4. Discussion

The highest larvicidal activity demonstrated by ethyl acetate extracts, indicated medium polar secondary metabolites are responsible for the activity. The effectiveness of ethyl acetate extracts were seen to all larvae tested including *Anopheles gambiae, Culex quinquefasciatus* and *Aedes aegypti* with LC_{50} 27.0405, 25.1096, and14.6395 µg/mL respectively (Table1, 2 and 3). These results are comparable to *Commiphora caudate* ethyl acetate extracts which showed significantly higher larvicidal activity against *A. aegypti, A. stephensi* and *C. quinquefasciatus* (Baranitharan and Dhanasekaran, 2014). In general percentage mortality of all species of larvae to methanolic extracts were relatively low, thus higher LC_{50} (Table 1, 2, and 3) as compared to petroleum ether and ethyl acetate extracts. However methanolic extract exhibited unsubstancial activity to *A. Aegypti* with LC_{50} 1235.678 µg/mL (Table 3) also ineffective to *A. gambiae and C. quinquefasciatus* with LC_{50} 709.3404 and 828.126 µg/mL (Table 1 and 2). These results indicate that methanol extract of *Commiphora swynnertonii* was non-toxic at first 24h of exposure to larvae. From *Sterculia quinqueloba* methanolic extract displayed week activity for both *A. aegypti* and *C. quinquefasciatus* after 72h of exposure with LC50 value range from 200 - 750µg/ml (Wilson et al., 2014) and the *Anopheles gambiae* was the stronger at inhibiting activity of extract with LC_{50} 3662.4 µg/mL. Furthermore, from this study *A. gambiae* was seen to be relatively resistant to extracts followed by *C. quinquefasciatus* and the least is *A. aegypti* in the first 24hours of exposure, but other trends of activity changed as per time and dose dependent (Tables 1,2, and 3). The study done by Habeeb et al., (2009) exhibit larvicidal potential from *Commiphora molmol* and *Allium cepa* with LC_{50} 0.992 and 0.383 respectively against *Culex pipiens*, and the displayed toxicity was due to secondary metabolites which are 1, 8-Cineole 12.11%, l-linalool 43.36% and Camphor 0.17% for *Allium cepa* and dl-limonene 12.25% for *Commiphora molmol*. The physiological changes of larvae due to *Commiphora molmol* extracts revealed inhibitory action over protein contents of larvae, thus larvicidal activity of the oleo-resin and oil was explained to be related to the loss of certain enzymes inhibited by these extracts which affect the metabolic processes (Massoud et al., 2001), moreover histological examinations of Myrrh treated mosquito larvae showed great pathological effect on their fat, muscles, gut and nervous tissues (Massoud et al., 2000)

5. Conclusion

The study publicized ethyl acetate extract of *Commiphora swynnertonii* to have higher larvicidal activity compared to petroleum ether and methanol extracts. Further study has to be done to isolate pure compound that will exhibit higher larvicidal activity from *Commiphora swynnertonii* extracts.

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