

Effect of Variety and Insecticide Seed-Dress on Russian Wheat Aphid (*Diuraphis noxia*) Population, Damage and Yield of Wheat (*Triticum aestivum* L.)

M. W. Karue*, A. W. Kamau and S. O. Owuoche

Department of Crops, Horticulture and Soils, Egerton University, Njoro, Kenya

***Corresponding Author:** *milkakarue@yahoo.com; 0711801631*

Russian wheat aphid (*Diuraphis noxia*) is one of the most important pest of wheat (*Triticum aestivum*) and other cereals worldwide. It has been reported to cause up to 95% yield loss when poorly controlled. Therefore, there is need to develop effective Russian Wheat Aphid (RWA) control methods to reduce wheat yield losses. The objective of this study was to determine the effect of variety and insecticide seed dress on RWA population and damage on wheat. The experiment was carried out in the field cage using Randomized Complete Block Design (RCBD) replicated three times. The treatments included nine bread wheat varieties (*Kwale*, *K. Wren*, *K. Kingbird*, *Robin*, *K. Tai*, *K. Sunbird*, *Eagle 10*, *K. Korongo* and *K. Hawk*) and insecticide seed dress (Cruiser at 1.5 ml/kg of seeds and JOCII at 25ml/kg of seeds). There were significant differences ($P \leq 0.05$) in plant height, aphid population and damage (leaf chlorosis and leaf rolling) among the varieties. *Eagle* variety consistently recorded the longest height compared to all the other varieties and also recorded the least aphid population. The most infested variety was *Korongo* which was not significantly different from *Kwale* ($P \leq 0.05$). Variation in plant height over time after infestation was due to interaction between RWA damage and genetic potential of each variety. Cruiser insecticide seed dress gave the best control by reducing aphid population and its damage significantly ($P \leq 0.05$) compared to control and JOCII seed treatment. The results of this study shows that *Eagle* variety is resistant to RWA and seed dressing the variety with cruiser promotes vigor and resistance during the early stages of growth resulting to high yield.

Key words: *Diuraphis noxia*, *Triticum aestivum*, variety