalpinia sappan* L., acarbose, *alpha glucooxidase*, *Inhibitor*, *ELISA*