

Cassava Matters

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Wow! Drs Dixon, Ceballos, and Fauquet honored at GCP21 in the Republic of Benin



Dr Alfred Dixon, Golden Cassava Award Winner, sandwiched by colleagues during the award ceremony

A Principal Scientist and Cassava Breeder with the International Institute of Tropical Agriculture (IITA), Dr Alfred Dixon; and Dr Hernan Ceballos of the International Center for Tropical Agriculture (CIAT) have won the 2018 Golden Cassava Prize.

The prestigious award, which is usually bestowed on colleagues for their excellent contribution to cassava transformation was given to the two researchers by the International Scientific Committee of the Global Cassava Partnership for the 21st Century (GCP21).

Announcing the winners of the prize at the GCP21 Cassava Conference in

...About Ceballos

Dr Ceballos, obtained his Ph.D. degree in plant breeding from Cornell University, USA. In 2007 he received the award for innovation from the Colombian Society for the Advancement of Science. His achievements in the cassava world over the last 20 years as cassava breeder include his involvement in the discovery of a spontaneous starch mutation (amylose-free) and induced mutation (small granule) in cassava, innovations in high throughput phenotyping of cassava roots for carotenoid content; implementation of new

Cotonou, the Director of GCP21, Dr Claude Fauquet, said Drs Dixon and Ceballos were selected from a pack of six highly qualified researchers across the world.

"We are proud of the achievements of both Drs Dixon and Ceballos to the cassava community. This is in recognition of their work but also a motivation to other upcoming researchers," Dr Fauquet said at the award ceremony.

...About Dr Dixon

Known by his peers as "Dr Cassava," Dr Dixon is currently the Project Leader of the Sustainable Weed

cassava breeding approaches such as selection based on general combining ability (breeding value) and rapid cycling recurrent selection for high heritability traits; and development and implementation of a new quantitative genetic approach to quantify epistasis in diallel crosses. Dr Ceballos has written more than 100 research articles in peer-reviewed journals, several chapters published in books, and two edited books. He served as a reviewer of more than 20 Ph.D. thesis mostly from African candidates on cassava.

Management Technologies for Cassava Systems Project, and also the Director, Development and Delivery Office in the Partnerships for Delivery Directorate of IITA. He developed over 400 improved cassava cultivars for a range of agroecologies and cropping systems in Africa. He discovered the Cassava Mosaic Disease- (CMD2) resistance gene from cassava landraces, which helped in the development of CMD-resistant cassava varieties that saved cassava from across Africa.

Dr Dixon managed and coordinated interdisciplinary research on cassava improvement in sub-Saharan Africa; maintained and improved links between research projects and the national root crops programs in Africa; as well as facilitated collaborative linkages with advanced laboratories and other institutions working on cassava outside Africa. He has authored and co-authored over 350 scientific publications. Dr Dixon played an important role in the development of the Global Cassava Development Strategy and was the Chairman of its Executive Committee, 2002 – 2008, and was an effective advocate and champion for policy dialogue leading to substantial support by the Nigerian government for cassava research and development.



R-L: Drs Ceballos, Dixon, Malachy Akoroda (Director, GCP21), and Joe Tohme (Co-Founder, GCP21), during the presentation of the awards

International scientific committee recognizes Bill & Melinda Gates Foundation for investment in cassava research

The International Scientific Committee under the auspices of the GCP21 presented a special recognition to the Bill & Melinda Gates Foundation for funding dozens of projects related to cassava, thereby contributing to the transformation of the root crop. The recognition was part of activities during the Golden Cassava Award Night in the Republic of Benin.

Lawrence Kent, Senior Program Officer with the Gates Foundation, while receiving a plaque on behalf of the Foundation, thanked GCP21 for the recognition and honor which he dedicated to millions of resource-poor farmers especially women and children, who depend on cassava for livelihood and food security.



R-L: Lawrence Kent, Senior Program Officer, Bill & Melinda Gates Foundation; Joe Tohme, Co-founder of GCP21; and Claude Fauquet, immediate past director, GCP21 during the presentation of award to the Gates Foundation.

