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Potency of *Fibraurea tinctora* Lour. extract as anti-bacterial agents towards pathogenic bacteria (Conference Paper) [\(Open Access\)](#)

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Abstract

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This research aimed to explore antibacterial activity of *Fibraurea tinctora* Lour. extracted by ethanol and hot water. The treatments of study consisted of six levels of *F. tinctora* plant extract (0 %, 0.625 %, 1.25 %, 2.50 %, 5.00 % and 10.0 %, respectively) either using ethanol or hot water, resulting in 12 experimental treatments according to 6 × 2 factorial arrangement in a completely randomized design. Each of the treatment was replicated three times. Results of this research showed that either ethanol or hot water *F. tinctora* extract have potency to control farm pathogenic bacteria. In the lowest concentration (0.625 %) both extract significantly inhibited bacteria growth (Minimum Inhibition Concentration). The highest antibacterial activity was in group that had the highest concentration (10 %) of extract in both of the bacteria. *Staphylococcus aureus* were more susceptible to the *F. tinctora* extract than *Escherichia coli*. Result from spectrophotometry UV-vis assessments showed that the total composition of tannin, alkaloid, and saponin from ethanol extract of *F. tinctoria* is higher than its water based extract. Meanwhile, phenol composition of water-based extract from *F. tinctoria* is higher than from ethanol extract. © 2019 Published under licence by IOP Publishing Ltd.

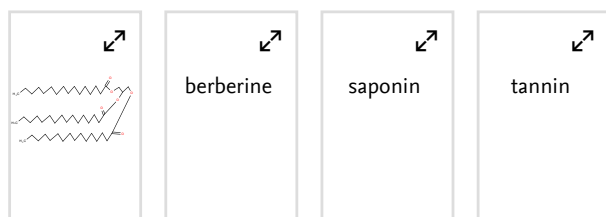
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