

IITA highlights diversification, mechanization at Zambia national agricultural show

“In the context of a changing climate in a primarily monocrop-based agriculture, as well as labor shortage and exit—particularly of the youth—from this sector, we wanted to promote crop diversification and mechanization as avenues for enhancing food security, nutrition, and income and livelihood options for Zambian smallholder farmers and their families.” This was the statement given by Dr David Chikoye, Director of IITA’s Southern Africa Hub, as he explained the theme of IITA’s exhibition at the 2014 National Agricultural and Commercial Show held in Lusaka, Zambia, from 30 July to August 4.

IITA’s exhibition theme this year is “Breaking new ground in agricultural research-for-development for food security, livelihoods improvement, and climate change mitigation.”

“The fact that Zambia is mainly maize based is worrying considering that the effects of climate change—particularly more severe droughts and shorter rainy season—is already taking a heavy toll on smallholder farmers, and will continue to do so in the foreseeable future,” Dr Chikoye added. “Without diversification or alternatives—this is like putting all your eggs in one basket. If the basket breaks, there go all your eggs.”

“But since maize is an intrinsic part of the people’s culture and diets, Zambia cannot

do away with it. However, it is imperative that we let farmers know that there are practical and profitable diversification options that could complement maize. For example, in this year’s exhibition, we focused on value chains in cassava, soybean, and cowpea—the other ‘baskets’ that farmers can put their eggs in—that could go hand-in-hand with maize,” he expounded.

“Additionally, we are also promoting new crop production technologies and mechanization to address the issue of labor shortage in Zambia’s agricultural sector. Most of the country’s youths are now more interested in getting jobs in the cities and urban centers, leaving the fields in the hands of the older-generation farmers and women. For these youths, they see agriculture as ‘dirty’ and back-breaking work, which is true given the current state of farm production in the country.”

“At our exhibition, we wanted to show that ‘back-breaking’ work should not always be the norm. Technologies, particularly mechanization, already exist to make farming a lot less laborious, less ‘dirty’, more efficient, and more profitable. We hope that as more farmers are made aware of these technologies and start deploying them in their fields, these will make agriculture more attractive and, consequently, give rise to a whole new generation of Zambian farmers employing



Journalist interviewing Dr David Chikoye regarding IITA and the exhibition.

modern production technologies,” added Dr Chikoye.

The Lusaka Agricultural and Commercial Show is an annual event in Zambia that draws thousands of people from all walks of life. The show is considered to be one of the largest in the southern Africa region, with more than 200 exhibitors participating comprising private and public sector players, government entities, NGOs, seed and fertilizer companies, and farmers’ organizations and cooperatives, among many others, and showcasing the state-of-the-art in agricultural research and technologies and related commercial ventures. The IITA exhibition attracted about a thousand visitors during the 5-day event.



Left: Members of a women’s group working with IITA explaining to visitors about the different cassava products on display. Right: Technology displays at the IITA exhibition.

Got a story to share? Please email it with photos and captions to Andrea Gros (a.gros@cgiar.org), Katherine Lopez (k.lopez@cgiar.org), Jeffrey T. Oliver (j.oliver@cgiar.org), Catherine Njuguna (c.njuguna@cgiar.org), or Adaobi Umeokoro (a.umeokoro@cgiar.org).

IITA HRS raises awareness about the Ebola virus disease

IITA Human Resources Service (HRS) has called on members of staff to maintain basic hygienic practices especially in washing hands with soap and water in the current alarm over the Ebola virus.

This call was made on 5 August through a special webinar on “Ebola Outbreak Evolution Confirmation,” which was streamed live from Washington, D.C. and facilitated by Drs Michael Braida and Philippe Biberson, MD with participation from experts in France and UK.

During the seminar, Dr Braida said that the illness resulting from infection by the Ebola virus causes bleeding—Ebola haemorrhagic fever kills 25 to 90% of all infected people. Since there are currently

no vaccines or treatments available, staff members were advised to avoid facilities treating Ebola patients; avoid touching blood, body fluids, or secretions; avoid participating in funeral practices that involve touching a dead body or handling/eating bats or other kinds of “bush meat”.

