IITA, icipe, CABI: Developing a strategy to combat invasive species in Africa

IITA, together with the International Centre of Insect Physiology and Ecology (icipe) and the Centre for Agriculture and Bioscience International (CABI), organized a two-day workshop to develop a comprehensive strategy to deal with invasive species in Africa. The multi-stakeholder event brought together more than 100 participants from across the globe representing research organizations, national institutions, economic communities, the public and private sectors, and donor organizations.

May-Guri Saethre, IITA’s Deputy Director General, Research for Development, was the co-chair of the workshop’s steering committee and led a team of scientists who are working on invasive species across Africa.

In her opening remarks, Saethre said that invasive species, if left unchecked, will cause irreparable damage to indigenous species and cause the loss of genetic diversity.

“We need to identify the pathways through which invasive species are transmitted and develop preventive measures to reduce their effect and the cost of control,” Saethre pointed out.

Nigeria’s future looks brighter with IITA innovations, says Nigeria’s agriculture think-tank

Research and innovations being developed at IITA hold promise and could transform Nigeria’s agricultural narrative, says the country’s agricultural think-tank, the Nigeria Agribusiness Group (NABG).

The think-tank, which comprises private sector players in Nigeria’s agricultural value chain, led by its Vice president, Emmanuel Ijewere, paid a visit to IITA on 19 February to explore areas of possible collaboration with the Institute.

The team was excited over the many innovations that have been developed by researchers in IITA ranging from improved seeds that could more than double farmers’ productivity, to technologies that control weeds and double the yield of cassava, to simple processing machines that add value to crops such as cowpea, cassava, and yam. Other technologies such as inoculum production, which raises the productivity of soybean by about 20 percent, and aflasafe—a biological control product for managing aflatoxins—were also explored. The semi-autotrophic hydroponics which is being used to produce thousands of clean seeds of clonal crops such as cassava and yam, and the yam aeroponics—a system of growing clean seed yam in the air—were also well received by the group.

After a series of presentations by IITA researchers and a tour of the 1000-hectare research facility, Ijewere remarked, “The visit to IITA was an eye opener.”

“Yes, we knew that IITA was doing some things, but little did we realize the extent and depth of what they have done... how far they have gone, and
how relevant they have become to Nigeria’s agriculture future,” he added.

In the last 7 years, IITA under the leadership of Dr Nteranya Sanginga, has refreshed its strategy emphasizing not only research but also partnership building, delivery, commercialization of technologies and dissemination of innovations, and youth in agribusiness.

Ijewere said the NABG would work with IITA to see how the research outputs of the Institute in the last 50 years could be “translated to money in the bank for resource-poor farmers.”

The President of NABG, Mr Sani Dangote, who is also Vice President of the Danjote Group said, “What we saw here (in IITA) is amazing.”

Dangote, who was represented by Baba Girma said, “I never thought we had this in Nigeria. Before, we thought IITA was only about research but what we saw today shows opportunities that can bring synergy between what IITA is doing and the private sector.”

Earlier, the Deputy Director General, Partnerships for Delivery, Kenton Dashiell, reiterated IITA’s commitment to work with the private sector with the goal of improving the livelihoods of millions of farmers in Africa.

The convener of the meeting, Alfred Dixon, Director for Development and Delivery at IITA, said IITA was glad for the exploratory visit by NABG, and was willing to join forces with the group towards eliminating poverty and hunger in Nigeria.

Dixon said the decision to work with NABG and other partners was aimed at paving the way for the rapid delivery of IITA-developed technologies.

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She added that IITA has worked on invasive species for more than 40 years, focusing on environment-friendly biocontrol solutions that are easily available to smallholder farmers. Current projects include the Biorisk Management Facility (BIMAF) based in Cotonou, dealing with the infamous Fall Armyworm. Other projects by IITA include research work on fruitfly, banana Bunchy top, Panama Wilt Disease Tropical Race 4 in Mozambique, Banana Xanthomonas Wilt (BXW), and potato cyst nematodes.

The workshop featured presentations from different stakeholders and scientists who have worked on invasive species and focused on the experiences and relative data showing different results and tactics applied in other parts of the world.

Participants were also tasked to examine specific areas including continent-wide coordination efforts; prevention, preparedness, early warning, and rapid response action; research on long-term invasive species management; strengthening the policy and regulatory framework; and capacity building, communication, and outreach.

Scientists from IITA who attended the workshop include Laura Cortada, James Legg, George Mahuku, Lava Kumar, Danny Coyne, and Ghislain Tepa-Yotto.

During the session on solutions to lingering problems of invasive species in Africa chaired by Legg, scientists gave presentations addressing critical gaps in tackling invasive species in Africa. Mahuku, from IITA Tanzania, gave a presentation on the critical research gaps and solutions on safeguarding African crops against invasive species, with an emphasis on stronger partnerships, coordination, communication, and collaboration.

