## **CHAPTER V. CONCLUSION**

## 5.1 Conclusion

The conclusion of this study is as follow:

- 1. Fraction non-polar of liverwort (*Marchantia paleacea* Bertol.) has cytotoxicity effect on colorectal cancer cell line with  $IC_{50}$  value 24.65 µg/ml
- 2. 13 potential anticancer compounds were identified in the non-polar fraction of liverworts and the compound with the highest percentage area and anticancer activity was the nobiltien compound.
- 3. Nobiletin bioactive compounds have potential as anticancer based on in-silico studies with molecular docking obtained a docking score of -7.5627 kcal/mol against COX-2 target protein. The docking score obtained is lower than the native ligand which shows nobiletin has strong binding potential to the target protein COX-2 in colorectal cancer.

## 5.2 Suggestion

Recommended to conduct futher studies it is necessary to perform in vivo tests on experimental animals to see a more accurate dose in inhibiting cancer cell growth, and to perform AO/PI staining to see the pattern of cancer cell death.

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