

## Scientists, farmers to band together against ‘bunchy’ disease

*A project on managing the Banana Bunchy Top Disease is using participatory research bridging scientists and communities together to better control the deadly disease “on the ground”.*

Banana Bunchy Top Disease (BBTD) is the most devastating virus disease of banana and plantain, and its spread is negatively impacting the economy, livelihoods, and quality of life of millions of farmers in Africa. The disease is already established in 14 African countries and scientists warn that the disease will continue to rapidly spill into more regions if tough action is not taken now. For example, the BBTD outbreak detected in Bénin and Nigeria, West Africa since 2011 – a region previously thought as BBTD-free – opened a second front for disease advancement in the region.

Since the impact of the disease develops over time and the first symptoms are not always easy to identify, banana-producing farmers often fail to see the situation clearly. This is compounded by insufficient financial and human resources within the national programs and quarantine services, making the accurate determination of the current status and changes over time of the disease difficult and hampering the drafting of realistic and affordable control strategies.

Currently, three international agricultural research centers—IITA, Bioversity International, and CIRAD, are partnering in a BBTD control project titled “*BBTD containment and recovery by building capacity and piloting field recovery approaches through a learning alliance.*” The initiative is being funded by the CGIAR Research Project on Roots, Tubers, and Banana (RTB).

On 20-25 January 2014, the project organized a workshop on “Recovering banana production in BBTD-affected areas: Community and farm household approaches”, during which researchers shaped out a framework for a participatory approach to eradicate infected plants and resuscitate banana production across nine pilot sites in Benin, Nigeria, Cameroon,



Lava Kumar from IITA pointing to BBTD symptoms in the field.

Gabon, Congo Brazzaville, DR Congo, Burundi, and Malawi.

“One of the biggest challenges of BBTD is that infected plants initially show no symptoms, thereby making it especially difficult for farmers to detect and control it. By the time the leaves begin to bunch up, irreversible damage is done to the host plant and the virus may well have spread to other farms, into new regions, and across international borders.” says Lava Kumar, IITA virologist.

“We, therefore, need a multi-pronged participatory approach involving farmers and scientists to nip this disease in the bud,” he added. Lava Kumar is co-leading the project with Rachid Hanna, also of IITA, Charles Staver of Bioversity International, and Marie-Line Caruana of CIRAD.

“We need to explore more interdisciplinary approaches in disease control”, said Marie-Line Caruana. “When I started working on BBTD in Rwanda in the early nineties, researchers did not consider the disease as crucial as they do today. I see a big motivation among researchers to exchange information on BBTD and BBTD-affected communities and thus improve control mechanisms”.

The 48 researchers involved in the Bujumbura- workshop used tools derived from participatory research approaches to solve problems of symptom recognition by farmers via role games in various “village-setting” exercises, and developed implementation plans to mobilize “communities” and “households” in interactive work sessions. The draft model was then tested successfully with

banana-producing communities in Burundi during a field visit in Secteur de Rusagara.

“Qualitative research may not play a big role in my daily laboratory work,” says Adedapo Adediji, a PhD student on BBTD in the IITA Virology and Molecular Diagnostics Unit, “But when it comes to collecting samples and taking data on rates of infection of healthy plants in the communities, it would make such a difference to understanding better the priorities of the banana producers, so we could work together to control this devastating disease”.

The participatory tools were facilitated by an enthusiastic team and included methods of qualitative and action research, social and gender analysis, gender-sensitive diagnostic tools, participatory communication, and matrix scoring.

“Participatory research approaches are based on the principle of triangulation, in which three data sources are crossed: local knowledge, researcher’s analysis, and secondary sources. This is necessary to check the quality of the results,” says Anne Rietveld, enterprise and value chain specialist of Bioversity International based in Uganda and one of the workshop facilitators.

The laboratory results obtained alongside the information given by farmers would serve to validate participatory disease control practices and to analyze the findings for further strategic work with communities. The method also proved useful in understanding the economic factors that influence disease management and decision making by farmers, as experienced in different project

sites. Widespread, participatory research approaches would enable scientists to involve farmers more and establish disease control priorities with quarantine services and communities.

The tool is also a valuable one for helping farmers decide which control mechanism should be given priority and should serve to manage disease control more efficiently. It also makes it much easier to raise awareness among farmers and to monitor disease development.

As a follow-up to the workshop, the project will organize a training course in the next few months for national partners on detection of the virus to help develop a capacity for monitoring and certification of planting material.

