



IITA maize breeder selected as a Fellow of the prestigious CSSA

The Crop Science Society of America ([CSSA](#)) has selected Dr [Abebe Menkir](#), IITA Maize Breeder, as the recipient of the 2015 CSSA Fellow Award. Dr Menkir has received this prestigious recognition for his efforts spanning 19 years at IITA in breeding maize with high yield potential, resistance to diseases and *Striga*, tolerance to drought, and low levels of aflatoxin production. Many of these varieties have been registered and released by the national agricultural research systems ([NARS](#)) and the private sector, and have contributed to significant improvements in the productivity, income, and well-being of people in West and Central Africa.

In addition to his laudable scientific achievements that have contributed to agricultural development, he was considered for this award because

of his collaboration with the NARS, the private sector, and advanced research institutes in the US, UK, and Australia.

“For me this is a recognition of the output of the Maize Unit and IITA’s contributions to science and development in Africa. I will continue to mentor the younger generations of scientists and generate more varieties and innovations that will have greater impact on the livelihoods of farmers,” said Dr Menkir.

Dr Menkir will be formally recognized with this award during the 2015 Annual Meeting in the Hilton Minneapolis at the CSSA Breakfast, Awards, and Plenary (Klepper Lecture) on 17 November. He will also be acknowledged in [CSA News](#) and other avenues, including a poster display at the Annual Meeting.



IITA Maize Breeder Abebe Menkir.

Nestlé VP: IITA is a lighthouse for Africa and many other emerging economies

An related [Anne Roulin](#), Nestlé Vice President: Nutrition, Health & Wellness & Sustainability, has commended Dr Nteranya Sanginga, Director General of [IITA](#), for his outstanding presentation during the conference *Planting Seeds for the Future of Food* in Switzerland on 1-4 June. Dr Sanginga’s presentation to more than 150 participants from NGOs, the business world, and academia described IITA’s work, success stories, and model for eradicating youth unemployment in Africa.

Anne’s congratulatory message to Dr Sanginga read as follows: “After listening to so many ‘gloom and doom’ messages at other conferences, I was really encouraged to see that there is a whole series of potential technological solutions that can produce sustainable and nutritious foods in the future, even though the political and social issues are immense. The work you are doing at IITA is truly a lighthouse, not only for Africa but also for many other emerging economies. Hearing about the successes of your Agripreneurs

brought tears of joy to my eyes and real hope for the future. Keep up the great work!”

Also, last month Dr Sanginga was a panelist at the 50th Annual Meeting organized by the [African Development Bank](#), 26-29 May in Abidjan, Côte d’Ivoire, to discuss agribusiness potentials. He spoke extensively about how IITA continues to link and help young people to earn a decent living from the agricultural value chains. More information about the events are available here: [article](#) and [video](#).

Got a story to share? Please email it with photos and captions every Wednesday 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).

YIIFSWA exhibits achievements on yam during IITA RTB review

External evaluators from the Independent Evaluation Arrangement (IEA) came to review and evaluate IITA's contribution to the achievements of the CGIAR Research Program (CRP) on Roots, Tubers and Bananas (RTB) last week.

Jillian Lenne, team leader of the IEA, stated, "The evaluation of the RTB program is one of 10 evaluations commissioned by CGIAR. The purpose is to provide guidance for developing proposals for the next phase." The information gained will influence decision making by program management and its funders on issues such as extension, expansion, and structuring of the program.

With the global mandate on yam, IITA has made major strides in the development and advancement of the crop for income generation and food security. YIIFSWA, a flagship project on yam, was selected for an in-depth review of its outcomes, delivery, and impact.

YIIFSWA has made a significant breakthrough in the development of low-cost, effective mass propagation methods. With the establishment of aeroponics and the bioreactor for production of plantlets and mini tubers, the yam multiplication rate has increased a hundredfold. These technologies offer rapid, clean, and cost-effective mass methods of multiplying yam. The establishment of these technologies in the private sector and the NARS will

effectively address the need for fast and wide distribution of high-quality improved varieties to meet the increasing demand for the crop.

YIIFSWA has also made significant strides in managing yam pests and diseases. Under the project, a cost-effective Multiplex PCR was developed to detect several viruses from one single test. The advantage is that it requires fewer tests of assay, therefore, it is less costly. The project is also working on developing and establishing a procedure called loop-mediated isothermal amplification (LAMP) for detecting viruses. Such an intervention will aid field inspectors with the health certification of plants and seed tubers.

Lenne had visited the aeroponics, bioreactor system, and virology labs. During an intermission she said, "Although yam is considered an orphan crop in the RTB program, one of the main highlights of the evaluation is the strides made from learning from previous work that had been done on other crops. It is a basic sort of wish of the CRPs to see cross-crop collaboration in the development of new technologies. I think that has come out nicely for yam."

IITA's RTB programs will be evaluated on their performance with a special focus on relevance, quality of science, effectiveness, impact and sustainability, governance, and management.



Samson Ogbole, YIIFSWA research supervisor, shows Jillian Lenne mini tubers growing in the aeroponics system.



YIIFSWA PhD student Yao explaining the effect of nematode infestation in yam.

AGCO to partner with IITA on agricultural mechanization

The labor-intensive activities undertaken by African farmers in the production and postharvest processing of cassava justify mechanization. Impressed by IITA's work on cassava, senior managers from [AGCO](#) International GmbH visited IITA-Zambia on 29 May to propose a partnership to ease the labor stress by developing mechanized options for production, postharvest handling, processing, and storage. AGCO is a global leader in the design, manufacture, and distribution of agricultural equipment. It recently opened a farm in Lusaka, Zambia, with state-of-the-art facilities to train smallholder and commercial farmers, dealers, and distributors on new technologies for sustainable agricultural production.



