

## IITA-organized international confab puts grain legume and cowpea research in global spotlight

More than 580 delegates from 46 countries across the globe converged in the historical town of Livingstone in the south of Zambia to share knowledge, information, and expertise; deliberate on issues; build and reinforce partnerships; and discuss the state of the art in grain legume and cowpea research at the highly-successful [Joint Pan-African Grain Legume and World Cowpea Conference](#).

The meeting was held 28 February to 4 March at the AVANI Victoria Falls Resort. Delegates included eminent scientists, researchers, academia, agriculture and nutrition campaigners, food and nutrition experts, and private and public sector players engaged in grain legumes and cowpea research, development, and enterprises.

The international confab was organized by IITA in partnership with the [Feed-the-Future Innovation Lab for Collaborative Research on Grain Legumes \(Legume Innovation Lab\)](#) and the [International Center for Tropical Agriculture \(CIAT\)](#), in collaboration with [major international agricultural research organizations and development partners and sponsors](#).



*Left: Zambia Minister of Agriculture Honorable Given Lubinda giving his keynote speech at the opening of the Joint Pan-African Grain Legume and World Cowpea Conference on 29 February at the AVANI Victoria Falls Resort in Livingstone, Zambia. Right: IITA DDG Dr Ylva Hillbur addressing delegates at the opening program. She highlighted the need for countries particularly in Africa to adopt sustainable and diversified production processes to address the effects of climate change on agriculture.*



*Some delegates registering for the conference.*



*Panoramic shot of the delegates during the official opening of the Joint Pan-African Grain Legume and World Cowpea Conference.*

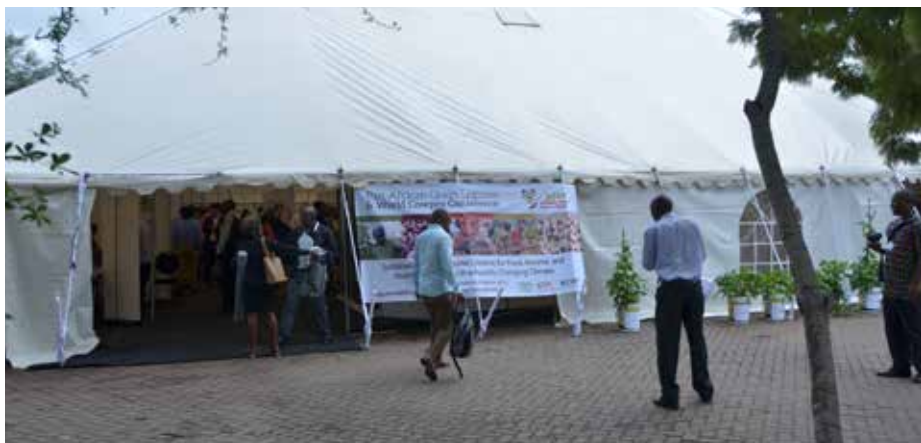
The conference is one of the [10 global signature events](#) recognized by the Food and Agriculture Organization (FAO) of the United Nations as part of the celebration of 2016 as the [International Year of Pulses \(IYP\)](#), and is the only FAO-sanctioned IYP signature event for Africa.

With the theme “Sustainable Grain Legume Systems for Food, Income and Nutritional Security in a Rapidly Changing Climate”, the conference covered 13 subthemes: Abiotic Stress; Biological Nitrogen Fixation; Economics and Value Chain Development; Gender and Youth; Genomics and Plant Breeding; Human Nutrition and Health; Integrated Pest Management; Mechanization of Production and Postharvest Handling; Plant Pathology; Seed Systems; Sustainable Intensification; Technology Dissemination and Impact Assessment; and Value Addition and Food Processing.

More than 120 research papers were presented as oral presentations in plenary and breakaway sessions, whereas 400 papers were presented as scientific posters. Approximately 900 scientific abstracts were submitted for inclusion in the conference. Additionally, nine organizations set up booths at the conference’s Technology Marketplace exhibition area to demonstrate technologies related to the theme of the conference.



Conference delegates viewing some of the posters during the poster session.



Shot of the outside of the combined Technology Marketplace Exhibition area and poster session stands.

## An impressive collection of agricultural geniuses

In his remarks keynoting the opening of the conference, Zambia Minister of Agriculture Honorable Given Lubinda called the delegates attending the conference “an impressive collection of agricultural geniuses”.

“On behalf of the Government of Zambia, I would like to thank the organizers for choosing Zambia as the host of this Joint Pan-African Grain Legume and World Cowpea Conference.”

“The government is determined to make Zambia the food basket of the [southern Africa] region and contribute significantly to the global food supply chain. With this impressive collection of scientific minds gathered here to share knowledge and

information on the latest agricultural research, I am confident that our own researchers will benefit greatly from the deliberations and move this agenda forward,” the Minister added.

