

Introduction: Plant extracts are an attractive target for search of effective malaria vector control agents. The reason for this is that they present a cost effective, target specific and bio-degradable insecticides. The other reason is that they possess varied phytochemical contents that vectors are unlikely to develop resistance to very soon. In this study, we report on effectiveness of ethanol and water extracts of *Phytolacca dodecandra* (L' Herit) against *Anopheles gambiae* (Diptera: Culicidae) larvae. Methods: Crude ethanol and water extracts of leaves (shoot and midsection) and mature green fruits of *P. dodecandra* were scrutinized for larvicidal activity against 1st to 4th instar larvae of *An. gambiae*. Larvicidal bioassays were conducted and effectiveness evaluated using the >80% as per the WHO methods and threshold respectively. ANOVA analyses were performed for statistical justifications of the larvicidal property with *P* considered significant at $p < 0.05$. The effects of the extracts were evaluated under laboratory conditions. Result: Ethanol extracts were more potent than water extracts of *P. dodecandra* as larvicide. The highest mortality (56%) was recorded for L4s for ethanol extracts of mature green fruits of Endod sourced from Eldoret. Water extracts of Neem leaves killed 31% L3s while deltamethrin killed over 80% of all exposed larvae. Conclusion: Ethanol extracts *P. dodecandra* killed more of the exposed *An. gambiae* larvae than water extracts. Recorded mortalities due to exposure to the extracts were less than the WHO threshold of >80%. We recommend that additional refinement and tests need to be done before commercial exploitation as a malaria vector larvicide.