

Good progress towards banana improvement

Although there are currently no commercial transgenic bananas and plantains, great strides have been made in their development with confined trials for banana expected to start soon in Uganda. The success will lead to increased food security, income, and well-being of millions of resource-poor people in sub-Saharan Africa depending on the two crops.

According to Leena Tripathi, IITA Biotechnologist based in Uganda, IITA and partners have made good progress in developing banana resistant to Banana *Xanthomonas* Wilt (BXW)--a deadly bacterial disease--and nematode-resistant plantain. She said the confined field trials of BXW-resistant banana would start very soon in Uganda.

She spoke on the role of transgenic technologies for banana improvement at a special seminar organized by the Biosciences eastern and central Africa (BecA) hub in Nairobi on 1 April.

She said banana and plantain are important sources of food and livelihoods for many communities in sub-Saharan Africa but are seriously being threatened by several diseases and pests. Biotechnology research is ongoing in several institutes and universities to develop pest- and disease-resistant varieties and improve their nutritional contents.

According to her, much progress



Harvested bananas

has been made in the past 10 years in developing banana and plantain biotechnologies, such as transformation protocols, suitable transformation constructs with modified promoters driving one or more transgenes, appropriate gene techniques, the detection of the transgenes, and characterization of their insertion sites.

Tripathi is leading IITA's work on BXW resistance with the National Agricultural Research Organisation (NARO)-Uganda, the African Agricultural Technology

Foundation (AATF), and Academia Sinica Taiwan.

In the nematode resistance activities, IITA is collaborating with the University of Leeds, UK, under a Department for International Development (DFID)/ Biotechnology and Biological Sciences Research Council (BBSRC) project.

Tripathi also leads the BecA-funded project "Development of biotechnological tools to control *Xanthomonas* wilt in banana and enset in Eastern and Central Africa".

Non-biodegradable waste collection day takes off



Cleaners and FMS staff removing non-biodegradable waste as consultant John Peacock and FMS head Mohammed Arman look on.

An initiative to effectively dispose waste on the campus has taken off with the FMS declaring the 15th day of every month a non-biodegradable waste collection day.

This is part of an institute-wide policy to promote environmentally friendly options in waste management.

In Ibadan, the non-biodegradable waste collection shall be observed between 9.00 am to 4.00 pm on working days. If this date falls on a weekend or a public holiday, then it shall be observed on the next working day.

During this period, FMS staff shall visit each residential quarters and collect the segregated refuse.

FMS therefore appeals that "materials such as plastic, metals, glass, and papers be sorted and made available on that day as we patrol the quarters with a tractor trailer. We also wish to appeal to those who might not be around to please put these sorted items in a location that is easily visible." The service will not be charged.

'The fight against plant diseases is yielding results'

Efforts by IITA to control and tackle the spread of plant viral diseases in Africa is yielding results, as the region makes gains in crop improvement over the years.

The gains are even more obvious in areas where IITA planting materials/technologies have been adopted to fight disease spread.

For instance in Nigeria where IITA has the longest presence, the country is now not only the largest producer of soybean in Africa but also the world's largest producer of cassava. But the success still demands more action especially to combat the emergence of new diseases, occasioned by factors including climate change, according Lava Kumar, IITA Virologist, during an R4D seminar in Ibadan.

Kumar believes that this will sustain the gains recorded, improve yield, and create wealth for farmers.

Consequently, the virologist and his team have taken fresh steps to reduce and make plant losses due to viral attack negligible.

Using conventional and cutting-edge technologies with the ultimate aim to develop "convenient technologies suitable for adoption in SSA," the team is dealing with high priority problems such as banana bunchy top, cassava mosaic and cassava brown streak,



Kumar making a presentation during his R4D seminar

augmenting resistance to maize streak and mosaic diseases in cowpea and soybean, developing clean seed systems for cocoa and yams, enhancing virus indexing procedures, and establishing virus-free germplasm.

The team has also developed simple diagnostics for viral, fungal, and bacterial pathogens and even aflatoxins, while also developing information databases for exchange and dissemination.

Farewell



Staff pose with Yoloye Nathaniel, Security Supervisor, who retired recently.

Welcome to service



Newly elected members of the IITA staff association and officials of the Personnel Unit.

Announcements

World Cowpea Conference 2010



IITA, in cooperation with partners – Pulse-CRSP, Purdue University, and the ISRA, Senegal – is organizing the 5th World Cowpea Research Conference to be held on 27

September - 1 October 2010 in Dakar, Senegal. Global cowpea experts will tackle research issues related to enhancing the profile of cowpea as a viable income-generating and food security crop. For more details and to submit papers, please visit the conference Web site at <http://cowpea2010.iita.org>.

Submission of abstracts: 31 May 2010

Abstracts approval and contact with presenters: 16 July 2010

Full paper submission: 30 September 2010

Early registration: 16 July 2010

ISTRC-AB to hold 11th symposium

The International Society for Tropical Root Crops- Africa Branch (ISTRC-AB) will hold its 11th symposium with the theme "Root Crops and the Challenges of Globalization and Climate" in Kinshasa, DR Congo, 4-8 October 2010.

Submission of abstracts: 30 April 2010

Submission of full papers: 30 July 2010

IITA Women's Group 2010 scholarship

The IITA Women's Group is happy to announce the annual scholarship competition for 2010. The group welcomes applications from qualified candidates for scholarships in the following categories:

- Junior secondary school
- Senior secondary school
- Polytechnic
- University

Interested parents with children in these categories may get the forms from the Employee Services Unit of Human Resources in Building 500 during work hours. Completed forms should be returned to the Unit on or before 14 May. Late or incomplete applications will not be accepted.

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