Abstract

Tubers of potato variety Roslin Gucha were dusted with the following insecticides: Pirimiphosmethyl (1 percent), permethrin (1 percent), cypermethrin (0.5 percent), Fenvalarate (1 percent) and etrimfos. The adult moths were left exposed for 21 days after which the paper bags were closed and clipped for another 30 days. This was done in order to allow already laid eggs to develop. Then the tubers were examined for the tubermoth infestation. The untreated tubers were 90 percent infested which justified insecticides treatments for tuber protection against (Phthorimaea operculella) (Zell). At all treatment rates, all the insecticides achieved some control except pirimiphosmethyl. All the insecticides were very effective in controlling (P operculella) infestation. Fenvarate and etrimfos were more effective in suppressing the population of (P. operculella) in storage than permethrin, cypermethrin and pirimiphosmethyl. Although both rates to 100 and 75 gms of product per bag of potatoes were more effective than 50 gms, it is better to use 75 gm. These treatments produced good results and would be recommended for use in storage for large quantities.