ABSTRACT

Daun gatal (Laportea decumana) is well known in the Papuan province for its analgesic properties. Traditionally, the muscle fatigue relieving effect is obtained by applying *Laportea decumana* leaves on the skin of the sore area for 5-10 minutes until itchiness ensues. This may not be the only benefit of *Laportea decumana*, as studies done on its close relative *Laporteaa estuans* indicate that *Laportea decumana* may also have significant antimicrobial activity. This hypothesis is supported by a recent study on the antimicrobial properties of *Laportea decumana* that found antibacterial activity on *Staphylococcus aureus* and *Escherichia coli*. To answer this hypothesis, this study will gather data on phytochemicals and antimicrobial activity of *Laportea decumana, Laportea aestuans,* and *Laportea crenulata* to help identify this antimicrobial activity on *Laportea decumana.* Data on antimicrobial properties and phytochemicals of *Laportea decumana, Laportea aestuans,* and *Laportea crenulata* will be extracted from Google Scholar and PubMed databases, while additional data on other biochemicals that contribute to the antibacterial properties of *Laportea decumana* will also be provided. This will be supplemented with in situ *Daun gatal e*xtraction data. The goal of the study is to provide an avenue of research on the future uses of *Laportea decumana* extract for its antibacterial activity.

Keywords: *Laportea decumana*, antimicrobial, literature review, *Laportea aestuans, Laportea crenulata,* Phytochemical