## Beneficiaries praise IITA Talent Grant initiative

**B**eneficiaries of the IITA Talent Development Grant (ITDG) say the initiative is helping staff to gain new skills and prepare them to take up more challenging tasks.

The ITDG program aims to support nationally recruited staff who wish to undertake training or further study in areas related to their work.

The program was instituted last year by DG Nteranya Sanginga, with about US\$40,000, as part of efforts to develop the critical human resource within IITA.

During one of the training supported by the grant on Effective Communication in Cameroon, one of the participants, Frederick Fanwong, IT Manager, described the course as a “wonderful experience.”

He said, “A great part of the course touched on our individual ways of communicating and in some cases it was so personal. .... I am certain that this training was a positive initiative and will remain a valuable tool in our jobs and other walks of life.”

Enow Rose, IITA-Cameroon accountant said, “I feel honored to have been part of such an enlightening and educative experience.”

The objective of the training was to identify actors in the client/supplier value chain at IITA-Cameroon and understand their needs; identify different communication channels; practice active listening; and work out conflict management. The training was organized into four interactive modules during which participants were divided into two groups



*A group photo of participants at the Effective Communication training in Cameroon.*

(Bulls and Orange), and were asked to play roles in specific situations assigned by the facilitator.

The modules covered basic elements of professional communication with an emphasis on the fundamental capacities and the need for feedback. Other areas covered were the different means of communication and the different actors, and the challenges or obstacles to communication. The training emphasized that for effective communication, participants need to listen actively, speak constructively, exercise self control, and treat others with empathy.

### Help conserve electricity!

Before leaving the workplace at the day’s end, make sure that you have:

- (1) Powered off all unnecessary electrical office/lab equipment;
- (2) Turned off air conditioners; and
- (3) Switched off all lights.

# Monitoring & Evaluation Unit engages in Outcome Mapping training with PCD Directorate



A group photo of participants at the outcome mapping training

The Monitoring & Evaluation (M&E) Unit in collaboration with the Partnerships & Capacity Development Directorate set up a three-day training workshop on Outcome Mapping (OM). OM is a methodology for planning and assessing development and research programming that is oriented towards change and social transformation. OM provides a set of tools to design and gather information on the outcomes, defined as behavioral changes, of the change process. OM puts people and learning at the center of development and research and accepts unanticipated changes as potential for innovation. The method – which was conceived by Canada’s International Development Research Centre – is a

versatile technique that is being used globally and continues to evolve.

The objectives of the training were to enable 22 participants coming from different offices in IITA to:

- plan and measure behavioral changes required to improve the implementation of IITA’s corporate initiatives and development projects;
- involve stakeholders in the planning, implementing, monitoring and evaluation processes;
- foster social and organizational learning;
- strengthen partnerships and alliances within IITA’s workforce, and with IITA’s partners;
- understand and influence more effectively, the human and ecological

well-being of IITA’s targeted beneficiary populations.

Addressing participants at the opening of the workshop, the Deputy Director General (Partnerships & Capacity Development), Dr Kenton Dashiell said the workshop would help participants do their jobs better. Dr Dashiell who was also a key participant in the training highlighted the importance of the workshop in light of the Institute’s renewed focus on impact especially at the farm level.

Participants at the training mostly came from the PCD Directorate. The workshop was facilitated by the IITA Monitoring & Evaluation unit Thomas Wobill and his team.

## IITA Yam Agronomy team celebrates harvest

The Yam Agronomy team at IITA has concluded the harvesting of yam for the 2013-2014 season with tuber yields of between 15 and 45 t/ha that were obtained using simple agronomic measures such as tillage in ridges, fertilizer application, and increased planting density.

To celebrate the occasion, the team presented some of the finest yam tubers to IITA DG Nteranya Sanginga on Monday.

Team Leader Dr Stefan Hauser said the team is working on identifying the most important factors for attaining high yam tuber yields and the means to reduce the high production costs.

According to him, this research feat will be accomplished over the next few years.

Traditionally, yam is a “men’s crop” but the IITA Yam Agronomy team consists mainly of female staff and endeavors to involve female researchers more closely in the production research of yam.

Dr Hauser said one of the goals of the team

is to enable female farmers to start yam cultivation on degraded soil and at lower investment than currently required.

DG Sanginga commended the team for a job well done and urged them to continue looking for solutions to ensure high yields.

He encouraged the team to work harder to ensure that the Institute’s vision of lifting 11 million people out of poverty and reclaiming and putting into sustainable use 7.5 million hectares of degraded land is achieved.



The Yam Agronomy team celebrates a successful harvest of the crop in IITA.