## UJI PROFIL FITOKIMIA, AKTIVITAS ANTIOKSIDAN DAN KANDUNGAN FLAVONOID TOTAL DARI EKSTRAK METANOL, FRAKSI HEKSANA, FRAKSI ETIL ASETAT DAN FRAKSI METANOL-AIR DAUN PISANG BATU (*Musa balbisiana* Colla)

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## **ABSTRAK**

PHYTOCHEMICAL PROFILE TEST, ANTIOXIDANT ACTIVITY AND TOTAL FLAVONOID CONTENT OF METHANOL EXTRACT, HEXANE FRACTION, ETHYL ACETATE FRACTION AND METHANOL-WATER FRACTION OF ROCK BANANA LEAVES (Musa balbisiana Colla)

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Banana stone (Musa balbisiana Colla) is one of the wild banana species belonging to the Musaceae family. This plant is widely found in Southeast Asia, including Indonesia, and is characterized by the presence of hard seeds in its fruit. This study aimed to determine the content of secondary metabolites, total flavonoids, and antioxidant activity of the methanol extract, hexane fraction, ethyl acetate fraction. and methanol-water fraction of Musa balbisiana leaves collected from Padang Pariaman Regency. Phytochemical screening was carried out to identify secondary metabolites in the leaf samples. The total flavonoid content was determined using a colorimetric method based on a specific reaction with AICl<sub>3</sub>, using quercetin as the standard, while antioxidant activity was evaluated using the DPPH (1,1-diphenyl-2-picrylhydrazyl) method by measuring the IC<sub>50</sub> value. The results of phytochemical tests showed that the methanol extract, hexane fraction, ethyl acetate fraction, and methanol-water fraction contained flavonoids, phenolics, triterpenoids, alkaloids, and coumarins. Saponins were only found in the methanol extract and methanol-water fraction, while steroids were detected only in the hexane fraction. The total flavonoid contents of the methanol extract, hexane fraction, ethyl acetate fraction, and methanol-water fraction were 66.5785; 77.6014; 98.5450; and 56.0091 mg GAE/g extract, respectively. The IC<sub>50</sub> values of antioxidant activity were 317.96; 253.47; 240.70; and 189.11 mg/L, respectively. These results indicate that the methanol-water fraction exhibited weak antioxidant activity, while the methanol extract, hexane fraction, and ethyl acetate fraction showed very weak antioxidant activity.

Keywords: Musa balbisiana Colla, secondary metabolites, total flavonoids, antioxidant activity

