

ABSTRAK

Sementara diare dapat terjadi oleh berbagai penyebab, infeksi menjadi penyebab paling umum, lebih dari 90% kasus. *Salmonella typhii* adalah salah satu agen infeksi tersebut. *S. typhii* yang menyebabkan demam tifoid, ditularkan melalui jalur fecal-oral, sehingga personal hygiene sangat menjadi faktor penularannya. Daun jambu biji merah (*Psidium guajava* L.) telah dipelajari tentang sifat antibakterinya, dan terbukti efektif sebagai antibakteri terhadap beberapa bakteri, di antaranya adalah *S. typhii*. Penelitian ini bertujuan untuk membandingkan sifat antibakteri antara ekstrak metanol daun jambu biji merah dan metanol. Penelitian ini merupakan penelitian eksperimen in-vitro dengan post-test only with control group design dengan subjek eksperimen *S. typhii*. Penelitian ini menemukan bahwa ekstrak metanol daun jambu biji merah. Pada konsentrasi 20 mg/ml dan 100 mg/ml menunjukkan zona hambat yang jelas pada nutrien agar dengan *S. typhii*, sedangkan metanol pada konsentrasi yang sama gagal menghasilkan zona hambat.

ABSTRACT

While diarrhea may occurred as result of various cause, infection is one of the most common reasons, more than 90% of the cases. *Salmonella typhii* is one of such infectious agents. *S. typhii* which caused typhoid fever, is transmitted through the fecal-oral pathway, hence personal hygiene is very much a factor in its transmission. Red guava (*Psidium guajava* L.) leaf had been studied extensively on its antibacterial properties, and had been found to be effective antibacterial against multiple bacteria, amongst them is *S. typhii*. This study aims to compare the antibacterial properties between red guava leaf methanol extract and methanol. This study is an in-vitro experimental study with post-test only with control group design using *S. typhii* as the experiment subject. This study found that red guava leaf methanol extract (RGLME) at 20 mg/ml and 100 mg/ml concentration shown a clear inhibition zone on the nutrient agar with *S. typhii*, while methanol at the same concentration failed to produced any inhibition zone. This study concludes that RGLME possess antibacterial properties which increased by increasing concentration, while methanol at lower dose did not possess antibacterial properties.