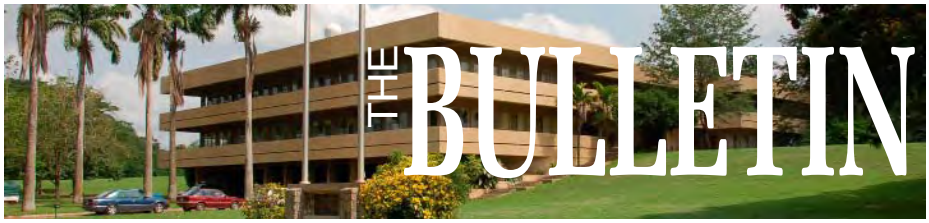
IITA

No. 2013, 19-23 April 2010



Improved cowpea varieties hit Nigeria's savanna region

Nigeria has released two new cowpea varieties to raise production and improve farmers' incomes.

The varieties are coming just when the country's researchers are finalizing their plans to attend the Fifth World Cowpea Research Conference to be held from 27 September to 1 October in Dakar, Senegal, to discuss the state of the art in cowpea research.

The varieties—IT89KD-288 and IT89KD-391—were developed by scientists working at IITA, Ibadan, in collaboration with the Institute for Agricultural Research of the Ahmadu Bello University, Zaria; the University of Maiduguri, Borno; and the Agricultural Development Programs of Borno, Kaduna, Kano, and Katsina States.

Both varieties have proven to be superior over the improved lines currently under cultivation and could overcome the challenges faced by cowpea farmers.

IT89KD-288 (now SAMPEA-11) is a dual-purpose variety with large white seeds and a rough seed coat. It has combined resistance to major diseases, including septoria leaf spot, scab, and bacterial blight, as well as to nematodes, and tolerance for Nigeria's strain of *Striga gesnerioides* (a parasitic weed that severely lowers yield).

A farmer taking care of a cowpea field in northern Nigeria

"It also has a yield advantage of at least 80% over the local varieties," said Alpha Kamara, IITA's Agronomist, who is leading efforts to rapidly disseminate the varieties to farmers.

The nematode-resistant variety is an equally good candidate for sowing in cereals or as a relay crop with maize in the moist and dry savanna zones, as well as for high grain production in the dry season.

IT89KD-391 (now SAMPEA-12) is also a dual-purpose cowpea variety but it has medium-to-large brown seeds with a rough seed coat. These are preferred seed characteristics for commercial production in northeast Nigeria.

"IT89KD-391 is a welcome improvement over SAMPEA 7, Ife brown, IT90K-76, and IT90K-82-2, which are the main improved brown-seeded varieties available. It has been tested extensively in this area and is well accepted by the farmers," said Hakeem Ajeigbe, IITA Extension/Dissemination Specialist.

IITA and partners launch an art competition to mark International Year of Biodiversity

A cross section of teachers from Dar listening keenly during the launch

IITA and the national museum and house of culture, Dar es Salaam, and other partners launched an art competition for primary schools in Dar es Salaam to raise awareness among the young people–tomorrow's leaders–on the importance of biodiversity.

Biodiversity, the "variety of life on earth from plants to animals and to the microscopic microorganisms," is crucial to man's survival. It provides food, fuel, health, wealth, medicine, clothing, and many other important things that man needs. Unfortunately man's activities are destroying it at an alarming rate and there is concern that we are heading towards another mass extinction of species.

Speaking at the forum, Christine Ngereza, senior education officer with the museum and house of culture, noted the low awareness on the consequences of loss of biodiversity. Therefore the decision by the international community to mark 2010 as the International Year of Biodiversity to bring together people from all corners of the world in the fight to protect life on Earth is a necessary measure.

"It is a call for action. And that is why the national museums and house of culture, and our partners, IITA, the Tanzania Forestry Conservation Group (TFCG), and Wildlife Conservation Society of Tanzania (WCST) have come together to organize an art contest for selected schools," she said. "This will help to instill in our children the importance of sustainably using biodiversity so they will behave responsibly towards it."

The winning entries will be announced on 22 May, the International Day of Biodiversity and prizes awarded to the schools and students. All the entries will go into a month-long exhibition at the national museum and house of culture.

The launch for the art competition was held on 17 April at the museum, and was attended by teachers from over 30 schools in Dar es Salaam.

