



APBA
African Plant
Breeders Association

Conference Announcement

Advances in Classical Breeding and Application of Modern Breeding Tools for Food and Nutrition Security in Africa

Accra, October 23-25, 2019



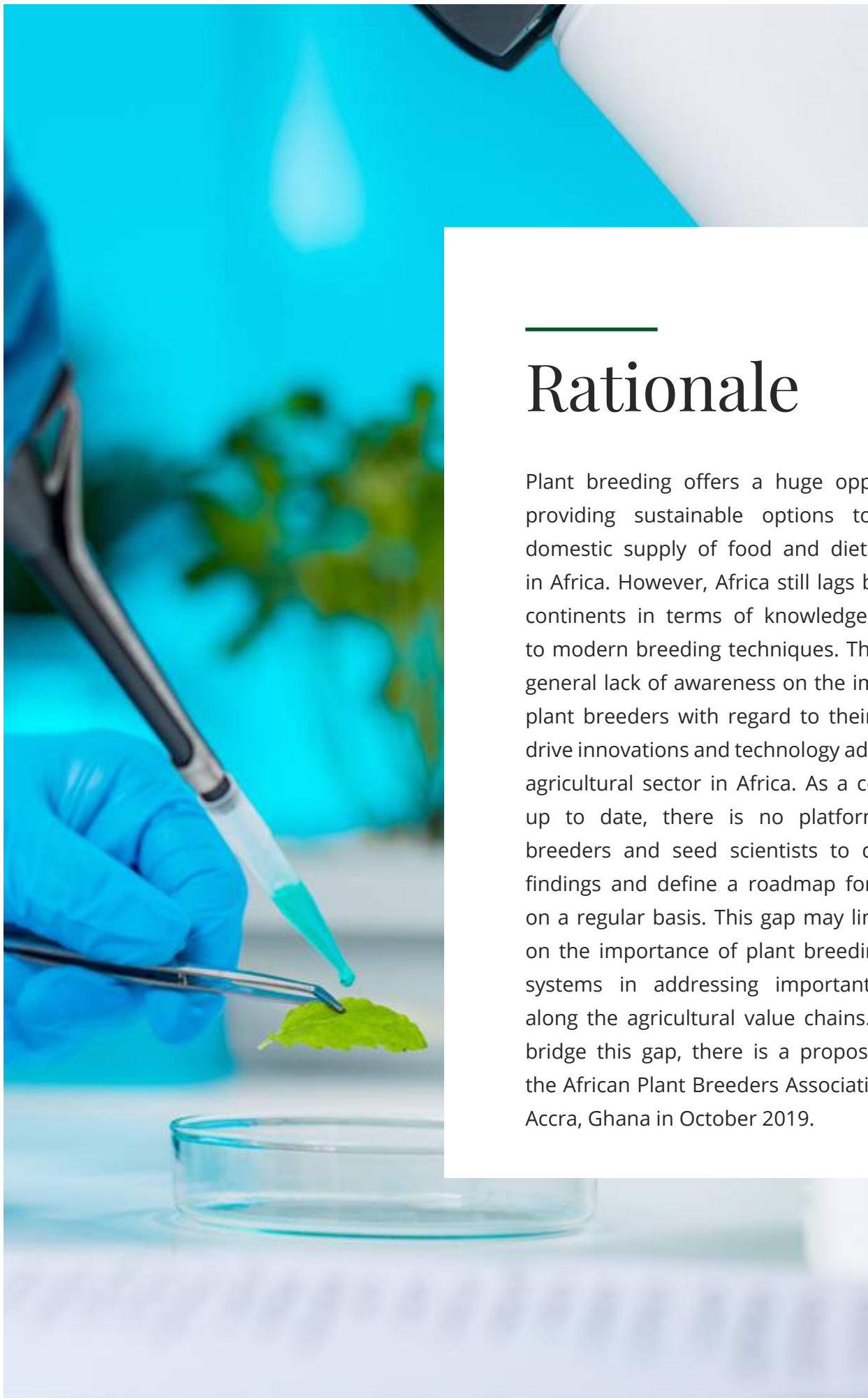
Feed a growing population.
Adapt to climate change.
Ensure food security.

