ABSTRACT

ANTIOXIDANT ACTIVITY TEST OF RED BETEL LEAF *(Piper crocatum)* ETHANOL EXTRACT USING DPPH

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Red betel (Piper crocatum) is a plant that has an exotic shape and attractive color. Red betel leaves have an exotic shape with wavy leaf surfaces accompanied by green, black and purplish-red leaf colors on the underside of the leaves, thus attracting the attention of many people. Red betel has secondary metabolites, namely alkaloids, flavonoids, tannins and essential oils with antioxidant and antibacterial activities. Antioxidants are compounds that have a function to combat the negative effects of free radicals, antioxidant compounds are substances the body needs to neutralize free radicals and prevent damage caused by free radicals to normal cells, proteins and fats.

This research was conducted to determine the antioxidant activity contained in the 96% ethanol extract of red betel leaves using the DPPH method which was tested using a UV-Vis spectrophotometer with ascorbic acid as a comparison. This research was conducted to determine the antioxidant activity contained in the 96% ethanol extract of red betel leaves using the DPPH method which was tested using a UV-Vis spectrophotometer with ascorbic acid as a comparison. The results showed that the average IC50 value of 96% ethanol extract of red betel leaves was 93.0275 ppm ± 2.4699 ppm with a coefficient of variation of 2.6550%. While the average IC50 value of ascorbic acid was 10.3070 ppm ± 0.2650 ppm with a coefficient of variation of 2.5710%. It can be concluded that there is still a stronger antioxidant from vitamin C than the ethanol extract of red betel.

Keyword : Red betel leaf, DPPH, Antioxidant, Spectrophotometry, Ascorbic acid