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Antioxidant Activity of a Combination of Kasumba Turate (*Carthamus tinctorius* L.) Secang (*Caesalpinia sappan* L.) Extracts

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ABSTRACT

South Sulawesi has endemic plants which are the kasumba turate (*Carthamus tinctorius* L.) and secang wood (*Caesalpinia sappan* L.) plants are known. Kasumba turate is usually used as a coloring agent and herbal medicine. Secang contains brazilin compounds which give a red color and is included in the flavonoid group as isoflvanoid which is an antioxidant compound. This plant is widely used as a traditional medicine in treating cholesterol reduction, antibacterial, antiviral, gout and antioxidant. Gout and high cholesterol are closely related. Research published in the International Journal of Cardiology in 2008 shows that high uric acid levels can increase levels of bad LDL cholesterol, triglycerides and other blood fats. In addition, another study in 2019 released by Lipids in Health and Disease also stated that in the 3,884 volunteers studied, the risk of developing high uric acid doubled if they had cholesterol triglycerides above the normal threshold. However, the above conditions of complications and decline in health can be suppressed by administering antioxidant supplements. Based on the description above, the combination of kasumba tutareta and seccang has good potential in the development of traditional medicine with claims of reducing uric acid, anti-cholesterol and antioxidant properties. Based on the results of antioxidant research using the FRAP method, it was found that the capacity of antioxidant seccang extract 122,88 mg/g, kasumba turatea extract 17.36 mg/g and a combination (1:1) 197.31 mg/g. From these data it can be seen that the combination of seccang and kasumba turateta extracts has higher activity.

Keywords: Seccang, kasumba turatea, antioxidant.