AGCO visitors at the IITA-Zambia facilities.

The AGCO team included Rob Smith, Senior Vice President and General Manager for Europe, Africa, and the Middle East; Steve Clarke, Vice President, Strategic Marketing and Brand Governance; Mark More, Manager, Business Process and Agricultural Development; and Jason Burbidge, General Manager of the Future Farm.

[Dr David Chikoye](#), Director, IITA-Southern Africa, and [Dr Oladeji Alamu](#) welcomed

the visitors. Dr Chikoye highlighted IITA's value chain activities on the six mandate crops, capacity development, and youth in agriculture and made a presentation on the plans for developing the permanent site for IITA-Southern Africa Research and Administration Hub.

“Cassava is a second staple crop in southern Africa, and has high

potential for industrial use in bakeries, livestock feed mills, starch and ethanol production,” Dr Alamu said when receiving the visitors. He added, “IITA has successfully demonstrated that high quality cassava flour can replace up to 40% of wheat flour in bread.” The initial contact with AGCO was made by IITA board member [Hans Joehr](#).

Healthy soils, healthy plants, healthy planet

IITA organized a talk on 29 May at its Eastern Africa hub in Dar es Salaam on healthy soils, healthy plants, healthy planet, for grade 6 and 7 students from nearby schools to mark two important events, the [International Fascination of Plants Day](#) and [International Year of Soils](#) (IYS2015).

Fascination of Plants Day was celebrated 18 May but events were held throughout the month. The goal is to get as many people as possible around the world to be fascinated by plants and enthusiastic about the importance of plant science for agriculture, in sustainably producing food, as well as for horticulture, forestry, and all of the non-food products such as paper, timber, chemicals, energy, and pharmaceuticals. The IITA-Eastern Africa hub celebrated the event in 2013 by inviting students from nearby schools to tour the facility and learn about IITA's research on plants/crops.

Meanwhile, the 68th UN General Assembly declared 2015 the International



An IITA staff explains about IITA's work with African food crops.

Year of Soils (IYS2015) to increase awareness and understanding of the importance of the soil for food security and essential ecosystem functions.

The talk, given by [Dr Frederick Baijukya](#), IITA agronomist and National Coordinator for the [N2Africa](#) project in Tanzania, focused on the links among good soils, healthy plants, and a healthy planet.

The students later toured the facility and interacted with various IITA researchers and got a better understanding of some of the ongoing research work at IITA.

The event not only created awareness among the students on the importance of soils and issues around soils, plants, and food security but inspired and encouraged them to pursue courses in science.

WASHC-IITA educates country-level soil health consortia members on ISFM data management and analyses

The West Africa Soil Health Consortia (WASHC) project successfully conducted a training workshop in Ibadan 25-29 May for the five Country-level Soil Health Consortia (CSHC) established in Burkina Faso, Ghana, Mali, Niger, and Nigeria. Stakeholders included representatives from other IITA projects, [Africa RISING](#), [University of Ibadan](#), [Federal University of Agriculture Abeokuta](#), and [Institute of Agricultural Research and Training](#), Ibadan. There were 28 participants from 16 organizations across West Africa, with some of the resource persons coming from USA and Kenya. The objective of the workshop was to contribute to better recommendations on integrated soil fertility management (ISFM) for smallholder farmers through capacity building in ISFM data synthesis and information management.

In his welcome address, the project Leader, [Dr Jeroen Huising](#), pointed out that the training workshop was very important and of urgent necessity for the



Dr Jeroen Huising addressing the participants.

Events

Annual Review and Planning Meeting - Africa RISING, NAFKA and TUBORESHA CHAKULA Scaling Project, Dar-es-Salaam, Tanzania, 8–10 July

[Africa RISING ESA Project Annual Review and Planning Meeting](#), Mangochi, Malawi, 14–16 July

Africa RISING ESA Project Steering Committee Meeting, Mangochi, Malawi, 16 July

Tropentag 2015, Humboldt Universitaet zu Berlin, Berlin, Germany, 17–19 September

First World Congress on Root and Tuber Crops, Nanning, Guangxi province, southern China, 5–10 October

The 7th International Conference of the African Soil Science Society Announcement of Special Program: Soil Fertility Management for Sustainable Intensification in West and Central Africa, Ouagadougou, Burkina Faso, 25 October – 1 November

CSHC to fulfill their function of being a repository of ISFM data and information. It was also needed to broaden agronomic data and information management across IITA and to improve data sharing across different projects both within and outside IITA. “We need to discuss opportunities to share data and knowledge better: we spend a lot of time collecting data but make little or no effort to ensure its use for the longer term. We need to improve this,” Dr Huising emphasized.

The 5-day training workshop focused on data management, presentation and review of legacy data collected in each CSHC; understanding of the conceptual framework for ISFM data analyses and recommendations; use of [metadata data standards](#) for ISFM trials and legacy data; presentation of different agronomic

protocols and the review of different data collection templates; ISFM trials data analyses using [R studio](#); use of [aWhere](#) for effective management, analyses, and visualization of ISFM trials data; and the use of [Dev aWhere platform](#). Also discussed were best practices in data management and data quality; capacity development in MS Excel - Excel spreadsheet requirements for use on [aWhere platform](#); challenges to data harmonization; and how to leverage [weather data](#) for ISFM data analysis.

Jeroen Huising, [Martin Mueller](#), Samuel Mesele, [Martin Macharia \(CABI, OFRA data manager\)](#), [Dries Roobroeck](#), Hannah Reed, and Courtney Cohen facilitated the sessions. At the end of the training, Dr Huising presented certificates of attendance to the participants.



A group picture of the workshop participants.