... Presents a 'Surprise' Recognition Award to Dr Fauquet

The International Scientific Committee of GCP21 took the opportunity of the Golden Cassava Prize Award Night to bestow an award in recognition and appreciation to Dr Claude Fauquet for his dedication to the research and development of the cassava crop.

Presenting the award on behalf of the committee, Prof. Andrew Westby, Director of the Natural Resources Institute, University of Greenwich, congratulated Claude on his leadership, dedication, energy and persistence in driving forward GCP21 since its establishment.

GCP21 is a global partnership of institutions that together are leveraging plant breeding and biotechnology to transform cassava into a more productive and resilient crop. Through his role at GCP21, Claude was an effective convener and a driving force behind united efforts to further cassava research and transform the crop into a future-proof staple food and income source for millions of smallholder farmers worldwide.

The co-founder of GCP21, Claude, has expertly guided its mission to improve cassava worldwide with outstanding commitment and determination.

"Claude spoke of cassava the day I first met him and every other time I met him over the past 15 years. He loves cassava science, he loves cassava researchers, and he loves those who depend on this crop for their food and livelihoods," said a long-time friend Lawrence Kent, Senior Program Officer with the Bill & Melinda Gates Foundation.

In 2002, Claude, together with Dr. Joe Tohme, founded the Global Cassava Partnership for the 21st Century – which is now a legacy in honour of his drive and ambition and a platform to continue what he started.

He is a fellow of the American Association for the Advancement of Science, of the American Phytopathological Society (APS), and a member of the St Louis Academy of Sciences. In 2007, Claude was knighted "Chevalier de l'Ordre des Palmes Académiques" by the French Minister of Higher Education and Research.



The International Scientific Committee celebrates with Claude on his award

Tributes to Claude

It's been a personal pleasure to have worked with Claude on several GCP21 convenings, as we overcame some quite challenging obstacles in pursuit of this dream for our amazing crop."

Graham Thiele, RTB Director

"Congratulations for this beautiful career dedicated to science and development of Southern countries. IRD colleagues who crossed your path,

I particularly, and we the members, generally, of the 'Cassava Fraternity' and the GC Partnership Mafia owe Claude a huge debt of gratitude which we hope this Special Award to him represents."

Eugene Terry

"You don't sleep. We appreciate you."

Peter Kulakow, IITA

"For his retirement, I would like to bestow him with a Doctor of Philosophy in persuasion." **Alfred Dixon, IITA**

"I admire Claude for his dedication to cassava and he deserves great appreciation and a big 'Thank you' from the cassava community." **Wilhelm Gruissem.**

"Your 'Can Do' Spirit deserves to be transferred to the future 'Claudes' in our globe." **Lateef Sanni, Deputy Vice Chancellor, Federal University of Agriculture, Abeokuta, Nigeria.**

"We will all remember Claude as one of the pillars on which cassava biotechnology research was built." **Luis Augusto Becerra, CIAT**

TAAT: AfDB to invest \$120m in cassava and other crops ...Dr Dashiell harps on partnerships



R-L: Dr Kenton Dashiell, IITA Deputy Director General (Partnerships for Delivery); Prof Malachy Akoroda, GCP21 Director(5th from right); Minister of Higher Education, H.E. Mme Attanasso Marie-Odile; Minister of Agriculture, Livestock and Fisheries, Republic of Benin, H.E. Dossouhoui Cossi Gaston; Dr Claude Fauquet, Immediate past GCP21 Director; and other national partners at the cassava conference.

The African Development Bank (AfDB) said it will invest \$120 million in the framework of the Technologies for African Agriculture Transformation (TAAT) in the next 2-3 years to boost the productivity and transform cassava and other eight other commodities on the continent. The nine commodities include: cassava, rice, maize, sorghum/millet, wheat, livestock, aquaculture, high iron beans and orange fleshed sweet potatoes.

"Transforming cassava on the African continent would help African nations to cut imports and redirect about \$1.2bn into African domestic economies," the Director for Agriculture at AfDB, Dr Martin Fregene said at the fourth International conference on cassava, being organized by the Global Cassava Partnerships for the 21st Century, GCP21, in Cotonou, Republic of Benin.

