



# Zimbabwe Plant Breeders Association

*Innovative. Creative. Exceptional*

## ZPBA NEWSLETTER Issue 2 of 2023

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ZPBA 2023 Annual Event " @ MSU in pictures



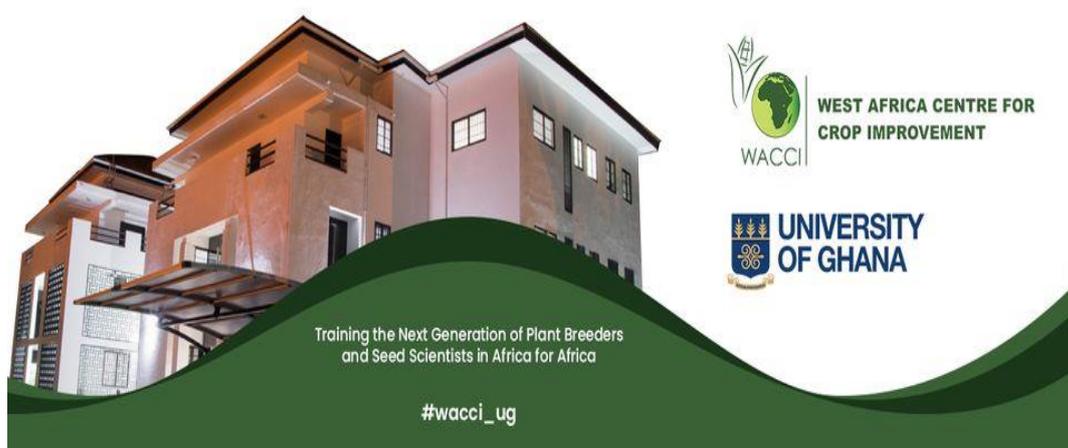
# CULTIVATING AFRICAN EXCELLENCE: The case of The West Africa Centre for Crop Improvement (WACCI)

Written by

Macdonald Makombe, M. Phil Seed Science and Technology Scholar, WACCI

## Introduction

In the heart of the African continent, where agriculture is not just a means of sustenance but a cornerstone of livelihoods, the West Africa Centre for Crop Improvement (WACCI) stands as a beacon of hope and progress. Established with a vision to transform agriculture through education, research, and innovation, the West Africa Centre for Crop Improvement has emerged as a crucial player in advancing crop improvement and securing food security in the region.



WACCI is located at the University of Ghana, and serves as a hub for agricultural innovation and education. Since its inception, the centre has and continues to bring together leading researchers, scientists, educators, and students from across West Africa and beyond. Its collaborative approach fosters a rich exchange of ideas and knowledge, laying the foundation for groundbreaking advancements in crop improvement.

WACCI's educational programs are crucial in nurturing the next generation of agricultural leaders. The centre offers a specialized Ph.D. program in Plant Breeding, which equips students with skills and knowledge needed to address the complex challenges faced by West Africa's agricultural sector. Through hands-on research, coursework, and mentorship, students graduate as skilled Plant Breeders capable of developing resilient and high-yielding crop varieties. The centre also offers the Master of Philosophy in Seed Science and Technology and the Master in Genetics and Plant Breeding Programs.

Research at WACCI transcends traditional boundaries, focusing on both the development of new crop varieties and the refinement of existing ones. This holistic approach is aligned with the diverse needs of West Africa's farmers and agribusinesses. The centre's scientists delve into areas such as disease resistance, drought tolerance, and nutritional enhancement, all with the aim of creating crops that are not only productive but also adaptable to the region's dynamic climate. The well-being of African farmers lies at the heart of WACCI's mission and through developing crop varieties that are resilient in the face of climate change and pest

outbreaks, the centre directly contributes to the improvement of farmers' livelihoods. These improved varieties enhance yields, reduce the reliance on chemical inputs, and promote sustainable agriculture.

