

TECHNOLOGY DESCRIPTION

Single Diseased Stem Removal (SDSR): SDSR is a simple and fast way of reviving Xanthomonas wilt (XW) affected banana fields.

Irrespective of the initial plant disease incidence, all visibly diseased stems are cut at soil level as soon as symptoms are observed. SDSR is applied as long as XW symptoms are present in a field. XW incidence drops to below 1% within 2-3 months. Its suitable for less intensive production systems.

Use of symptomless suckers: Symptomless suckers sourced from XW affected fields can be used to establish new banana plots, especially in locations where most fields are infested and clean seed is unavailable. Less than 5% of planted suckers showed XW symptoms across different experiments. SDSR can then applied on these plants.



SDSR: A farmer cutting a diseased stem at soil level (A) and removing the apical meristem of the cut plant.

END USERS AND BENEFITS

The end users of SDSR are the farmers and farming communities. The technology is simple and less costly to apply compared to the removal of complete mats. It can be easily applied by both genders in the household.

SDSR is suitable for subsistence production systems whose objective is control rather than eradication.

On farm trials that involved farmers were used to improve the technology.

SCALING STRATEGY

East DR Congo will be prioritized for SDSR scaling out work given the limited support to affected farmers. This region currently also forms a large disease front, heading westwards into the Congo basin.

SDSR will be scaled out through partnerships with field-based governmental and non-governmental agencies. In the framework of the RTB-RBM project a BXW platform was strengthened in South Kivu, east DR Congo, comprising local and Int. NGOs and various governmental organizations. Networks or platforms of the NGOs/GO at community level will be used as entry points for out-scaling. Staff of partner agencies will be trained on SDSR use. Gender roles in disease control will be taken into account. In central Africa, men tend to manage the bananas, while women are responsible for the intercropped annual crops.

LEVEL OF ADOPTION OR USE

SDSR guidelines and posters have been scaled out through partner agencies in East DR Congo.

SDSR is currently being scaled out by several International NGOs and FAO.

Current beneficiaries (early 2017) in Central Africa (DR Congo and Burundi) estimated at 20,000 households.

Target beneficiary by 2020 across the East and Central African region estimated at 200,000 households.

CRITICAL GAPS AND NEXT STEPS

- So far 20,000 households have been reached, through SDSR technology out-scaling investments by international NGOs (e.g. a World Vision-led development project in South Kivu, east DR Congo, a USAID-funded CRS-led project in Burundi), FAO who led a development project on Idjwi island in South Kivu and by the DR Congo government who funded a development project in North Kivu on SDSR and macro-propagation.
- The RTB-Results Based Management project spearheaded by Bioversity in collaboration with FAO has created a coordination platform that needs to be sustained to realize large-scale development outcomes and impact. With sustained coordination assistance of the RTB-RBM project or FAO, this platform will continue to streamline impact-oriented out-scaling approaches and messages.
- The current critical gap is reaching hundreds of thousands of farmers affected by the disease, predominantly in remote locations of eastern DR Congo.



A new banana field established using symptomless suckers sourced from a field with an 80% plant disease incidence.

KEY PARTNERS FOR SCALING

Main partners: NARS and Governmental extension services (INERA, IPAPPEL and SENASEM); National and International NGOs (DioBass, World Vision, Food for the hungry and CRS) and FAO.

Investors: RTB, Belgian Directorate General for Development through the CIALCA project, USAID funding to Int. NGOs in east DR Congo and Burundi.