The cassava conference was attended by more than 450 local and

international partners in the cassava sector, coming from research and development organizations, government, farming community, and the private sector.

The bank's investment in cassava comes at a time when African governments are scaling up efforts to end food imports and create wealth.

Dr Fregene said cassava was a strategic crop for Africa's food security and wealth creation for youth, and women, adding that "another dimension to the importance of cassava is in nutrition where cassava can enhance the nutrition of children directly or as feed for poultry and other livestock."

With the largest volume of cassava coming from Africa, cassava supports more than 350 million people in Africa.

The Minister of Agriculture for the Republic of Benin, Dr Gaston Dossouhoui said cassava remained

the cheapest staple consumed by Africans, adding that "addressing the constraints of cassava production in Africa will have a positive impact on African farmers."

He lauded the President of the African Development Bank, Dr Akin Adesina, for his commitment of investing in agriculture and cassava, in particular.

The minister also commended the GCP21 for organizing the fourth International Conference on cassava, emphasizing that it would contribute to knowledge sharing that would help in removing the bottlenecks in the cassava sector.

Dr Kenton Dashiell, Deputy Director General for Partnerships for Delivery at the International Institute of Tropical Agriculture (IITA), said unlocking the potential of cassava required partnerships and close collaboration of partners to address the constraints facing cassava.

Dr Dashiell commended GCP21 for filling the gaps in cassava R&D by organizing a series of conferences with experts sharing knowledge on innovations in cassava.



Dr Martin Fregene , Director for Agriculture and Agro-Allied Industries at AfDB

Thank you for your support!

The GCP21 takes this opportunity to thank all the organizations that supported the 2018 Cassava Conference. Thanks to: IITA, CIAT, National Institute of Agricultural Research of Benin (INRAB), Faculte des Sciences Agronomique – Universite Abomey-Calavi (FAS-AUC), the African Development Bank (AfDB), the West and Central African Council for Agricultural Research (CORAF/WECARD), Bill & Melinda Gates Foundation, CGIAR Research Program on Roots, Tubers and Bananas (RTB),



International Center for Agricultural Development (CIRAD), the Institute for Research & Development (IRD), French Embassy in Benin, French Institute, Nigeria Incentive-Based Risk Sharing System for Agriculture Lending (NIRSAL), Flour Mills of Nigeria, Cibus, China's TAGRM, Inqaba Biotec, PRASAC, Intertech, Building an Economically Sustainable Integrated Cassava Seed System (BASICS), Sino-Food Machinery, OC, NextGen Cassava project, and Centre de Technique de Cooperation Agricole et Rurale (CTA).

Agronomy, Weed Management, and Seed System join Breeding as ‘game changers’ for cassava

After a week deliberation on cassava research and development, researchers highlighted agronomy, weed management, and cassava seed systems as new research priorities that will take cassava to the next level. These new areas, in addition to breeding, are game changers for the cassava sector. Read the full communique below:

Commmuniqué issued at the end of the IVth International Cassava Conference

The IVth International Cassava Conference was held in Benin, June 11-15, 2018 with 417 persons in attendance comprising researchers, policymakers, donors/development partners, national agricultural research and extension systems, farmers and the private sector.

In attendance were also two ministers from Benin: The Minister of Agriculture, Livestock and Fisheries, Republic of Benin, Prof. H.E. Dossouhoui Gaston; and the Minister of Higher Education, Mme Attanasso Marie-Odile; and two ambassadors: The French Ambassador to the Republic of Benin, Mme H.E. Veronique Brumeaux; and the Brazilian Ambassador, Mr. Luís Ivaldo Villafañe Gomes Santos. The African Development Bank was represented by Dr. Martin Fregene, Director for Agriculture and Agro-Industry; and the International Institute of Tropical Agriculture (IITA) by Dr. Kenton Dashiell, Deputy Director General for Partnerships for Delivery.

The theme of this year’s conference was Cassava Transformation in Africa, and a total 357 abstracts were received ranging from the upstream type of research (genomics) to the very basic type of research (agronomy, seeds systems, and weed science), and to social economics (markets and postharvest).

