Effect of Different Concentration of Actellic 25ec on the Storage Quality of Cowpea (*Vigna Unquiculata*) Grains

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Abstract

The experiment was conducted at the Pest Management Laboratory of Niger State College of Agriculture, Mokwa, during December, 2009 and June, 2010 to identify the most effective and economic dosage of Actellic 25EC for successful preservation of quality of cowpea for about six month after harvesting. The treatments were made up of Actellic 25EC (R) applied at the rate of 0, 5, 10, 15. 20, 25 and 30 mi in 1 liter of water for treatments A trough G respectively. The experiment was laid out in a Completely Randomized Design (CRD) with seven treatments replicated three times. Assessment was based on ranking of infestation and damage to seed quality based on scale of 1-9 for store produce quality. The results shows there were no significant difference ($p<0.05$) in the treatments during the first 6 weeks, whereas, there were significant differences ($p<0.05$) between treatment A and all other treatments from 6 weeks after storage of cowpea. It is recommended that the storage of cowpea for period less than 6 weeks after harvesting does not required any use of pesticide while for period 6-24 weeks after harvesting required 5-20 ml of Actellic 25 EC ® in 1 litre of water.

Keywords: Cowpea weevils, actellic 25EC, *Vigna unquiculata*, storage grains

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