

## INTISARI

Temu kunci (*Boesenbergia pandurata* Roxb. Schlecht) merupakan salah satu tanaman obat yang berkhasiat sebagai antibakteri yaitu untuk mengobati penyakit tifus. Salah satu kandungannya adalah minyak atsiri seperti sineol, kamfer, zingiberin, dan d- borneol. Minyak atsiri tersebar merata di seluruh bagian tanaman walaupun terdapat penumpukan di bagian tertentu.

Penelitian ini bertujuan mengetahui perbandingan potensi antibakteri minyak atsiri rimpang dan daun temu kunci terhadap *Salmonella thypii*. Penelitian ini termasuk penelitian eksperimental murni dengan rancangan penelitian faktorial pola dua arah.

Dari penelitian diperoleh harga indeks bias minyak atsiri temu kunci bagian rimpang  $1.5372 \pm 0.00001$  dan bagian daun sebesar  $1.5845 \pm 0.00009$  sedangkan konsentrasi minyak atsiri rimpang  $2.54 \pm 0.06\%$  dan bagian daun  $2.77 \pm 0.04\%$ . Uji potensi antibakteri dilakukan dengan empat variasi kadar yaitu 1, 5, 10, dan 15% dengan ampisilin sebagai kontrol positif dan etil asetat sebagai kontrol negatif. Uji organoleptis menyatakan bahwa minyak atsiri temu kunci berwarna jernih, rasanya pedas dan tajam di lidah, serta memiliki aroma yang khas. Diameter zona hambat dianalisis dengan *Kolmogorov Smirnov Test*, ANOVA dua arah, dan uji LSD taraf kepercayaan 95%. Hasil penelitian menunjukkan minyak atsiri bagian daun memiliki potensi antibakteri yang berbeda, ditunjukkan dengan diameter zona hambat dibandingkan bagian rimpang dengan kadar hambat minimal (KHM) sebesar  $0.50\%$  sedangkan bagian rimpang  $0.75\%$ .

**Kata kunci** : potensi antibakteri, *Boesenbergia pandurata* Roxb. Schlecht, Kadar Hambat Minimal (KHM), *Salmonella thypii*, minyak atsiri

## ABSTRACT

“Teru kunci” ( *Boesenbergia pandurata* Roxb. Schlecht ) is one of medicinal plants as an antibacterial for thypoid. One of the content's is volatile oil like as cineol, champor, zingiberin, and d- borneol. This volatile oil is spread evenly at all of plant sections although cumulated at some sections.

This research was aimed to determinate the comparison of antibacterial potentation from rhizomes and leaves volatile oil of *Boesenbergia pandurata* against *Salmonella thypii*. This research was a pure experimental with two ways random factorial design.

Based on the research, the refraction index of rhizomes volatile oil was  $1,5372 \pm 0,00001$  and the leaves was  $1,5845 \pm 0,00009$  and also the concentration of rhizomes volatile oil was  $2,54 \pm 0,06\% \text{ } \frac{1}{b}$  and  $2,77 \pm 0,04\% \text{ } \frac{1}{b}$  for the leaves ones. On the antibacterial potentation test, there were four concentration variation. They were 1, 5, 10, and 15%  $\frac{1}{v}$  with ampicilin as positive control and ethyl acetate as negative control. The organoleptic test stated if the volatile oil was a pure oil, spicy and had a strong taste at tongue and also had a specific aroma. The diametres of inhibitions zone were analyzed with Kolmogorov Smirnov Test, two ways ANOVA, and Least Significan Deferential (LSD) at significant level of 0,05. The results of this research showed that the volatile oil of the rhizomes has a different antibacterial potentation at the diametres of inhibitions zone than the leaves with Minimum Inhibitory Concentration (MIC) was 0,50%  $\frac{1}{v}$  for the leaves and 0,75%  $\frac{1}{v}$  for the rhizomes.

**Key Words** : antibacterial potentation, *Boesenbergia pandurata* Roxb. Schlecht, Minimum Inhibitory Concentration (MIC) , *Salmonella thypii*, volatile oil