Forum for Agricultural Research in Africa (FARA) Executive Director Yemi Akinbamijo said in an interview that key scientists involved in grain legumes improvement across the world and in Africa were attending the conference.

“This is like calling the select. All the brains that can turn the situation around and make a difference are here in Livingstone, right here at this conference, right now,” Akinbamijo added.



The Joint Pan-African Grain Legume and World Cowpea Conference was officially closed by Julius Shawa, Permanent Secretary of Zambia’s Ministry of Agriculture. He thanked all delegates and organizers of the conference for choosing Zambia to be the host of the event. He also expressed optimism that the knowledge shared during the 5-day conference will result in concrete benefits for grain legume smallholder farmers across the world.



It was not all work for the delegates as they were treated to a Gala Dinner featuring local Zambian dishes at the Boma grounds of the AVANI Victoria Fall Resort, the conference venue.

## Put hoes in museums; place ICT, women, and youths in forefront

Lubinda has also urged African countries to put the hand hoe in museums and promote a mechanized and smart agriculture because he said “the hoe had outlived its usefulness in agriculture.” He added that this is especially true in the context of climate change in which production efficiency is of paramount importance.

He noted that 77% of the 60 million farmers in Africa were subsistence farmers growing crops on less than one hectare each. He said because of poor mechanization in Africa, 65% of the work force in African agriculture comes from human muscle compared to 35% in the rest of the world.

He said there was need for the continent to promote a mechanized and smart agriculture as well as the introduction of digital or ICT solutions to enhance crop production.

“The African woman and the African youth cannot continue to till the land using such backbreaking, inefficient, and archaic tools.

“The youths who are driving modern computer based systems cannot be attracted to agricultural systems that are divorced from advanced technology,” Lubinda added.



Minister Lubinda (middle) touring the poster stands while being briefed by Zambia Agriculture Research Institute (ZARI) Director Moses Mwale (right) as IITA Southern Africa Director Dr David Chikoye (left) walks alongside.

## Call for sustainable and diversified production

In an interview, IITA Deputy Director General for Research for Development, Ylva Hillbur, reiterated that drought tolerant crops would be extremely important in countries facing the effects of climate change like Zambia.

“You also need to diversify and have different varieties of cash crops such as legumes, cowpeas and integrate cassava. We need to move away from subsistence farming to growing of cash crops. We also need to diversify our eating habits in view of climate change,” she said.

She urged delegates to use the forum as an opportunity to share experiences and information relevant for the promotion of sustainable and increased production, processing and marketing of grain legumes especially in Africa.

“As you do so, please remember that by 2050 the world population will have increased to nine billion and the three quarters of that population will be living in cities and demanding more food, particularly foods with proteins. As a result of rapid urbanization, Africa’s urban population will

have grown threefold by 2040. This means that less and less people shall be in rural areas to grow food.”

Bill & Melinda Gates Foundation Program Officer Jeff Ehlers said in an interview that his organization supported the hosting of the conference because it was key in uplifting the lives of smallholder farmers.

“With respect to this conference which represents all grain legumes research in Southern Africa, there is a good part of the international community and this will provide exchange of information,” added Ehlers.

## Teamwork key to success

Asked about the vital ingredient to the success of the conference, David Chikoye, IITA Regional Director for Southern Africa, simply stated: “teamwork”.

“The (conference) journey began exactly 12 months ago when we started planning for hosting the World Cowpea Conference. Along the way, we changed the initial plans when IITA agreed to join hands with Michigan State University’s Legume Innovation Laboratory to host the Joint Pan African Grain Legume and World Cowpea Conference. At that time, we estimated that we would be fortunate to have 300 participants.”

“We have now verified that 583 participants from 46 countries attended the conference, with over 600 people attending the Gala Dinner!” he exclaimed.

“However, all of these would never have materialized without the hard work of the



The “black and blue” conference crew with Dr Chikoye with an all thumbs-up for a successful conference at the close of the event on 4 March.

numerous people working hand-in-hand for this conference, both within and outside of IITA. While I would like to thank everyone individually, there are just too many to mention. However, I would like to give special mention to the ‘men and women in black/

blue’ for going above and beyond to ensure that this conference was organized and was run smoothly.”

Chikoye was referring to the conference staff wearing black/blue IITA-branded

shirts, which he acknowledged and presented to delegates at the closing ceremony of the conference and who were met with much applause from the grateful participants.

