



Zimbabwe Plant Breeders Association

Innovative. Creative. Exceptional

ZPBA NEWSLETTER Issue 2 of 2020

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Holing out at the Quality Seed + Lime Pfumvudza demo plot in Mhondoro-September 2020

CELEBRATING OUTSTANDING ZIMBABWEAN BREEDERS

Meet our SAPBA Influential Breeders Nominees for 2020

Zimbabwe has made numerous strides with regard to introduction of new improved varieties of various crops which withstand biotic and abiotic stresses, assuring farmers of better yields and to the consumers and agro-processing industries better quality attributes. This has been through the efforts and hard work of numerous breeders who not only keep abreast advances in breeding approaches and techniques but also contribute to the crop improvement knowledge. When SAPBA (Southern African Plant Breeders Association-<https://sapba.co.za/>) made calls for nominations of Africa's most influential breeders it was seen fit that Zimbabwe Plant Breeders Association should submit nominations as an Association.

Consequently, a call for nominations was circulated through various communication platforms of ZPBA. Thirty three (33) breeders were nominated, of these, seven nominees with the highest votes were submitted to the SAPBA. Our nominees are just a sneak peek into the deep bucket of many outstanding breeders that Zimbabwe can boast of who are operating within and beyond our borders.

But who are these top seven nominees? They are seasoned and influential breeders who have a track record of proven excellence. Now, take a seat and relax as you allow me to reveal and decode our nominees;



Professor Tongoona

Professor Tongoona is a seasoned plant breeder. He studied Plant Breeding and Genetics at the University of Zimbabwe (UZ) with course work done at Michigan State University and graduated with a PhD in 1987. Think of any successful breeder to have come out of Africa, the probability of him or her having been trained by Professor Tongoona is almost certain. With over 35 years' experience in Academia, he is currently a visiting Professor at the West Africa Centre for Crop Improvement (WACCI) where he is lecturing several breeding courses and inspiring many students from different nationalities. Over the years he has developed courses in numerous aspects of breeding for many different universities in Africa. To date, Professor Tongoona has supervised over 129 post graduate students who have gone to take leadership roles in different organisations world over. In addition, he has authored and co-authored 120 articles in peer reviewed journals, 34 chapters in books and more than 26 conference presentations. All this points to the great input he has put towards the field of breeding, having dedicated his life to such a just cause. Professor Tongoona has contributed significantly to research in several crops including small grains by raising around 8 million USD towards research grants. He has received numerous awards and honours the world over. Closer to home, and important to note is that he is the ZPBA first honorary life member, and was awarded this in honour because of his tremendous input towards plant breeding.



Dr. Magorokosho

Dr. Cosmos Magorokosho is a professional Maize Breeder who obtained his qualifications in Plant Breeding from Texas A&M University, USA (PhD), University of Zimbabwe (MPhil) and University of Wageningen (Cert. in Applied Plant Breeding). During his fifteen years at CIMMYT he has developed and promoted the use and adoption of climate resilient maize germplasm (inbred lines, synthetics, populations) and produced more than thirty successful high yielding and stress tolerant maize varieties being marketed by private seed companies in several African countries in southern, eastern and west Africa. Dozens of BSc, MSc and PhD students have passed through his academic supervision and mentorship in addition to training hundreds of different levels of plant breeders and maize technicians across Africa. Dr. Magorokosho has authored and co-authored more than fifty journal articles, book chapters, technical manuals and conference papers. Prior to joining CIMMYT, Dr. Magorokosho led the collection of over 220 local maize landraces and characterized them before handing them over to gene-banks in Zimbabwe, Zambia and Malawi for their conservation. While working for World Vision International (1997 to 2002) in post war Angola, Dr. Magorokosho led a massive Agriculture Recovery Programme which resulted in increased and enhanced food, nutrition, and seed security for thousands of families who had been affected by civil war in that country. Dr. Magorokosho is a fellow of several international associations and he is the current President of ZPBA.



Professor Derera

Professor John Derera is the incoming Head of Breeding at the International Institute of Tropical Agriculture (IITA) and Global Head of Research and Development at Seed Co Group. He obtained his PhD in Plant Breeding from the University of KwaZulu-Natal, MPhil and BSc Hon both from the University of Zimbabwe. He has over 24 years' experience in South Africa and Sub-Saharan Africa in both industry and academia. Prof. Derera has experience in grantmanship having written many winning research proposals. He has invested a significant amount of time mentoring and providing guidance to over 70 PhD and MSc students at WACCI in Ghana and ACCI UKZN in South Africa. Prof. Derera has worked in several maize breeding programmes focusing on pest resistance, disease resistance, drought tolerance and bio-fortification to mention a few. Under his outstanding leadership, his current company has released over numerous new varieties to meet the ever changing market demands and climate as well as numerous maize inbred lines. He is a proven expert in process improvement as well as visionary with regard to establishing state of the art infrastructure which has seen great strides being made. History should note that Prof. Derera recruited the first 8 professional female breeders in his current position as Global Head of Research at Seed Co.



