MANAGING MAIZE LETHAL NECROSIS DISEASE IN EASTERN AND CENTRAL AFRICA

Locations  
Burundi, Ethiopia, Kenya, Rwanda, South Sudan, Tanzania, Uganda

Dates  
01/10/2014 - 30/09/2016

Summary

Maize lethal necrosis disease (MLND) negatively affects maize crops and their seeds and is threatening food and economic security in East and Central Africa. This project researched solutions to minimize or eliminate the risks and effects of the disease in the region. Through use of various channels to reach stakeholders along the value chain, CABI disseminated information on the threat of the disease and ways to manage it.

The problem

Maize is an important food crop in majority of households in East and Central Africa, where it accounts for 40-50% of the calories and proteins consumed. The outbreak and rapid spread of Maize lethal necrosis disease has emerged as a great challenge to maize production, threatening food security for the majority of households in the Eastern and Central Africa region.

What we are doing
The project aimed to ensure MLND was sustainably managed in eastern and central Africa; increasing productivity and efficiency of the maize value chain. To reduce instances and severity of the disease and its spread the team sought to increase and achieve equitable access and use of technologies, innovations, management practices and knowledge of disease management. This contributed to increased maize productivity in the region and hence improved food security and income.

The key objectives were to:

- Develop and disseminate Maize lethal necrosis resistant/tolerant maize varieties that were adaptable to eastern Africa
- Validate and disseminate proven MLND technologies, innovations and management practices in an integrated way to prevent the spread
- Enhance the knowledge base on MLND viruses and the epidemiology of the disease in eastern Africa
- Facilitate policy and economic analyses and advocacy to guide viable, equitable and gender responsive management interventions
- Strengthen regional capacity for innovation to prevent and control Maize lethal necrosis
- Enhance communication, information and knowledge on MLND with key CABI activities to:
  - Identify existing knowledge on MLND and the information needs and opportunities
  - Improve dissemination of Maize lethal necrosis information
  - Create awareness of Maize lethal necrosis among stakeholders

The team conducted an information needs assessment in Kenya, Tanzania and Uganda that guided the development of a project communication plan.

We trained over 84 extension staff, local administrators and researchers in packaging and disseminating information.

We also disseminated MLNDs information through 82 plant health rallies in over 20 districts and provinces throughout Burundi, Kenya, Rwanda, Tanzania and Uganda which reached over 11,635 farmers, traders, community leaders and agro-dealers (5,241 men, 3,921 women and 2,473 youth and children).

The team also used radios and television shows to channel information. Five live radio talk shows, three recorded radio programmes and one recorded TV news item were broadcast in Kenya, Tanzania and Uganda. These are estimated to have reached at least 50,000 listeners. In addition, four print media articles on the problems and management of the disease were published in national newspapers in Uganda and Kenya, including; ‘Seeds of Gold’ in both countries, ‘Harvest Money’ magazine and ‘New Vision’.

We produced a maize lethal necrosis poster in English that targeted farmers and translated it into Kiswahili for Tanzania and Kenyan audiences, Kalenjin for Kenya and seven languages in Uganda.

We also produced a mini video on the project for use online which covered the annual review and planning meeting.

Results so far

Donors

Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)

Partners
National Agricultural Research Institutes from the respective project countries,
East Africa Seed Co Ltd (EASEED), International Maize and Wheat Improvement
Centre (CIMMYT), University of Nairobi

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https://www.cabi.org/what-we-do/cabi-projects/