ABSTRACT

Identification of Secondary Metabolites Compounds and Antioxidant Test with Toxicity Test from Leaves Extract Kayu Ara (Ficus aurata (Miq.) Miq.)

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Kayu Ara (Ficus aurata (Mig.) Mig.) in the one of plant that is found in Indonesia. Leaves of Kayu Ara were extracted with n-hexane, ethyl acetat, and metanol by using maceration method. Hexane, ethyl acetate, and metanol extract were obtained as much as 3,171 g, 7,884 g, and 21,727 g. The result of secondary metabolite identification showed each n-hexane extract contain Phenolic and steroid, ethyl acetate extract contain phenolic, flavonoid, triterpenoid, and steroid, and methanol extract contain phenolic, flavonoids, triperpenoid, and steroid. Each extracts was investigated its antioxidant activity by using DPPH method The result showed IC₅₀ values are 273,29 mg/L, 219,50 mg/L, and 87,60 mg/L. And then each extracts was also investigated its toxicity by using BSLT method. The result showed LC₅₀ values are 92,04 mg/L, 67,83 mg/L, and 53,33 mg/L. The result of phenolic total assay of extracts showed phenolic totals are 212,12; 342,42; and 3584,84 (GAE/10 mg air-dried extract). Phenolic total data showed correlation with antioxidant activity assay, the higher total phenolic, the smaller the IC₅₀ value which indicates the better ability of antioxidant activity.

Keywords :Kayu Ara (*Ficus aurata* (Miq.) Miq), antioxidant, DPPH, toxicity, BSLT dan Phenolic total