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AKTIVITAS ANTIOKSIDAN “TEH HIJAU” DARI DAUN UBI JALAR UNGU (Ipomoea batatas L. Lam)
(+230 pages: 27 figures, 8 tables, and 92 appendices)

Sweet potato leaves (Ipomoea batatas L. Lam) have a high antioxidant content. The purpose of research were to determine the drying temperature, brewing temperature, the type of processing and brewing time to get the best antioxidant activity. In this study, sweet potato leaves (Ipomoea batatas L. Lam) are made into green tea leaves with three level of drying temperature (60°C, 70°C,80°C) and brewed with three level of brewing temperature (70°C, 80°C,100°C). The brewed “green tea” was then used to analyzed antioxidant content, flavonoids, condensed tannins, and phenolic. The highest antioxidant activity was found in “green tea” that was dried at 70°C with 100°C brewing temperature for 15 minutes (169,702±47,040 mg/L at the effect of dried temperature and 372,053±185,042 mg/L on the effects of brewing temperature), total flavonoids (208,440±3,677mg QE/L), condensed tannins (521,158±4,525 mg CE/L), and phenolic (743,456±3,118 mg GAE/L). The best result of drying and brewing temperature was then used to compare dried sweet potato leaves (Ipomoea batatas L. Lam), fresh sweet potato leaves (Ipomoea batatas L. Lam), and the stew of fresh purple sweet potato leaves (Ipomoea batatas L. Lam) with three levels of brewing time (10 minutes, 15 minutes and 20 minutes). The highest antioxidant activity was found in “green tea” sweet potato leaves (Ipomoea batatas L. Lam) with a 20 minutes brewing time (89,087±8,513 mg/L), flavonoids (149,286±3,225 mg QE/L), condensed tannins (550,869±3,765 mg CE/L) and phenolic (849,933±1,481 mg GAE/L).

Keywords : antioxidant activity, sweet potato leaves, green tea, brewing time, temperature.
References : 92 (1995-2016)