



ABSTRACT

Title of Abstract : Effect of Eleutherine bulbosa Tiwai Onion Oil as an antimicrobial
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Background : East Kalimantan as a tropical rain forest area has biodiversity. One of them that has been used by the traditional community is Dayak onion or Tiwai onion (*Eleutherine bulbosa* Mill Urb). Tiwai onion has many proven properties for traditional medicine in the treatment of diseases such as diabetes, heart disease, dysentery, colitis, laxative for urination and defecation, anti-vomiting, anti-inflammatory, anti-bleeding, anti-fertility, ulcer or skin diseases, Dayak onions have phytochemical components such as flavonoids, phenols and alkaloids as well as terpenes-steroids. Terpenoids have soluble properties in organic solvents such as alcohol and ether.

Objective : The aim of this study was to determine the effect of tiwai onion oil as an antimicrobial in vitro. Tiwai Onion Oil is made by mixing Tiwai Onion Extract with Virgin Coconut Oil (VCO).

Research Methods/ Implementation Methods : The research method used is true experimental with a posttest-only control group design. Antimicrobial test with microdilution method.

Results : The results of this study showed that *Eleutherine bulbosa* (Mill) Urb Tiwai Onion Oil had an antimicrobial effect on *Staphylococcus aureus* (konsentration 50 μ L) and *Escherichia coli* konsentration (25 μ L and 50 μ L)

Conclusion/Lesson Learned : *Eleutherine bulbosa* (Mill) Urb Tiwai Onion Oil had an antimicrobial effect on *Staphylococcus aureus*) and *Escherichia coli*

Keyword : *Eleutherine bulbosa* , VCO, flavonoid

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