IITA joins initiative to sequence the gene of *Striga*

Hearne making her presentation

IITA Plant Molecular Geneticist Sarah Hearne is collaborating with colleagues to sequence the genome and transcriptome of *Striga hermonthica*, a parasitic plant that wreaks havoc on cereals including maize. Using 454 Titanium sequencing and illumina sequencing, the plant molecular geneticist and partners hope to use the data generated to develop molecular markers for *Striga*, complete the chloroplast genome, and construct a mitochondrial genome.

Knowledge from this work will help in unraveling the diversity of *Striga*, generate better awareness of differing pathogenicity of *Striga* from different places, understanding the evolution of parasitism across parasitic plants including *Alectra* and *Orobanche*, and will also give scientists a clearer view on strategies to control its spread.

Consequently, the information will be integrated into efforts to lower the losses faced by farmers due to *Striga* infestation.

Working with evolutionary biologist, Claude de Pamphilis at Penn State on a USAID-linkage grant building on resources from an NSF initiative to sequence parasitic plant expressed sequence tags (ESTs), Hearne collected diverse *Striga* samples in Nigeria for RNA isolation and sequencing in the United States. She will be deeply involved in the data analysis of this project.

During her contract seminar, Hearne also spoke on her involvement in other projects with partners across the globe including the Drought Tolerant Maize for Africa (DTMA) initiative.

In addition to work on *Striga*, the seminar titled "IITA--the appliance of science: Harnessing interdisciplinary approaches for germplasm development," focused on advancements made in maize breeding via the integration of novel abiotic and biotic stress phenotyping and molecular tools with established breeding practices. The modification and application of this approach to enhance breeding gains in other crops that IITA works on were highlighted.

Hearne also emphasized some outputs that include the development of molecular markers for incorporation into IITA's breeding programs and the contribution to knowledge of synteny within important crops.

She also disclosed the commencement of work on the genotyping of IITA-released maize lines using a 60k SNP chip to facilitate tracking of IITA germplasm for impact assessment.

New Regional Administrators for East and Southern African Hubs

IITA has appointed two new Regional Administrators, one for the East Africa Hub and another for the Southern Africa Hub.

The new Regional Administrators are Eveline Odiambo for the East Africa Hub, based at Dar es Salaam, Tanzania; and Suzan Katebalirwe for the Southern Hub, based at Lusaka, Zambia.

While Odiambo will, with immediate effect, take on the role of Regional Administrator for East and Southern Africa, the post earlier held by the late Frances Onyango, Katebalirwe will assume her post only towards the end of this year.

Yacoubou Aboubakar will continue as the Regional Administrator for the West and Central Africa region.

Lakshmi Menon, IITA Deputy Director General (Support), said that towards the end of the year, when the Southern Hub would have been fully staffed and established, responsibilities would again be divided among the three Regional Administrators. She congratulated the staff for their new assignments and urged the IITA community to give them their cooperation and support.

Odiambo

Katebalirwe

R4D announces changes in designation of location leadership

The designation of location leadership as the Officer-in-charge (OiC) has been changed to IITA Country/Station Representative. The role of the Country/Station Representative in each location has been tailored to meet the individual needs of each location or station for representation, leadership, and/or management. The Country/Station Representatives will also report directly to the Directors on location issues.

The designated IITA Country/Station Representatives are:

- Ousmane Boukar, IITA Station Representative in Kano
- Manu Tamo, IITA Country Representative in Benin
- Issac Gyamfi, IITA Country Representative in Ghana
- Rachid Hanna, IITA Country Representative in Cameroon
- Stefan Hauser, IITA Country Representative in DRC
- Hailu Tefera, IITA Country Representative in Malawi
- Steve Boahen, IITA Country Representative in Mozambique
- Leena Tripathi, IITA Country Representative in Uganda
- DJ Kim, IITA Country Representative in Kenya

IITA Directors based in Tanzania and Zambia will also serve as Country Representatives. The Country Representative duties for Nigeria will be undertaken by the General Directorate and the Directors located in Ibadan.

May is Housekeeping Month in IITA-Ibadan

May has been designated as Housekeeping Month. During this month, members of the Facilities Management Service, the Computer Unit, and the Assets Unit will visit labs/offices, check equipment, and help in discarding obsolete items and those not needed by the units.

The exercise is aimed at improving efficiencies in cost and energy utilization, creating a better working environment, and reallocating resources to units where such equipment are most needed.

In preparation for this exercise, Yusuf of the Asset Unit has sent to each budget officer a list of assets in his/her name.

The budget officers are reminded that they are responsible for the assets in their possession and it is in their interest to see that the asset list is accurate and up-to-date. Budget officers are expected to equally use this opportunity to check current assets in their possession against this list and, then dispose of those that are not needed.