

ABSTRACT

Amelia Fernanda Putri I, Analysis of Total Flavonoid Levels in the Leaves of the Moonflower *Tithonia diversifolia* (Hemsley) A. Glay Using the UV-VIS Spectrophotometry Method Based on Drying Time Variations. Supervised by Elok Widayanti, S.Si., M.Si.

Moon flower leaves are one of the plants used as traditional medicine in Indonesia. Flower moon leaves contain alkaloids, tannins, flavonoids, terpenoids and saponins. Flower moon leaves contain secondary metabolites, one of which is flavonoids. The benefits of moonflower leaves can be used to treat diabetes, diarrhea, liver disease and stomach aches. The flavonoid levels of a plant can be influenced by the drying time when making simplicia. The aim of this research was to determine the total levels of flavonoids contained in kembangbulan leaves with different drying times. In this research, simplicia kembangbulan leaves were used with different drying times, namely 6 hours and 10 hours. The drying temperature used is 60°C using extraction using the maceration method, qualitative testing of color reagents and determining total flavonoid content using the UV-Vis spectrophotometric method. The qualitative test results of the color reagent were positive for containing flavonoids. Determination of the total flavonoid content of Kembang Bulan leaf extract at a drying time of 6 hours was 0.4136 mg QE/gram and at a drying time of 10 hours was 0.455 mg QE/gram. Based on the research results, it shows that a drying time of 10 hours has greater flavonoid levels compared to a drying time of 6 hours.

Keywords: moonflower leaves; drying time; amount of flavonoids.