CHAPTER V

CONCLUSION

5.1 Conclusion

Based on the research that has been done. Can be concluded :

1 *C. sumatrana* ethanolic extract exerts antioxidant activity *in vitro* by scavenging DPPH ($IC_{50} = 52.627 \mu g/mL$), ABTS($IC_{50} = 497.67 \mu g/mL$) and reducing Fe³⁺ (FRAP; $IC_{50} = 230.17 \mu g/mL$) with the criteria strong, weak and mild respectively.

2 9,10-Epoxy-12-octadecenoate is the most potent compound as antioxidant in *C. sumatrana* ethanolic extract with the highest binding affinity toward endogenous antioxidant namely GPx (-6.4168), SOD (-5.7451), Keap1-Nrf2 complex (-8.3931) and CAT (-7.74977).

5.2 Suggestion

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Some future studies including *in vitro* assays on antioxidant enzymes and *in vivo* experiments are suggested to deepend our understanding on the real mechanisms of *C*. *sumatrana* antioxidant activity. Morever, the isolation of the particular compound 9,10-Epoxy-12-octadecenoate from crude extract of *C. sumatrana* are required.

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