He also cited the various donors and sponsors who supported the conference, which included the [Alliance for a Green Revolution in Africa \(AGRA\)](#), [Archer Daniels Midland \(ADM\)](#), [Center for Coordination](#)

[of Agricultural Research and Development for Southern Africa \(CCARDESA\)](#), [CGIAR Research Program on Grain Legumes](#), [Crop Science Society of America \(CSSA\)](#), [Feed-the-Future Innovation Lab for Climate-Resilient Chickpea](#), [Feed-the-Future Innovation Lab for Climate-Resilient Cowpea](#), [Global Pulse Confederation \(GPC\)](#), [International Center for Research in the Semi-Arid Tropics \(ICRISAT\)](#), [International Development Research Centre](#)

[\(IDRC\)](#), [Pan-Africa Bean Research Alliance \(PABRA\)](#), [Putting Nitrogen Fixation to Work for Smallholder Farmers in Africa \(N2Africa\)](#), [The Bill & Melinda Gates Foundation](#), [The Kirkhouse Trust](#), [The McKnight Foundation](#), [Tropical Legumes III Project](#), [University of Zambia \(UNZA\)](#), [US Agency for International Development \(USAID\)](#), [Zambia Agriculture Research Institute \(ZARI\)](#), and the [Zambia Ministry of Agriculture and Livestock \(MAL\)](#).

## IITA confers achievement awards to three cowpea researchers

At the Joint Pan-African Grain Legume and Cowpea Conference, IITA conferred "Lifetime Achievement Awards" to three researchers in recognition of their outstanding contributions to the development of grain legume and cowpea research. The scientists are Drs Issa Drabo of Burkina Faso, Irvin Widders of Michigan State University - Feed the Future Legume Innovation Lab, and Jeff Ehlers of the Bill & Melinda Gates Foundation. The awarding ceremonies took place during the conference's Gala Dinner held at the AVANI Victoria Falls Resort in Livingstone, Zambia on 3 March.

### Issa Drabo

Drabo started his cowpea research journey when he joined the Agronomic Research Service of Burkina Faso after his BSc degree. He pursued MPhil and PhD degrees in breeding.



*Dr Ousmane Boukar reading the citation for the Achievement Award for Dr Issa Drabo (right).*

From 1992 to 1997, he was cowpea breeder at Kamboinse research station. Then from 1997 to date, in addition to his responsibility as cowpea breeder, he is the coordinator of the Legume Program at the Agricultural Research Center in Saria.

Since 2002, he has been the project leader of the Bean/Cowpea CRPS, Dry Pulse CRPS and Legume Innovation Lab, Tropical Legumes I, Tropical Legumes II projects, and AVEC-BF Project.

He released in Burkina more than 20 improved cowpea varieties, which included introductions but also varieties that he had developed himself. He has also trained hundreds of farmers in seed and crop production, and several students.

Drabo is also known in the cowpea community as the "Grand *Selectionneur*", which means "the Great Plant Breeder".

The award was given in recognition of his contributions to cowpea improvement in Burkina Faso.

### Irv Widders

Irv Widders' background is plant physiology and he has been mainly active in the field of horticulture. Those who know him can attest to his enthusiasm and passion for legumes. In some cases, some of his closest colleagues would call him a legume fanatic, or better, a legume maniac!

Irv has been the driving force behind the success of the earlier phases of the Legume Innovation Lab (2013-2017), called Bean/Cowpea CRSP (2002-2007) and, later, Dry Grain Pulses CRSP (2007-2013).

The award was given to Widders for his outstanding leadership in the bean/cowpea CRSP, Legume Innovation Lab and the successful hosting of this and previous World Cowpea Research Conferences.



*Dr Ylva Hillbur presenting the Achievement Award plaque to Dr Irv Widders during the recognition ceremonies at the conference's Gala Dinner.*

### Jeff Ehlers

Ehlers started breeding cowpeas with IITA in 1985-1988. In 1992, he joined the University of California, Riverside, where he co-led the Bean/Cowpea and Dry Grain Pulses Collaborative Research Support Projects (CRSPs) with colleagues at UCR. He mentored a majority of current active cowpea breeders in sub-Saharan Africa.



*Dr Jeff Ehlers acknowledging the Achievement Award conferred on him by IITA.*

He was project leader of the cowpea component of the GCP (Generation Challenge Program) Tropical Legumes I project of CGIAR. Currently, he works as Program Officer with the Bill & Melinda Gates Foundation.

Among his remarkable contributions to cowpea are: release of large-seeded, black-eyed, high yielding cowpea varieties such as CB46 and CB50 in California; some of the released early maturing cowpea varieties in Senegal and Burkina Faso resulted from populations he developed and shared with national partners; and contribution to genomics tools for cowpea such as development of a 1536 SNP marker genotyping platform for cowpea, development of a dense consensus genetic linkage map for cowpea, and development of a MAGIC population.

Among the cowpea community, Ehlers is recognized as the Molecular Breeding Champion!

The award was presented to Ehlers for his rock solid support to cowpea improvement in sub-Saharan Africa.