The IITA Clinic through its Head, Dr Samson Adeleke, assured all staff members that it is currently acquiring the basic facilities to ensure that the Ibadan campus stays safe and free from the virus. With proper precautions in place, the likelihood that Ebola will spread to other people is minimal.

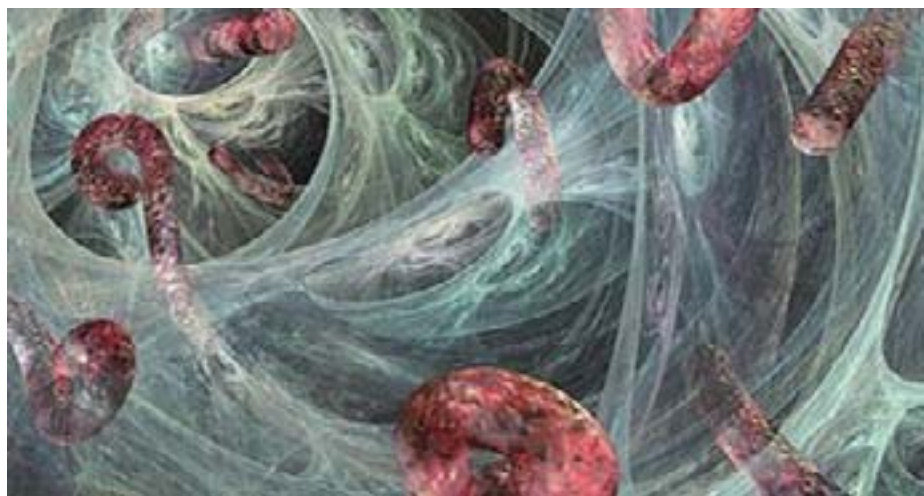
Dr Adeleke also asked everyone to remain health conscious and to report

cases or stay at least 1 m away from people who are obviously sick.

He also enjoined all to consult the clinic for appropriate attention or referral once any form of illness, such as fever, headache, weakness, muscle pains, vomiting and diarrhea, rash, red eyes, hiccups, or bleeding – internal and external, was suspected. These are all symptoms of Ebola virus infection.

An Ebola Task Force composed of key staff in the Institute had also been established. According to Lilian Mendoza, head of Human Resources Service, who leads the task force, the members have met and agreed on some preventive measures to address this immediate concern not only in Ibadan but also in other stations. The measures include but are not limited to organizing an awareness campaign about Ebola including more seminars and training for staff; screening, monitoring, and tracking visitors and staff, especially those coming from affected areas; organizing a medical check up for those coming from affected areas, and following quarantine measures, if needed; identifying a possible “isolation center” on campus and abroad; distributing disinfectants to different units in Ibadan and Lagos and all IITA vehicles; moving staff in Sierra Leone to a safer location.

For more information about Ebola, visit <http://www.who.int/mediacentre/factsheets/fs103/en/> and <https://www.internationalsof.com/ebola/>.



Ebola virus.

Source: echinacities.com

DTMA trains field technicians and seed specialists

IITA, in collaboration with CIMMYT, has organized a one-week training course for field technicians, seed specialists of public institutions, and production managers of seed companies participating in the Drought Tolerant Maize for Africa (DTMA) project.

This is in recognition of the need for Africa to raise production to meet the world level of maize—a highly sought-after crop with industrial and local consumption benefits both for people and animals.

The training titled “Conduct and

Management of Field Trials for Seed Production of Open-pollinated and Hybrid Seed” was held in Ibadan 4-8 August.

During the opening, Dr Robert Asiedu, IITA’s Research for Development Director for West Africa, urged participants to learn all that they could during the training. “Make use of this opportunity by sharing your experiences and also learning new things from your instructors,” he said.