Introduction

Message

Africa is faced with two diverse but interlinked challenges in the 21st century: feeding a growing population and how to adapt to climate change. During the last two decades, the number of undernourished people on the continent has increased, indicating an increased importance of ensuring food security. To meet the rising demand for food, the only plausible option for Africa is to increase domestic supply that can benefit from the use of modern agriculture (the use of irrigation systems, chemical fertilizers, farm machinery, and large-scale monoculture farms for increased efficiency and yields). However, this model is increasingly proving to be unsustainable at the current scale. This is mainly due to the fact that many of the components of modern agriculture are heavily dependent on water, fossil fuels (for irrigation, fertilizer production, machinery, transportation) and phosphate rock (for phosphorus fertilizer), most of which are finite resources and are becoming increasingly scarce. Frequent droughts further constrain the amount of water available for cropping. Water scarcity is further aggravated by climate change. Climate change is having and will increasingly have more severe implications on food security in Africa. Climate change, which results from carbon emissions into the atmosphere, has resulted in an average increase in global temperatures which has several implications on food production. Crop productivity is expected to decrease in lower altitudes, especially in dry and tropical regions, and also decrease the area suitable for agriculture, and the length of the growing season particularly in arid and semi-arid areas. If this trend continues, wheat production is expected to disappear from Africa by the 2080s.

If Africa is to achieve the Sustainable Development Goal (SDG number two), which is ending extreme poverty and hunger, it has to adopt a different strategy. The growth and expansion of the plant breeding profession provides an opportunity to deal with some of these big challenges faced by African countries to increase domestic supply. Crop improvement through development of “smart” and nutritious varieties that yield under diseases, pests, limited water and input conditions, provides an opportunity to increase crop productivity to meet the ever-rising food demand under the heavily constrained production factors such as water and land.



Rationale

Plant breeding offers a huge opportunity for providing sustainable options to increasing domestic supply of food and dietary diversity in Africa. However, Africa still lags behind other continents in terms of knowledge and access to modern breeding techniques. There is also a general lack of awareness on the importance of plant breeders with regard to their capacity to drive innovations and technology adoption in the agricultural sector in Africa. As a consequence, up to date, there is no platform for plant breeders and seed scientists to discuss their findings and define a roadmap for their fields on a regular basis. This gap may limit advocacy on the importance of plant breeding and seed systems in addressing important challenges along the agricultural value chains. In order to bridge this gap, there is a proposal to launch the African Plant Breeders Association (APBA) in Accra, Ghana in October 2019.



Launch of APBA

This launch will bring together professionals, researchers and students from both public and private sectors in the fields of plant breeding and seed science to discuss current research outputs and outcomes in plant breeding and seed systems. Future prospects in these fields will equally be addressed. Further, this conference will provide participants with an opportunity to connect with persons that share the same passion and possibly develop collaborations which are key to mobilising resources. The association is expected to sponsor numerous events that allow members to connect with their peers sharing ideas, asking for advice, volunteering to speak or become a member of a committee throughout the year. In addition, the association is expected to provide an enormous amount of access to resource information such as major journal articles, magazines, newsletters, case studies and books written by experts in the area of plant breeding. This conference is a contribution to the achievement of the Sustainable Development Goals especially the Goal 2, Zero hunger (End hunger, achieve food security and improved nutrition and promote sustainable agriculture by the set date, 2030).

Goal and objectives

The conference is to reflect on the current state and future prospects of plant breeding research in Africa. Specifically, the conference will:

- ✔ promote scientific plant breeding & related research through discussion & communication,
- ✔ offer opportunities to researchers and practitioners to present their findings and network with their peers,
- ✔ influence plant breeding training and education and contribute to continuing professional development of members so that they are technically up-to-date and remain relevant for their current and future employers both local and in the global village,
- ✔ reflect on emerging issues in food and nutrition security,
- ✔ promote high standards of professional ethics among its members,
- ✔ promote interaction with the view to advance the science and business of plant breeding,
- ✔ Raise awareness on the importance of plant breeding and seed systems.

Intended Participants

This first conference of the African Plant Breeders Association will bring together Plant Breeders, researchers, students, professional private companies as well as national agriculture policy makers to share their research findings, discuss recent developments in their respective fields of research and potential collaborative actions to be put into place. Participants will come from a broad range of institutions and organizations:

- ✓ National plant genetic resources centres/institutions (including gene banks)
- ✓ National Agricultural Research Systems (NARS)
- ✓ African Higher Education Institutions (HEIs)
- ✓ Commodity networks, and plant genetic resources networks
- ✓ International agriculture research institutions
- ✓ Non-governmental organizations
- ✓ Community representatives.

It is estimated that 250-300 people will attend the conference. Direct beneficiaries of this conference will be researchers, students, professionals, private companies and national governments. Indirect beneficiaries include smallholder farmers and other value chain stakeholders involved in seed production, distribution and food production.