Invasive species in Africa have become a growing concern with studies indicating losses running into billions of dollars annually especially for resource-poor farmers in sub-Saharan Africa. According to a report by CABI in 2016, more than 300 million livelihoods have been disadvantaged by invasive species introduced in new locations accidentally or intentionally.

Others who spoke at the workshop include the icipe Director General Dr Segenet Kelemu and CABI’s Director General for Development Dr Dennis Rangi.

Kelemu reiterated the need to adopt a proactive stance in the fight against invasive species as opposed to the reactive mode, which has been ineffective and costly. Rangi noted that collaboration between IITA, CABI, icipe, and the International Maize and Wheat Improvement Center (CIMMYT) previously have borne remarkable results. He challenged participants to consider even stronger partnerships for efficient and effective results.

The workshop was sponsored by the Swiss Agency for Development and Cooperation (SDC).
IITA participates in the Cameroon scientific exhibition day

IITA-Cameroon participated in the 6th edition of The Excellence Day of Scientific Research and Innovation in Cameroon (JERSIC), 21-23 February in Yaoundé. The three-day national exhibition organized by the Ministry of Scientific Research and Innovation (MINRESI), with the theme “Scientific research and innovation: Strategic tools for enterprise and socioeconomic transformation,” took place at the esplanade of the Yaoundé City Council Hall.

The exhibition provided an opportunity for IITA to showcase some of its research findings and other documentation useful for farmers, scientists, and other stakeholders. Materials on display documented research findings on the fall armyworm, biopesticides, insects for food and feed, strategic tools for innovation in cocoa drying techniques, plant multiplication in tissue culture, soil fertility management, disease diagnostics and management, value chain analysis, as well as agricultural research and the Youth Agripreneur project, which will soon become operational in Cameroon.

Research products like the high yielding, improved varieties of maize and cassava as well as their by-products were also displayed.

IITA also participated in discussion sessions on start-ups and agricultural research for development. The recommendations retained by MINRESI will create an enabling environment for ENABLE Youth Cameroon and the IITA research program in Cameroon when they are implemented.

Cameroon’s Minister of Scientific Research and Innovation Dr Madeleine Tchuente and the French Ambassador to Cameroon visited the IITA stand in addition to hundreds of visitors over the three-day period. Rachid Hanna, IITA Country Representative along with other IITA staff and students were on hand to welcome the visitors.

On the evening of the last day, the winners for 2018 were announced and celebrated. The joint team from the Institute of Agricultural Research for Development (IRAD) and IITA, working on cassava germplasm collection and conservation, was among the winners. Congratulations!

Got a story to share?

Please email it with photos and captions every Wednesday to iita-news@cgiar.org or Katherine Lopez (k.lopez@cgiar.org) and Uzoma Agha (u.agha@cgiar.org) for headquarters and Western Africa, Jeffrey T. Oliver (j.oliver@cgiar.org) for Southern Africa, Catherine Njuguna (c.njuguna@cgiar.org) for Eastern Africa, and David Ngome (d.ngome@cgiar.org) for Central Africa.
Purdue University collaborate with IITA on TAAT

With an estimated one-third of the world’s food going to waste, reducing food waste and loss is fundamental to meeting food demand and the agricultural mandate of Africa feeding Africa. It is on this premise that the representative of Purdue University, Professor Steve Yaninek, visited IITA on 26-28 February to explore possible areas of collaboration with IITA on the Technologies for African Agricultural Transformation (TAAT) program.

Kenton Dashiell, Deputy Director General, Partnerships for Delivery, with other members of the management team, welcomed Prof Yaninek and gave an introduction to IITA’s activities and programs.

Purdue University, with the African Development Bank (AfDB)’s intervention in the agricultural sector, is saddled with the responsibility of addressing postharvest loss reduction in Africa to improve livelihoods for both small- and large-scale farmers. In his presentation, Yaninek said, “The purpose of the Postharvest Losses Reduction and Agro-Processing (PHAP) program, an initiative of AfDB, is to enable countries to achieve supply-chain efficiencies through targeted investments in rural infrastructure, logistical support, postharvest, and agroprocessing technologies leading to reduced physical losses, improved food availability, and enhanced product quality.”

Yaninek explained the need to partner with IITA: “We are leading and collaborating in efforts to reduce postharvest losses, enhance agricultural value chains, and improve nutrition. To achieve this mandate, there is the need to leverage on IITA’s developed technologies and to see areas in which the two parties can develop innovations to reduce food loss and promote industrialization along the agriculture value chain.”

