Nurseries for clean Cassava planting material

Recognize the problem
Planting material for cassava production needs to be obtained from healthy plants. This means plants that show no symptoms of any disease: no leaf colour changes or chlorosis, no twisted or curled leaves, no shoot tip dieback, no dark or white fungus patches or streaks on the stem, no rotten spots and no other abnormal characteristics. The most common of these diseases are Cassava Brown Streak Virus and Cassava Mosaic Virus. Such diseases can lead to up to 80-90% yield loss. Mealybug insects can also be a problem.

Background
The establishment of nurseries for cassava planting material is necessary to assure availability of disease free cassava cuttings. A cassava nursery is a small cassava field aiming to produce clean cassava cuttings. Such plots are established on a selected farmer plot. They are easily reached by other farmers for sourcing planting materials and even for learning purposes. In most cases, a plot of about 0.5 acres is well-manageable. It will provide enough planting material for a 1 - 1.5 hectare field.

Management
• Select a site far away from other cassava fields at a distance of about 150 - 200m to reduce the chance of insects carrying plant diseases to your nursery
• Prepare a nursery site of about 20 x 20 metres
• Till the land, and construct rows of ridges 30 cm apart
• Make planting holes 8 - 10 cm deep, with 10 - 15 cm between them
• Select cassava cuttings for planting material from healthy plants. Healthy plants show no leaf colour changes or chlorosis, no shoot tip dieback, no dark or white fungus patches or streaks on the stem and no rotten spots.
• Plant cassava cuttings while slightly slanted at 45°
• Inspect the nursery site for cassava diseases and insect pests once per week, and uproot diseased plants quickly
• Planting material should grow in the nursery for 3-4 months until it is ready for planting into the field
• Then, transplant the healthiest looking plants into a field at a distance of 45cm from plant to plant, and 60 cm between rows.
• Change the nursery site from season to season to avoid soil-borne cassava diseases

The recommendations in this factsheet are relevant to: Tanzania

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