Conference structure, and presentations

The conference will have five main sessions: 1) Keynote and Plenary sessions, 2) Parallel Sessions and Concurrent Workshops, 3) Field tours, 4) Poster sessions and exhibitions. Each conference day will begin with a keynote presentation followed by plenary sessions. The Conference will cover themes such as :

- ✔ Accelerating genetic gain in crops,
- ✔ Trait discovery, gene deployment and genetic gain,
- ✔ Variety development and deployment;
- ✔ Gender responsive breeding,
- ✔ Demand led breeding,
- ✔ Breeding for Postharvest and End-user traits (post-harvest pests and diseases, nutrient content, processing and cooking qualities)
- ✔ Tree Crops Improvement,
- ✔ Seed Systems (methods of seed dissemination, impact of breeding, private-public partnerships in seed systems),
- ✔ Plant breeding education and training.
- ✔ Planned workshops include:
- ✔ Demand-Led Plant Breeding with the support of BecA-ILRI,
- ✔ Student organized workshop
- ✔ Professional Development by ISU-PLC supported by SIL 2.
- ✔ Modelling and application for genomic selection as well as gene editing – supported by Benson Hill
- ✔ Integrated Breeding Platform – BMS
- ✔ Excellence in Breeding (EiB) platform

Besides the regular presentations, side events will be organized to reflect on the following questions:

- ✔ what are the current and future challenges that need to be addressed by plant breeding and seed systems?

- ✔ what models for seed business in sub-Saharan Africa should be adopted to bring rapid growth in the industry?
- ✔ how are stakeholders in plant breeding and seed sector going to act in a synergy of action in order to effectively address food insecurity challenges through plant breeding and seed systems?

Registration and abstracts submission

Registration is open from May 15th 2019 at <https://africaplantbreeders.com/>

Registration fee:

- ✔ **Students \$50**
- ✔ **Professionals/academics/researchers – \$150**
- ✔ **Corporate – we ask for donations.**

Registration fee covers workshop materials, tea breaks, and lunches. It does not include international travel cost and accommodation. Participants are encouraged to request support from their respective institutions or apply for sponsorship from Donors. Organizers will sponsor accommodation and travel for a few participants from NARS and students based on pertinence of their communications.

For abstract submission follow the regulations below.

- ✔ To submit an abstract, you must first register for the Conference
- ✔ A title (15 words formatted in Title Case, not UPPERCASE)
- ✔ A clear and concise abstract of no more than 350 words or less in English
- ✔ A list of all authors using their preferred abbreviations, as well as each author's full name
- ✔ Institution affiliations for each author

Oral presentations will have 15-minute time slots each. On submission, indicate whether for oral or poster or to be considered for both. If no indication is made it automatically goes to poster. Only accepted abstracts of participants who have paid their registration fees will be published in the Book of Abstracts.

Venue:

Auditorium of the Department of Economics, University of Ghana, Accra, Ghana

Dates:

October 23-25, 2019

Tentative Programme

Tuesday, October 22nd, 2019:

15h-20h – Arrival of participants and registration

Wednesday, October 23rd, 2019:

8h-12h: Launching ceremony and keynote presentation

13-17h: Workshops

Thursday, October 24th, 2019:

8-12h: Guest presentations and Plenary Session 1

13h-16h: Oral presentations and workshop

16h-17h: Poster sessions

Friday, October 25th, 2019:

9-12h: Oral presentations and Concurrent Workshops

13h-16h: Oral presentations and Concurrent Workshops

16h-17h: Poster sessions

19h-21h: Conference Dinner and awards, Closing ceremony

Saturday, October 26th, 2019:

Constitutive assembly of the African Plant Breeders Association (the constitution, Executive committee and its regional representation and Terms of Reference, as well as the design of a strategy for advocacy and public awareness/training).

Organizing Committee

Eric Y. Danquah (WACCI),

Enoch Achigan-Dako (UAC),

Dean Muungani (ZPBA),

John Derera (Seed Co International),

Clare Mukankusi (CIAT),

Richard Edema (MaRCCI),

Beatrice Elohor Ifie (WACCI),

Agyemang Danquah (WACCI)

and Julia Sibiya (ACCI/UKZN).

Hotel accommodation with prices

Name	Discounted Standard room price (\$)	Suite/ executive room price (\$)	Airport Transfer
Erata Hotel	90	170	Yes
Menzvic hotel	130	230	Yes
Tomreik hotel	90	230	Yes
MJ Grand hotel	80	250	Yes
African Regent hotel	170	190	Yes
Airport view hotel	130	200	Yes
Best Western Premier hotel	200	250	Yes
Golden Tulip hotel	220	350	Yes
Fiesta Royale hotel	340	440	Yes
M - Plaza hotel	150	250	Yes
University of Ghana Guest Centre	GHS 247	-	No
Yiri Lodge	65	-	No

Register for the conference

[Click here to register for the conference](#)

Visit our website : <https://africaplantbreeders.com>

Abstract submission closing date: July 15, 2019.

[click here to submit your abstract](#)

Further information can be obtained from:

Prof. Enoch Achigan-Dako, University of Abomey-Calavi

Mail at : infos@africaplantbreeders.com