V. CONCLUSION AND SUGGESTIONS

5.1 Conclusions

1. BSF larval oil extracted using the solventless pressing method contains 21 types of fatty acids, with lauric acid as a predominant content (41.59%).
2. Oral administration of BSF larval oil for 30 days did not show a significant effect on the blood profile of mice exposed to cigarette smoke.
3. Administration of BSF larval oil also did not have a significant effect on MDA levels in the lungs of mice exposed to cigarette smoke.
4. Administration of BSF larval oil had a significant effect on the histopathological of the lungs in mice exposed to cigarette smoke, particularly in reducing septal thickening and inflammatory cell infiltration, especially at a dose of 2.5 ml/kgBW.
5. Administration of BSF larval oil had a significant effect on weight gain (at doses of 5 ml/kgBW and 10 ml/kgBW) and food consumption (at doses of 2.5 ml/kgBW and 5 ml/kgBW), but had no significant effect on drinking water consumption.

5.2 Suggestions

Further research should be conducted over a longer period of time with increased cigarette smoke exposure to observe more pronounced effects on hematological parameters and MDA levels. In addition, future studies should conduct analyses within a narrower dose range around 2.5 ml/kgBW. Furthermore, future studies should include

molecular analyses involving the activation of the Nrf2 pathway and endogenous antioxidants in regulating the body's defense mechanisms.