

MICPS2-011-PS

In Vitro Antiinflammation and Antioxidant Activity of Etanol Extract of *Chromolaena odorata* L.

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ABSTRACT

Kopasanda (*Chromolaena odorata* L.) is a species of plant from the Compositae family. Kopasanda can grow in forests and coastal areas, causing differences in the size of the leaves. This plant is used as a traditional medicine for treating wounds, increasing hemostasis, blood clotting, anti-inflammatory activity, diuretic, and hepatotropic. The leaves contain several active compounds such as flavonoids, alkaloids, saponins, tannins, phytates, cyanogenic glycosides, and steroids. The anti-inflammatory test used the protein denaturation method, while the antioxidant test used the Ferric Reducing Antioxidant Power (FRAP) method. The results of the anti-inflammatory test obtained an IC₅₀ value of 299.719 (µg/ml) for forest kopasanda and 284.949 (µg/ml) for coastal kopasanda. The antioxidant test results obtained antioxidant activity values of 33.673 mgQE/g extract for forest kopasanda and 6.7283 mgQE/g extract for coastal kopasanda. The anti-inflammatory and antioxidant potential of forest kopasanda leaves is better than that of coastal kopasanda.

Keywords: *Chromolaena odorata* L., antiinflammation, antioxidant