

Abstract

In the past 10 years, cancer research has been increasing and the discovery of new anticancer properties is targeted by the scientist. Medicinal plants are considered as the target for developing new anticancer drugs since it is more tolerable and has less side effects. *Laportea decumana* is one of the plants that grows in Papua, Indonesia. It has been used as the anti-fatigue and anti-stiff. It has been investigated to have compounds that have an anticancer potential. This study primarily aims to investigate the possibility of using hexane extract of *Laportea decumana* leaves as an anticancer agent through *in vitro* assessment to see the capability of the extract to inhibit the growth of the HeLa cells by conducting MTT assay. The result suggested that *Laportea decumana* contains anticancer compounds such as terpenoid, alkaloid, tannin and steroid. It also able to decrease the growth of HeLa cells with the IC₅₀ at the concentration of 521 µg/mL (logIC₅₀=2.717). However, future study is needed to access the exact mechanism of the extract as an anticancer.

Keywords: daun gatal, hexane, anticancer, MTT assay, phytochemical test