

Tropentag, September 16-18, 2015, Berlin, Germany

"Management of land use systems for enhanced food security: conflicts, controversies and resolutions"

Ex-post Analysis of the Scaling Processes of BXW Control Methods in Rwanda, Uganda and DRC

ONNO GILLER^{1,3}, BOUDY VAN SCHAGEN², MARC SCHUT^{3,1}

¹International Institute of Tropical Agriculture (IITA), Burundi

²Bioversity International, Burundi

³Wageningen University and Research Centre (WUR), The Netherlands

Abstract

Banana Xanthomonas Wilt (BXW) disease has been raging through Eastern and Central Africa since it was first apparent in Uganda in 2001, having spread from Ethiopia. During the years that followed, BXW spread from Uganda through Kenya, Rwanda, Burundi, Tanzania and the (Eastern) Democratic Republic of Congo. The devastation it has caused to the banana crops called for a concerted push to scale control methods to help limit the spread of the disease. Based on the main modes of transmission (tools, animal grazing and insect vector transmission), a control package was drawn up. This package included early male bud removal, disinfecting farm tools, not exchanging planting material, only using disease-free planting material, keeping grazing animals off infected fields, and the removal of BXW infected 'mats'. In the worst case scenario, where BXW infection was too high to control (a threshold of about 14% was used), it was recommended that the whole field be uprooted. It was also often advised that farmers leave the fields where banana plants were uprooted fallow for at least 6 months. This set of control methods was scaled across the various countries, with varying degrees of success. This research is using a triangulation of research methods (a psycho-behavioural survey with farmers, in-depth interviews with farmers and key stakeholders, and workshops with key stakeholders (including farmers)) to understand the dynamics behind the scaling process. The aim is to identify key mechanisms within the scaling process that have either constrained or facilitated the process, in order to gain insights into scaling processes around the scaling of BXW Control Methods, as well as wider scaling dynamics. The results of this work will also feed into the current work being done on a new and improved set of BXW control methods.

Keywords: Banana disease control, Banana Xanthomonos Wilt, scaling processes

Contact Address: Onno Giller, International Institute of Tropical Agriculture (IITA), IITA Station Burundi, Quartier Kabondo, Avenue du 18 Septembre, No. 10, BP 1893 Bujumbura, Burundi, e-mail: onno.giller@wur.nl