Alfred Dixon, Director of Development and Delivery, and Project Leader, Cassava Weed Management Project, said the collaboration will focus on the postharvest aspect of the TAAT program, extrusion technology, using appropriate scale-type machinery for farming, participating in scaling up of innovations in agricultural conferences, manufacturing of a moisture meter to determine moisture level of grains, and probably, a testing kit for aflatoxin, and possible ways of controlling mealybug in yam.

A tour of the facility was conducted to further showcase IITA’s program in transforming agriculture in Africa.

Representatives of PAU visit IITA

On 23 February, the Interim Deputy Rector of The Pan African University (PAU), Prof. Kassa Belay along with other representatives paid a courtesy visit to IITA to familiarize themselves with the Institute and strengthen the existing partnership.

The team, led by Prof. Matthew Abatan, the acting Director of PAU in Nigeria, was received by Michael Abberton, Head of the Genetic Resource Center (GRC).

Abatan said that they came to see the work IITA is doing and, most importantly, to appreciate the Institute for accommodating their students. In addition, Belay said: “We would like to extend our heartfelt thanks to IITA for
IARSAF training: Enhanced communication skills and data management for better research

Research fellows under the auspices of International Association of Research Scholars and Fellows (IARSAF) underwent two different training sessions to enhance skills necessary for their development as researchers. The training comprised a two-day seminar on improving communication and presentation skills and a three-day course on quality data management techniques, both organized in conjunction with IITA’s Capacity Development Office (CDO).

During the first training which took place on 30 and 31 January, IARSAF members were guided through the basics of communication by staff of the Communication Unit. They were also tutored on best practices to adopt for their research presentations to be more effective.

Lead facilitator and Head of Communication Unit, Katherine Lopez, was joined by a team including Yvonne Olatunbosun, Clement Ono-Raphael, Adegboyega Juba, Godson Bright, and Uzoma Agha. A highlight of the training was Ono-Raphael explaining the need for a focused and uncluttered graphic presentation saying: “Less is more.”

The training included practical sessions on developing more effective scientific posters and slide presentations, and making presentations to their peers, with a critique provided by the trainers and colleagues.

The Data and Information Management Unit (DIMU) anchored the training on data management, on 13-15 February. This training aimed to equip the

having our students and making their staff and resources available to them.”

The visitors had a closed-door meeting with the executive committee of the International Association of Research Scholars and Fellows (IARSAF) of IITA before being taken on a tour of the GRC and the Bioscience Center.

PAU is a postgraduate training and research network in five regions with a mission to provide quality postgraduate education geared towards the achievement of a prosperous, integrated, and peaceful Africa. It is a premier continental university, instigated by the Heads of States and Governments of the African Union and supported by the Association of African Universities. The headquarters is in Ethiopia; the Institute for Life and Earth Sciences (including Health and Agriculture (PAULESI) is hosted by the University of Ibadan, Nigeria.
participants with knowledge on the various aspects of data management such as data quality and organization, curation, and metadata. The DIMU staff conducting the sessions also covered important areas such as Office365, SharePoint, and Open Access.

E-research coordinator Martin Mueller led facilitators from DIMU including Olatunbosun Obileye, Elsie Ezomo, Soji Oloyede, and Bosede Ayinla along with Morenike Abu from the Project Development and Administration Unit (PDAU).

The training sessions are in consonance with the agenda of the current IARSAF executive to empower its members and strengthen sustainable and innovative agricultural research in Africa.

They had the full support of IITA’s Deputy Director General, Research for Development, May-Guri Saethre, who was represented by Senior Executive Assistant Mary Badejo. She encouraged participants to make efficient use of the lessons learnt as the training courses were intended to improve their research skills. She also pledged R4D’s continuous support to all IARSAF activities.

Both training ended with awarding of certificates to all participants after an evaluation by IITA Training Manager, Stanley Nwachukwu.

**Events**

- YIIFSWA-II Annual Progress Review and Work Planning Meeting, 5–8 March, IITA, Ibadan, Nigeria
- Science & Technology and Innovation Expo 2018, 5–9 March, Eagle Square, Lagos, Nigeria
- Nairobi Innovation Week, 5–9 March, The Great Court, University of Nairobi, Nairobi, Kenya
- International Women’s Day, 8 March
- West Africa Transforming Breeding Workshop, 12–15 March, IITA, Ibadan, Nigeria
- BASICS Annual Review and Planning Meeting, 14–16 March, IITA, Ibadan, Nigeria
- IITA Board Meeting, 24–26 April, Center for Development Research of Bonn University (ZEF), Bonn, Germany
- Special event on “African agricultural transformation: The IITA Agripreneur Approach to Job Creation”, 26 April, ZEF, Bonn, Germany
- 7th International Food Legume Research Conference, 6–8 May, Palais des Congrès, Marrakech, Morocco