

Abstract

The efficacy of the water treatment of *Dioscorea hispida* tuber as the control of bean aphid (*Aphis craccivora* (Koch.)) was studied. The wild yam tuber water treatment was prepared by wild yam slice cloves in salt solution or distilled water for 24 hours. Both the bitter yam water treatment were control to the tested bean aphid. However, the 1st day water treatment with salt and distilled water was more effective. When exposed to 1st day of water treatment with salt for 48 hours, 83.75% of aphid mortality. The mortality of the 1st day of water treatment with distilled water was 83.13%, respectively. The toxicity bioassay of the bitter yam tuber water treatment was prepared by bitter yam slice cloves in salt solution for 24 hours were conducted on common cutworm. The studies showed that 100 percent mortality of common cutworm occurred after 48 hours of salt solution treatments. Whereas, sprayer of common cutworm with 1st, 2nd and 3rd day of water treatment with salt were conducted, 96.00, 96.00 and 98.00 percent mortality, respectively.

Keywords: wild yam tuber, *Aphis craccivora* (Koch), water treatment of jam yak tuber