

ABSTRACT

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Judul : Starch Characteristic test and antioxidant activity of yellow kapok banana (*Musa x paradisiaca L*) with DPPH method In vitro

Yellow kepok banana (*Musa x paradisiaca L*) contain high carbohydrates and bananas contain many chemical compounds are antioxidants such as phenolics (flavonoids) and carotenoids which serves as a natural antioxidant. Antioxidant is a compound that can inhibit free radicals. Free radicals can cause several diseases. Research on characteristics starch test and the antioxidant activity test of 96% ethanol extract of *Musa x paradisiaca L* using method in vitro DPPH (2,2 - diphenyl-1-picrylhydrazyl) and vitamin C. Absorbance was observed by spectrophotometer UV-Vis. The research purposes to determine the starch characteristics both qualitatively and quantitatively, knowing its active substances of *Musa x paradisiaca L* and determine the antioxidant activity of *Musa x paradisiaca L* 96% ethanol extract in maceration. The results showed that the structure of starch irregularly shaped, mostly oval and multifaceted. *Musa x paradisiaca L* starch had a 6.57% moisture content and 1.12% ash content. Active substances test showed positive results of alkaloids, flavonoids, saponins, triterpenoids and tannins were found in *Musa x paradisiaca L*. IC₅₀ value for 96% ethanol extract of *Musa x paradisiaca L* was 2266 µg / ml. Base on the value, 96% ethanol extract of *Musa x paradisiaca L* has a weak antioxidant activity.

Keywords: Yellow kepok banana, characteristic of starch, antioxidants, DPPH, IC₅₀.

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