## Mozambican named Young African Grain Legume Scientist 2016

ITA has named Mozambican Arsenio Ndeve as Africa's Grain Legume Scientist 2016. The 35-year old beat entries from Burkina Faso, Kenya, Uganda, Nigeria, and Malawi. Apart from a plaque of recognition, Ndeve also received an Apple iPad during the awarding ceremonies held at the Gala Dinner of the Joint Pan-African Grain Legume and World Cowpea Conference in Livingstone, Zambia.

Ndeve was selected from among a final selection of five other young scientists that included Paul Aseete, 29, of Uganda; Glory Mbah, 25, of Nigeria; Valentine Wacu Kamau, 29, of Kenya; Poda Saadon Leandre, 32, of Burkina Faso; and Yankho Kamila, 26, of Malawi.

Ndeve stood out for his research and also as a great role model to encourage young Africans into science. The selection committee described him as "genuinely enthusiastic, not only about his work but the need for more young people to pursue science as a career, especially in legumes, where the majority of scientists and researchers are nearing retirement."



*"It is indeed a great honor to be chosen as the 2016 African Young Grain Legume Scientist. It is my sincere hope that I could inspire other youths to go into agricultural research," said Ndeve in his acceptance speech.*



*Dr David Chikoye presenting the finalists for the 2016 African Young Grain Legume Scientist.*

He declared his delight at being named Africa's finest during the International Year of Pulses 2016 event: "I'm so overwhelmed. It's a great honor. I'm so motivated to continue my research. Grain legume research requires creativity and forward thinking. I always ask myself, 'how can my research be applied in a functional way to improve the lives of people in my country?' That is my dream."

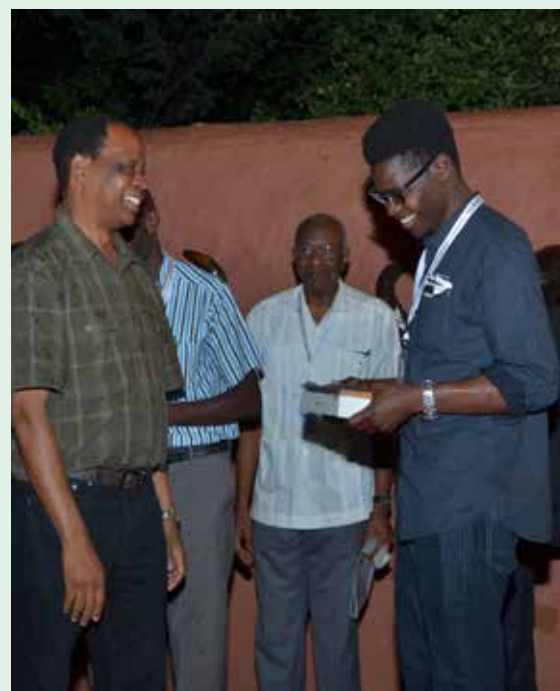
Farmers and consumers in Mozambique could be hugely assisted by his work into disease that affects cowpea. Ndeve's work could mean that instead of crops failing and dying from disease the crop could be made more reliable, enabling farmers to guarantee their investment and ensure that more of the crop is harvested for consumption.

The scientist, who is pursuing his PhD in plant pathology at the University of California, Riverside, is working to understand the genetic mechanisms behind cowpea's susceptibility to these stresses to manipulate its natural strengths to develop disease resistance and increase productivity.

The competition was part of the 2016 Pan-African Grain Legume and World Cowpea Conference in Livingstone, Zambia, in recognition of the UN-declared International Year of Pulses.

Its aim was to recognize up and coming researchers who are the future of grain legume research in their countries, contributing to the future of agricultural sustainability and food security in Africa.

Entrants were asked to write a 400-word essay answering the question: "How will your grain legume research impact the developing world?" Apart from submitting an essay, entrants must be attending the conference and be present to win, an African, aged 35 years or less, a student or have graduated in the last 5 years (master's or PhD), and active in research.



*Mozambican Arsenio Ndeve bested five other finalists and was named the 2016 African Young Grain Legume Scientist. He is shown here receiving his iPad prize as well as a plaque from Mr Julius Shawa, Permanent Secretary of the Zambia Ministry of Agriculture.*

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

## Conference snapshots



Conference delegates viewing some of the posters during the poster session of the conference.



Delegates also went on field trips to observe a small-scale cowpea farmer's field and a commercial grain legume seed producer, both within Kazungula District about 30 kilometers away from the conference venue.



Zambia Minister of Agriculture Given Lubinda (right) being briefed about the IITA Youth Agripreneurs (YA) program by Oyebamiji Oluwafemi (left) and Bose Kasumu (back to camera) at the IYA booth of the conference's Technology Marketplace.



And of course, there was entertainment! Delegates were enthralled by traditional dances from the various provinces of Zambia.