There were 26 plenary presentations, 186 oral and 183 poster presentations in parallel sessions, cutting across different topics on cassava.

Participants at the one-week conference concluded on the following resolutions and recommendations:

1. Commended the government of the Republic of Benin for hosting the Conference.
2. Reaffirmed the importance of cassava as a poverty fighter and a major contributor to food security in the developing world, Africa and Latin America.
3. Recognized the resilience of cassava in the context of a changing climate, which makes it a crop for today and the future.
4. Advocated for more funding for cassava Research and Development (R&D) especially in Africa where there are still gaps to be investigated.
5. Acknowledged the importance of upstream research (genomics), and at the same time called for greater attention and emphasis in terms of investments in downstream research particularly Breeding, Agronomy, Weed Science and Seeds Systems. These areas present low hanging fruits that could quickly accelerate cassava transformation in Africa and the developing world in general.
6. Commended the African Development Bank (AfDB) for the inclusion of agriculture as a priority area of focus and particularly the inclusion of cassava in the AfDB funded initiative— Technologies for African Agriculture Transformation (TAAT). Consequently, participants recognized TAAT as a unique opportunity to transform agriculture in Africa and noted that the low productivity of cassava was an opportunity for the TAAT program to make the desired impact by raising the productivity frontier of the crop.
7. Pledged to work, collaborate, and support the implementation of the TAAT initiative.
8. Recalled that the gains made so far in cassava R&D were products of collaborations, and reiterated the need for stronger partnerships across centers, national, and international institutions working on cassava.
9. Discussed the outbreak of cassava mosaic disease (CMD) in Southeast Asia (Cambodia and Vietnam) and called for urgent regional approach to halt the spread of CMD, which is threatening cassava production in Southeast Asia—a region that accounts for about 55 million tons of cassava and host billions of dollars in cassava investment.
10. Recognized and presented the GCP21 Golden Cassava Prize to a Principal Scientist and Cassava Breeder with the International Institute of Tropical Agriculture (IITA), Dr. Alfred Dixon; and Dr. Hernan Ceballos of the International Center for Tropical Agriculture (CIAT).
11. An award of recognition was also presented to Dr. Claude Fauquet, Executive Director of GCP21, for 44 years of work on cassava; virology, epidemiology, molecular biology, biotechnology and GCP21.
12. Presented an institutional recognition to the Bill & Melinda Gates Foundation with Lawrence Kent receiving the GCP21 award on behalf of the Foundation.
13. The Conference welcomed the incoming Director for GCP21, Prof. Malachy Akoroda who takes over from Dr. Claude Fauquet.
14. Received the expression of interests from France and Brazil to host the next conference. A committee will be set up to select the next country between the two to host the conference in 2021.
15. Commended the following organizations for their support: IITA, CIAT, National Institute of Agricultural Research of Benin (INRAB), Faculte des Sciences Agronomique – Universite Abomey-Calavi (FAS-AUC), the African Development Bank (AfDB), the West and Central African Council for Agricultural Research (CORAF/WECARD), IFPRI, Bill & Melinda Gates Foundation, CGIAR Research Program on Roots, Tubers and Bananas (RTB), International Center for Agricultural Development (CIRAD), the Institute for Research & Development (IRD), French Embassy in Benin, Benin French Institute, Brazilian Embassy of Benin, Podium Alimentos, NIRSAL, Flour Mills of Nigeria, Cibus, TAGRM, Inqaba Biotec, PRASAC, OSARA, Interteck, Building an Economically Sustainable Integrated Cassava Seed System (BASICS), Sino-Food Machinery, OC, NextGen Cassava project, and CTA.

Other partners that attended the conference included International Fund for Agricultural Development (IFAD), NRI, CAVA, FAO, Niji Group, WAVE.

About GCP21

Founded in 2003, GCP21 is a not-for-profit international alliance of 45 organizations and coordinated by Claude Fauquet and Joe Tohme of the International Center for Tropical Agriculture (CIAT). It aims to fill gaps in cassava research and development to unlock the potential of cassava for food security and wealth creation for poor farmers.

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