WACCI's success is rooted in its multidisciplinary approach to crop improvement. Collaborations between plant breeders, geneticists, agronomists, economists, and social scientists result in well-rounded solutions that address both the technical and socio-economic dimensions of agricultural development. This approach ensures that research outcomes are not only scientifically sound but also contextually relevant.

## Partnerships for Progress

WACCI's impact is amplified through partnerships with governmental agencies, international organizations, non-profits, and the private sector. By working together, these entities leverage their unique strengths to support the development, dissemination, and adoption of improved crop varieties.

## Ongoing Admissions

The West Africa Centre for Crop Improvement is currently calling prospective students to apply for the 2023/2024 cohort sixteen PhD Plant Breeding Program, with the admission deadline slotted for 12 September 2023. Find full details on <https://wacci.ug.edu.gh/content/call-applications-phd-plant-breeding-20232024>



WEST AFRICA CENTRE FOR CROP IMPROVEMENT (WACCI)  
University of Ghana  
World Bank Africa Centre of Excellence



The West Africa Centre for Crop Improvement (WACCI) is currently inviting applications for the PhD in Plant Breeding programme at the University of Ghana. Successful applicants will enroll in January 2024 and will comprise the sixteenth cohort of PhD Students.

APPLY NOW

### Prospective students

- The WACCI programme is specifically for full-time, professional plant breeders who will make their careers breeding new cultivars of food crops. Prospective students must have an MSc/MPhil in Plant Breeding, Plant Genetics, Plant Pathology, Horticulture, Crop Science, Applied Entomology or Applied Nematology, or an equivalent degree.
- Have generally completed their last university degree not more than 10 years ago at the time of application
- Must be nationals or permanent residents of an African country

Application Ends

SEPTEMBER 12  
2023



SCAN FOR MORE  
INFORMATION  
ON ELIGIBILITY

### How to apply

- 1 Complete the **Online Application**  
<https://wacci.ug.edu.gh/apply>
- 2 Provide Email Addresses of **3 Academic Referees**
- 3 Upload all **Relevant Documents**
  - BSc & MSc/MPhil Academic Transcript and Certificate of Completion
  - PhD Proposal
  - Curriculum Vitae
  - Recent Passport Size photo
- 4 Application Fee  
**US\$ 110 (Foreign Applicants)**  
**GH¢ 200 (Ghanaian Applicants)**  
<http://tiny.cc/application-payment>
- 5 Submit Your **Application**



- Any application received after the deadline will not be considered
- Only paid and successful applicants will be considered for scholarships
- Limited scholarships may be available for highly qualified applicants

## STUDENT PROJECTS AT MUAAT CONTRIBUTE TO INNOVATIONS

By



Cephass Sithole, Lecturer Marondera University of  
Agricultural Science & Technology  
[ciphosithole@gmail.com](mailto:ciphosithole@gmail.com) / [csithole@muast.ac.zw](mailto:csithole@muast.ac.zw)

I am Cephass Sithole, teaching at Marondera University of Agricultural Sciences and Technology (MUAAT). I am teaching undergraduate plant breeding and genetics courses and MSc Biotechnology for Plant Breeders. Part of my work includes supervising students' final year projects.

One of my undergraduate students, Sharlyn Matsekete was evaluating chickpea (*Cicer arietinum*) genotypes at MUAAT-AIP campus and we managed to come up with 4 promising varieties that can be recommended for local production. However repeated experiments are needed together with multilocation trials if we are to officially release them for commercial production. Chickpea have high protein content and can substitute expensive animal based proteins. It is widely consumed in India and should also have great potential in Zimbabwe.



Picture of Sharlyn in her chickpea field, showing some *Fusarium* susceptible genotypes

Another student, Liberty Bepete was evaluating *Pennisetum glaucum* (Pearl millet) genotypes. The nation is moving towards small grains, and because of their drought resistance they will do well in low rainfall areas hence better adapted to climate change. We managed to identify 4 high yielding genotypes that can be recommended to the locals near MUASt-AIP campus or those having similar conditions. Again there is need for further evaluation.