Dr Dele Fakorede, a breeder, who was also present, added that efforts being made by research institutes and their partners would be futile if seed companies did not reach out to farmers with available technologies.

Twenty six trainees took part in the practical course which aimed at upgrading the technical capabilities and skills of the participants, particularly in quality hybrid maize seed production, variety testing, profitable seed marketing, community-based seed production, and the management of seed production fields.

The training also provided participants an opportunity to fully grasp the limiting factors and mitigation strategies for maize seed production and deployment in West Africa with much emphasis on drought and the parasitic weed *Striga hermonthica*.



Participants in the DTMA training in IITA, Ibadan, Nigeria.

YIIFSWA backstops scientists with training on bioreactor systems for seed yam production

On 1 August, three scientists from the National Centre for Genetic Resources and Biotechnology (NACGRAB) participated in a learning session organized by YIIFSWA on the Temporary Immersion Bioreactors system (TIBs) for seed yam propagation. The activity is part of the project objective on strengthening the capacities of national agricultural research systems (NARS). The scientists toured the facilities on campus and were given firsthand knowledge on generating clean stocks for the mother garden using positive selection, and prevention of contamination by indexing of yam plantlets for bacteria endophytes before feeding into TIBs in addition to post-TIB handling of plantlets in readiness for field. Given their proficiency in producing crops such as pineapple in the bioreactor system, they were invited to participate in the development of the technology for yam. At the end of the project five-year term, NACGRAB is expected to deliver 2000 healthy yam plantlets.

Meanwhile, seven scientists of Biocrops, a private tissue culture laboratory in Abuja,



NACGRAB receives clean stock of plantlets and vines from IITA, represented by Dr Morufat Balogun (center, in glasses).

underwent training on 15 July as part of YIIFSWA's Objective 5 goals. The novel seed production technologies developed by YIIFSWA are being tested with the private sector for sustainability. Biocrops

is partnering with IITA to produce seed yam using the aeroponics system. At the end of the activities, YIIFSWA gave both partners clean yam plantlets for multiplication at their facilities.

...undertakes training on yam viruses and seed yam quality management...

A training course on 'Yam Virus Disease Indexing and Seed Yam Quality Management' was held on 4-8 August at the Crops Research Institute (CRI), Kumasi, Ghana. This course, organized under the framework of the Yam Improvement for Income and Food Security for West Africa (YIIFSWA) project, was attended by 40 participants representing CRI, Savannah Agricultural Research Institute, Grains and Legumes Development Board of Ghana, Ministry of Food and Agriculture, and Catholic Relief Services.

The training course is part of efforts by YIIFSWA, funded by the Bill & Melinda Gates Foundation, to implement a range of activities to strengthen the capacity to produce high quality, pest- and disease-free seed yam in Nigeria and Ghana.

This work involves the use of high ratio propagation technologies and conventional methods for the production of pre-basic, basic, and certified seed yam, while making efforts to improve the quality of farmer-saved seed yam. Research also focuses on developing effective tools and technologies for managing the quality of seed yam, such as low-cost diagnostic tools for virus indexing.

During the opening program, Dr Hans Adu-Dapaah, CRI Director, commended YIIFSWA and IITA for their efforts to improve the yam sector. He specifically highlighted YIIFSWA's support in organizing a Yam Day to ensure farmers' exposure to new technologies. Dr

Kingsley Osei, Ghana country manager of YIIFSWA, mentioned that this course was organized specifically for the project partners operating in Ghana to facilitate implementation of the seed yam quality protocol. He thanked Dr MD Quain, Head of the Biotechnology at CRI, and Dr Lava Kumar, Head of the Germplasm Health Unit and IITA Virologist for taking the initiative and implementing the training course.

The training covered the implementation of the seed yam quality management protocol (Yam QMP) and production of virus-free planting material, production of virus-free planting material through tissue culture, and selection of planting material by virus indexing, including application



Lab Manager (right), GHU, IITA, teaching participants to recognize infected plants during the training course.



