



Bioscience Center draws scientific solutions closer to Africa

The launching of the upgraded Bioscience Center at IITA is bringing science closer to Africa as scientists from the continent don't need to look elsewhere for solutions.

Established in the early 1990s and expanded and renovated recently, the center is among the few centers of excellence for genomics and biotechnology in sub-Saharan Africa.

"The Center is a gateway to science," says Melaku Gedil, Head of IITA's Bioscience Center, during its formal launch.

"We are endeavoring to expand our services in the areas of genotyping, bioinformatics, cytogenetics (ploidy analysis), genetic engineering, in vitro propagation/tissue culture, pathogen diagnostics, and training," he added.

Many other aspects of biotech are carried out in Nigeria, while the genetic engineering/transformation is being done in IITA-Kenya, Melaku explained.

In recent times, biotechnologies have been recognized as essential tools for the effective development of new research products.

The staple foods of Africa such as cassava, yam, cooking banana, plantain, and cowpea feed hundreds of millions of poor people, yet they receive little attention from biotechnology in the research community since they are not considered as major cash commodities.

IITA, through its Bioscience Center, bridges this gap by linking developing countries with advanced research institutions around the world to apply



Upgraded Bioscience Center

the benefits of biotechnologies to these under-researched crops.

The recent investments in upgrading the facilities of the Bioscience Center in Nigeria aim to consolidate the institute's efforts as a leader in biotech research services in Africa.

"The objective is to get the needed facility that will be a platform to attract scientists to Africa and encourage the creativity needed to address the challenges of food insecurity," says Paula Bramel, IITA Deputy Director General (Research).

"The Bioscience Center today is taking that challenge...and it is the direction we want to go," she added.

For the scientific community, the Bioscience Center will serve to enhance the management and use of plant genetic resources.

Other areas that the facility will address include:

- *Developing tools and technologies for better understanding, diagnostics, and monitoring of biological systems.

- *Developing and integrating biotechnological tools and products to enhance the efficiency and effectiveness of plant breeding – molecular breeding.

- *Deploying and delivering biotechnology products and knowledge.

- *Building capacity for high quality research within IITA and national partners in Africa.

Lakshmi Menon, Deputy Director General (Support) commended the work at the Center.

She reiterated the commitment of the R4D support in giving the necessary assistance for the smooth running and operation of research.



Molecular Physiologist Sarah Hearne takes guests on a tour of the Bioscience Center.



Molecular Geneticist Ranjana Bhattacharjee explains the various facilities at the Center.

Why cassava is important to East and South Africa

For the people of Eastern and Southern Africa, cultivating cassava is a safety net that can no longer be ignored as the weather in the region becomes more and more unpredictable.

The resilience of cassava in times of harsh weather has increased the appeal of the root crop.

Resource-poor farmers find cassava suitable for household food security. Moreover, the many varieties of cassava being improved by IITA and partners are proving to be tolerant of diseases, giving farmers more assurance.

Adebayo Abass, IITA Scientist in his R4D seminar titled, "Exploring the best options for including the rural poor in cassava value chain: Lessons from small-scale cassava processing in Eastern and Southern Africa," notes that cassava's outlook in the region is bright as the crop is on the verge of becoming a raw material in countries such as Zambia, Tanzania, and Madagascar.

Adebayo says for cassava to make a full impact, it has to move from being a food security crop to an industrial crop, a goal IITA wants to achieve in those regions.



The current cassava industrial policy in Nigeria is creating demand for the root crop.

At the moment, cassava processing in those regions is dominated by the use of traditional equipment, most of which are inefficient and unprofitable to farmers.

Adebayo and his team, working with partners, are tackling this challenge by promoting the use of improved processing machines.

The team is also establishing small-scale cassava processing units in

communities to help develop diverse products and reduce the vulnerability of farmers to postharvest losses.

Discussions between the IITA team and industry users of cassava, such as bakeries and starch manufacturers are now ongoing.

These efforts are expected to bring about the necessary conditions to trigger a cassava revolution in the nearest possible time in those regions.

IITA welcomes new Security Superintendant, Adedayo Ademola



Adedayo James Ademola, a Nigerian citizen, has joined the IITA Security Unit as a Security Superintendent.

Adedayo will oversee the physical security operations on campus and supervise the contract security work performance.

He joins IITA with close to 12 years of experience in private security both in Nigeria and the UK. Adedayo is an HND graduate of Yaba College of Technology, Lagos and is married with 3 children. He can be contacted on extension 2420 and on 0803-978-4008.

Help conserve electricity!

Before leaving the workplace at day's end, make sure that you have:

- (1) Powered off all unnecessary electrical office/lab equipment;
- (2) Turned off air conditioners; and
- (3) Switched off all lights.

Photo News



Members of the Personnel Unit pose with new members of staff and youth corps members.



*The Communication Office launches **CO**nvergence, a monthly seminar and training series for staff. Jeffrey Oliver talks about e-mail etiquette.*

The IITA Bulletin is produced by the Communication Office. For comments and/or contributions, please email: Jeffrey T. Oliver (o.jeffrey@cgiar.org), Godwin Atser (g.atser@cgiar.org), or Catherine Njuguna (c.njuguna@cgiar.org).