

Tanzanian women battle virus-fighting “liberator” cassava but challenges loom

Jaudi women’s group in Kismwene Village, Butiama district in Mara region of Tanzania received a “Mkombozi” cassava variety from the Tanzanian national agricultural research center, Mikocheni Agricultural Research Institute. Mkombozi is a kiswahili word for liberator. According to Alex M. Bethney, the area Extension worker who offers technical backstopping to this cassava group, the Ukombozi variety is resistant to cassava mosaic disease which is one of the two virus diseases devastating cassava in the region.

This resistant variety was multiplied through tissue culture so it is free from any kind of disease at planting. Tissue culturing delivers clean planting materials but does not add any resistance to what the plant already has. This group received plants that are resistant only to cassava mosaic disease and not the devastating cassava brown streak disease.

Women farmers tissue cultured cassava celebration may be cut short by cassava brown streak disease

Cassava brown streak disease is a viral disease that has devastated cassava fields in the great lakes region including Tanzania. There is no cassava variety that has total resistance to this disease aside a few varieties that scientists consider tolerant but whose resistance breaks down after a few cropping cycles. Cassava brown streak virus is transmitted by white flies, which are in abundance in farmers’ fields. Within the smiles from these women farmers.



Juliana Mwangwa, the groups’ leader, was extremely excited

about the tissue culture cassava she received. She noted that her group is able to supply members with clean cassava cuttings for planting, helping the many farmers who have been affected by the cassava viruses. That may change, however. Tanzania authorities have relaxed the strict liability clause, which means that Juliana and her fellow women may be able to eventually access a resistant variety.

Tanzania moving in the right direction

The strict liability in Tanzania’s Biosafety regulation 6 states: “All approvals for introduction of GMO or their products shall be subject to a condition that the applicant is strictly liable for any damage caused to any person or entity”. It was amended to include: “.....strict liability “as in the old regulation” shall not apply to

researchers and research activities.” The presence of the clause meant Tanzania had no research on genetic engineering because scientists were scared of the stringent penalties based on perceived harm. In contrast, neighboring Kenya and Uganda have been conducting confined field trials on transgenic crops for close to a decade.

Modifying the strict liability clause is a loss for anti-GMO activists and a gain for the Tanzanian farmers and scientists who are directly involved in cassava production and research respectively. Tanzania is moving faster in using genetic engineering in addressing cassava brown streak disease which will enforce the short term goal of continuously supplying clean planting materials through tissue culture. Farmers also got to realize that the tissue cultured cassava that some anti groups prefer to call “Test tube cassava” is not any different from the cassava that they have been growing. They have also realized that subsequently they could multiply this cassava through cuttings the way it is traditionally done. This is the same way farmers will eventually have access to transgenic cassava which are genetically modified to resist the brown streak virus which is a real threat to food security in the cassava growing areas.

Former Tanzanian minister on biotech challenges

Adan Malima, former Tanzania’s deputy Finance Minister who is also the Patron for the Open Forum on Agriculture Biotechnology in Tanzania, noted that decisions on biotech research are not being made by people who know. He underscored the urgent need for grassroots mobilization that would empower farmers to influence decision making process to help shift the current situation in which farming decisions are being made by non farmers who are influenced by self appointed “on behalf of the farmers” activists.

Malima was opening a leadership meeting on grassroots mobilization training organized by the Cornell Alliance for Science for the Africa’s science allies held in the Tanzania’s Mara Region town of Mwanza. According to the Alliance for Science training’s Coordinator, Polly E. Holmberg, it was meant to provide avenue for science supporters to help amplify the voices that have not been heard—farmers voices, like Juliana’s, whose current clean field could easily be wiped out because of a crop disease that can be addressed through genetic engineering.

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