Training course participants, Kumasi, Ghana.

of virus diagnostic tools. Mr Oguntade (Lab Manager, GHU, IITA) explained how to implement positive selection and its benefits to eliminate poor seed stocks from further use.

Participants tested their yam quality assessment skills during practical sessions

organized in the experimental fields and tissue culture hardening facilities at CRI. They also experimented with yam virus indexing tools in the new WAAPP biotech centre. They were delighted to reconfirm the virus-free status of tissue culture yam stocks developed at IITA and supplied to

CRI for bulking and distribution to farmers. Dr Emmanuel Otoo, Deputy Director of CRI, explained the pros and cons of various seed propagation technologies and urged participants to adopt QMP at all levels to improve yam productivity in the country.

... and renovates screenhouse at NRCRI, Umudike, Nigeria

YIIFSWA/IITA recently completed the renovation of a screen house at the National Root Crop Research Institute (NRCRI) Umudike. Dr Norbert Maroya, YIIFSWA Project Manager, handed over the keys of the renovated screen house to Dr Julius Okonkwo, the Executive Director of NRCRI. Dr Okonkwo received the keys with warm

appreciation, thanking IITA for supporting the rehabilitation of the screen house. The renovation of the screen house was done by IITA Facilities Management Services (FMS) in support of YIIFSWA'S research activities at NRCRI. In reiteration of the Executive Director's appreciation, Dr Eke-Okoro Okechukwu, the coordinator of YIIFSWA

project in NRCRI, promised to ensure that the facilities are used for YIIFSWA vine cutting propagation activities.

In line with its project goals, YIIFSWA is actively working to strengthen the capacity and improve the facilities of partners in national research agencies in Ghana and Nigeria.



Left: The condemned screenhouse at NRCRI. Right: The same screenhouse after renovation.

IITA Kalambo station gets a bus for staff

The IITA Kalambo Station has a brand new bus for staff use! The bus will be used for transporting staff to and from the office, which is located about 30 km from Bukavu City. The absence of public transport on the route had been a major problem for staff.

Having its own transportation in the hub for staff use will reduce the cost of transportation and facilitate staff travel on that route.

The entire staff of IITA Kalambo were excited about the new bus. The keys of the bus were officially handed over to Dr Paul Dontsop Nguetzet who received the bus on

behalf of Dr Chris Okafor, the Officer in Charge of IITA Kalambo Station.

Expressing their joy, Mr Mustapha Kigangu, SARD-SC Research Supervisor, said: "This is really good news to staff; the office used to rent a 28-seater which was not enough to take everyone. The arrival of this new bus is a solution to staff transportation problems. We thank our Ideaders for making our life easier."

Mrs Despines Bamuleke, IITA Kalambo Research Assistant, was particularly happy because the bus is a four-wheeler which will make it less difficult to ply the Kalambo route during the rainy season.



IITA Kalambo staff express their gratitude in receiving the new bus; Driver Luc Mbuwi (center in striped shirt) drove the bus from Nairobi and hands the keys to Dr Paul Dontsop Nguetzet

Announcement

The IITA Women's Group announces the annual scholarship competition for 2014. Applications are welcome from qualified candidates in the following categories:

- Junior secondary school (US\$150)
- Senior secondary school (US\$200)
- Polytechnic (US\$250)
- University (US\$250)

Qualified candidates will be paid in local currency.

Criteria

- Applicants must be children of IITA employees on Pay Grades 1-6.
- Parents of such applicants must have worked at IITA for at least two years and must be presently employed.
- Applicants must be above average academically and must have school reports to prove this.
- Applicants must be registered in schools or must have secured admission into a recognized school.
- Applicants will be expected to perform well during the interviews (both oral and written), which will be conducted for shortlisted candidates.

Forms should be completed and returned to the Employee Service Unit or Station Administrator on or **before 10 September 2014**. Late or incomplete applications will not be accepted. To get copies of the forms, contact HRS or the Women's Group.