

## **Screening of local cassava varieties against cassava mosaic disease and cassava green mite**

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**Abstract.** One of the sustainable solutions in controlling cassava mosaic disease (CMD) is the deployment of resistant genotypes. In this study, fifty cassava varieties mostly local landraces collected from the Lake Zone were screened for resistance to CMD and GCM. The varieties were evaluated in high disease pressure areas of Geita district in a randomized complete block design in two replications in two seasons. Cassava genotypes were obtained from the cassava germplasm bank at ARI Ukiriguru and were planted at a spacing of 1.0m x 1.0m in plots measuring 10.0m x 2.0m. Disease incidence and severity were taken at three months intervals. In the first year, 40% of the genotypes were severely infected by the disease. Many of these were therefore eliminated. The varieties that were

retained exhibited significant differences in disease levels ( $P < 0.05$ ). The most resistant varieties were Kachaga and Lwamilembe. Their CMD severity scores were 1.5 and 1.0, respectively. Root yield for the two varieties were 10.1kg/plot and 6.2kg/plot, respectively. These yields were higher than those of the rest of the varieties. Varieties that had high CMD severities also gave low root yields. The varieties Kachaga and Lwamilembe were therefore recommended for areas with heavy CMD infection