Antioxidant Activity of Dewandaru Leaves (*Eugenia uniflora*) Extracts in *Vitro*: As Reducing Agent and Metal Chelating Agent

Setyo Nurwaini, Wahyu Utami

Faculty of Pharmacy, Muhammadiyah University of Surakarta, Indonesia

ABSTRACT

Dewandaru leaf (*Eugenia uniflora*), was used as medicinal plant traditionally in Indonesia. In our previous study, it was known has high antioxidant activity as free radical scavenger. This research aimed to evaluate antioxidant activity of ethanol, ethyl acetate, and chloroform extracts of dewandaru leaves as reducing agent and metal chelating agent. Experiment revealed that all extracts of dewandaru leaves have antioxidant activity both in reducing activity and ferrous ions (Fe^{2+}) chelating activity which are concentration-dependent. The ferrous ions (Fe^{2+}) chelating activity (IC_{50}) of the ethanol, ethyl acetate, and chloroform extract of dewandaru leaves were 81.88, 90.09, and 95.87 g/ml respectively. These results indicated dewandaru leaves have significant antioxidant activity in vitro.

Keyword: antioxidant, dewandaru (*Eugenia uniflora*), reducing power, metal chelating activity

ISBN No. 978-979-25-1207-6