The last student I am supervising together with Dr. P. Matova (Mukushi Seeds) and Dr. K. Simango (MUASt), Nyasha Gwangwadze, is evaluating advanced experimental elite maize hybrids' resistance to Maize Streak Virus, Turicum Leaf Blight and Grey Leaf Spot. Out of the 93 hybrids evaluated, 31 showed multiple resistance (resistance on the 3 diseases). This is collaborative work between Mukushi seeds and MUASt and its being funded by Mukushi seeds.

## UPCOMING EVENTS

### 1. CALL for PRESENTATIONS

- Calling for volunteers to give presentations on the ZPBA platform online via ZOOM or WhatsApp, etc be it a seminar, a training event etc.
- Contact Dr. C. Kamutando (+263 71 323 2033; [kamutandocn@gmail.com](mailto:kamutandocn@gmail.com)) or contact using ZPBA contact details.

### 2. ZPBA Annual Event 2024

- Traditionally this has been held in January annually and the 2024 event will include elections for ZPBA leadership. In the past Tobacco Research Board, now Kutsaga (2021) and Midlands State University (2023) have hosted the event. Various institutions including local seed companies, ARC, CIMMYT, CTDO, SEQART contributed financially to hosting the event in the past.
- This is a call to institutions who wish to host or sponsor the event, send your expression of interest to ZPBA Secretariat by 10 October 2023

### 3. APBA 2023 Conference on 23-26 October 2023

- Theme: Leveraging Genetic Innovation for Resilient African Food Systems in the wake of Global Shocks
- Deadline for abstract submission- 15 September 2023
- Hosts: UM6P, Benguerir, Morocco
- Visit [The African Plant Breeders Association Conference 3rd Edition \(um6p.ma\)](http://um6p.ma)
- **You are encouraged to participate**



## Contact Us

Telephone: +263 (0)784 618719 (send your name if you want to be on the ZPBA WhatsApp group)

Email: [zimplantbreedersassociation@gmail.com](mailto:zimplantbreedersassociation@gmail.com)

Website: <http://zpba.org.zw/>

YouTube:

<https://www.youtube.com/channel/UC6Yf7YvuJHjNCMuUj15kgw>

You are receiving this e-mail because you are active or interested in plant breeding or plant breeding related fields. If not and would not like to continue receiving communication from ZPBA, then email 'unsubscribe' to [zimplantbreedersassociation@gmail.com](mailto:zimplantbreedersassociation@gmail.com)

## WHO IS ZPBA

**ZPBA** is a **membership-based, not-for-profit, non-political, professional association** of Zimbabweans based locally or abroad active or interested in plant breeding and/or plant breeding-related fields (e.g. seed agronomist, seed inspectors, seed technologists, geneticists, germplasm conservation specialists, biotechnologists, molecular biologists, etc.) launched on the **26<sup>th</sup> of January, 2016** at Holiday Inn, Harare with financial assistance from FAO.

**ZPBA** is legally registered as a **Trust** in Zimbabwe: registration number 1791/2018. The **ZPBA Board of Trustees** consists of the elected **Executive committee of the ZPBA** who are bound by the Trust Deed and the ZPBA Constitution.

### Membership benefits include

Professional and personal development;  
**Shared costs on human resource development;** Networking; **Timely Communication (especially for events, internships, job vacancies, scholarships);**  
Voting rights; **Discounted rates for events;**  
Sense of pride in the profession and industry

### WANT TO BE A SUBSCRIBED MEMBER?

What are you waiting for, visit [Apply for Membership – Zimbabwe Plant Breeders Association \(zpba.org.zw\)](http://zpba.org.zw). Pay your subs and receive your unique membership ID.

### THANK YOU SUBSCRIBED MEMBER

Thank you to members who continue to pay their subscriptions as well as those who support fundraising initiatives. Your contributions make it possible for your association to keep going.