

V. CONCLUSION

5.1 Conclusion

Based on the research that has been done, it could be concluded:

1. The administration of *C. sumatrana* extract at doses 100 mg/kg bw and 300 mg/kg bw could prevent the shortening of the colon caused by piroxicam-induced ulcerative colitis. However, no hemorrhaging was observed due to ulcerative colitis induction with piroxicam.
2. The administration of *C. sumatrana* extract could improve the histological condition of the colon, specifically by preventing the thickening of the tunica muscularis, maintaining epithelial integrity, and also could protect goblet cell quantity in UC-mice induced by piroxicam .
3. The administration of *C. sumatrana* extract at doses of 50 mg/kg bw and 100 mg/kg bw could suppress the number of leukocytes in mice suffering from ulcerative colitis. However, administration of the extract at a dose of 300 mg/kg bw can lead to an increase in leukocyte quantity.

5.2 Suggestion

Based on the research that has been done, it could be recommended:

1. Toxicity studies of ethanolic extract of *C. Sumatrana* rhizome through *in vivo* approach.
2. Molecular dynamic study is necessary to investigate the stability of ligand and protein target who involved in UC therapeutic.

