5. CONCLUSIONS AND SUGGESTIONS

5.1. Conclusions

- The increase of harvesting time (3, 4, and 5 months) will decrease the antibacterial activity of *Z. officinale* Rosco. The highest inhibitory action was achieved on 3 months old of ginger.
- At the smallest concentration, which is 0.78 µg/ml, *Z. officinale* Rosco can still inhibit the growth of the entire bacteria.
- The increase of harvesting time (3, 4, and 5 months) will increase the total phenolic compound in *Z. officinale* Rosco.
- Powdered ginger resulted higher antibacterial activity and higher total phenolic compound compared to fresh ginger.

5.2. Suggestions

- The hydrodistillation method to produce essential oil in *Z. officinale* Rosco can be done to determine higher antibacterial activity.