

CHAPTER V

CONCLUSION

The chemical constituents of *L. loudonii* fruit were successfully isolated and studied for the biological activities. The constituents of *L. loudonii* fruit DCM extract (14.37 g; 0.36% of fruit) primarily consisted of triterpene acids; ursolic acid (29.2% of DCM extract 10 g), oleanolic acid (1.4% of DCM extract 10 g) and waxes (17.1% of DCM extract 10 g). The major compounds of triterpene acids were ursolic acid. The constituents of waxes consisted of odd-numbered saturated straight-chain hydrocarbons, together with wax esters, saturated fatty acid methyl esters, a fatty aldehyde and primary fatty alcohols. Moreover, a phytosterol; β -sitosterol was found.

Oleanolic acid and ursolic acid have been reported in species of *Lagerstroemia* (Hou, et al., 2009; Dou, et al., 2005). However, this is the first report on the isolation of waxes, oleanolic acid and ursolic acid from this plant. *L. loudonii* fruits are new source to produce waxes and triterpene acids which provide the anti-TB and anti-malaria activity.