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 progressivus* reached peak densities on 39th day of the most susceptible varieties, and by the 54th day attacked leaves had withered at 20.0 ± 2°C and 63 ± 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 led to higher CGM density growth and subsequent biomass loss. Similarity, high leaf cyanide (HCN) content led 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 <10mg/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.