

DANIEL L. MUTISYA, E. M. EL BANHAWY CANNUTE P, M. KHAMALA, CHARLES W KARIUKI, MIANO DW Determination of Damage Threshord of Gassava Green (Acari: Tetranychidae) on Different Cassava Varieties *Journal of Plant and Pest Science* 1, (2): 79-86.

Abstract

Density threshold has been least considered in efforts to control cassava green mite (CGM) of the *Mononychellus* species. Nine cassava varieties of varied cyanogenic contents were evaluated for CGM density threshold. Mite population of the 10 introduced individual active stages of *Mononychellus progresivus* reached peak densities on 39th day of t h e most susceptible varieties, and by the 54th day attacked leaves had witted at $20.0 \pm 2^{\circ}\text{C}$ and $63 \pm 4\%$ test climatic conditions' Mite threshold was determined to be ≥ 27 mites / leaf, cassava leaf variety cyanogens potential content was between 8.5 to 20.0 mg/kg on the nine varieties evaluated' variety high cyanogens potential ted to higher CGM density growth and subsequent biomass loss. similarity, high leaf cyanide (HCN) content ted to higher biomass toss (%) up to HCN 20mg/Kg as a result of high CGM infestation. This information is beneficial to cassava breeders, when developing varieties tolerant to CGM damage and safe for human consumption where cyanogens levels $<10\text{m}9/\text{kg}$ showed the least leaf damage by CGM. Likewise farmers and crop Protection agents can use the determined threshold to decide when to implement control measure for CGM on cassava crop.