Dr. Ndhlela

Dr. Thokozile Ndhlela is a Maize Breeder at CIMMYT overseeing breeding activities for nutritious maize, specifically Provitamin A and Zinc as well as climate resilient maize varieties in eastern and southern Africa. She is a holder of a PhD in Plant Breeding from the University of Free State and an MSc from the University of Zambia. Through her work, she has facilitated release and commercialisation of climate resilient and nutritious maize in many African countries thereby playing a crucial role in the fight against hidden hunger, which affects millions of people in Sub-Saharan Africa. Often times she is referred to as the “Nutritious Lady” owing to her relentless hard work and passion in the promotion of Bio-fortified maize. Before joining CIMMYT she worked at DRSS where she bred drought tolerant, insect resistant, heat and drought tolerant maize. Her efforts resulted in the release of some OPV maize varieties and several drought tolerant maize hybrids. Due to her contributions to drought tolerant maize research she won the Drought Tolerant Maize in Africa (DTMA) project consecutively for four years between 2009 to 2012 and again in 2014 leading to receiving the prestigious presidential award for outstanding research in the production of the popular maize variety ZS265. She continues with her result-oriented breeding at CIMMYT, having released over 28 Provitamin A maize in Tanzania, Malawi and Zimbabwe and Zambia. She is a perfect example to all aspiring and professional female breeders that there is indeed, “room at the top”



Dr. Gorden Mabuyaye

Dr. Gorden Mabuyaye is the Group Maize Breeding Programme Lead at Seed Co International where he spearheads Seed Co.’s Global Maize Research strategy formulation and implementation. He received his PhD in Plant Breeding from the University of KwaZulu Natal. He holds both his MSc and BSc degrees from the University of Zimbabwe. He is passionate about offering crop genetic solutions to problems facing farmers across Africa. He started his career in 1999 as a Quality Assurance Inspector in seed maize production. In 2001, he moved to maize breeding and since then has risen through the ranks to become the breeder and research manager that he is today. He has directly bred 10 active commercial maize hybrids and over 10 experimental maize hybrids that are at various stages of registration and commercialisation in different environments of sub Saharan Africa. In his previous role, he contributed to the breeding and commercialisation of six commercial maize hybrids, as well as breeding many inbred lines with a strong emphasis on earliness, heat and drought stress tolerance. A hard-working hands-on breeder who believes in rolling up the sleeves and exemplifying sound breeding practices. He has scored firsts in the development of ultra-early, very early, early and medium maturing maize hybrids in tropical and temperate environments of Africa. He has mentored breeders, supervised graduate and post graduate students from agricultural colleges and universities across Africa. Dr. Mabuyaye has research management and corporate governance experience sitting on board committees for the past eight years. In October 2020, he will assume the role of Global Head of Research at Seed Co International. He currently resides in Harare with his family. You can find him on Facebook: Gorden Mabuyaye and on twitter: [DrGordenMabuyaye@GordenMabuyaye](#)



Dr. E. Havazvidi

From his Level Cambridge exams in 1971, where he emerged amongst the top academic achievers in colonial Rhodesia, it was clear that he was indeed a rising star. He was admitted to study Plant Breeding at the then University of Rhodesia. His first port of call was at Cotton Research Institute in Kadoma. He later joined Seed coop in 1980 where he quickly rose to become the principal wheat breeder. He became a pioneer in the unique field of research concerned with ascertainment of means of improving yield and quality of seed crops produced by seed growers. This yielded in what we now refer to as facts and as a result there has been global references to his work. Furthermore, from the early 80s right through to this millennium, Dr. Havazvidi released over 28 wheat varieties of which five are registered in the ten tonne per hectare commercial yield club in Zimbabwe and Zambia. These breeding achievements also helped Zimbabwe to occupy top position in the world for a long time. Dr. Havazvidi has also dedicated his time in academia. In addition, he represents Sub-Saharan Africa in the WHEAT–Independent steering committee of CGIAR, CIMMYT. He has also received several awards including Zimbabwe Wheat Board, Wheat Legend winner. He is currently the Senior Group Research of Seed Co Group Limited.



Mr. Bruce Mutari

If you are an avid sugar-bean eater there is a high chance that you are enjoying the benefits from Mr. Bruce Mutari's work. While at the Crop Breeding Institute he developed dry bean breeding pipelines in collaboration with CIAT through PABRA (Pan African Bean Research Institute). These pipelines were developed for different types of beans namely the sugar types, large whites, large red kidney, large red mottled and many others in response to market demand. In his career he has dedicated a lot of effort towards cultivar dissemination through participatory varietal selection and innovation platform approach. He has even gone a step further in several partnerships to promote value addition through engagement of various processors resulting in several products which are on the market. One of his varieties, NUA 45 has been taken up by several humanitarian programmes in Zimbabwe and Southern Africa in the fight against malnutrition and hidden hunger. His team won the Presidential award in 2019 for outstanding research. One of his releases a canning bean has potential to save the country a lot of forex significantly as it will eradicate the need to import as we will now be producing our very own. Mr. Mutari obtained his BSc from University of Zimbabwe and MSc from University of Fort-hare. He is working towards obtaining his PhD from the University of KwaZulu Natal. He is currently working as a Research Associate at ICRISAT working on the breeding of chickpea and pigeon pea.

Now as we await the next phase, we would like to thank the ZPBA family for amazing team spirit as we celebrate each other's successes and draw inspiration from each other.

Compiled by

ZPBA facilitated FAO PRE-BREEDING COURSE

What is unique about it?

- The FAO developed the pre-breeding course in 2011 with 5 modules and has had revision over years. The course is available online for anyone interested. Read more <http://www.fao.org/in-action/plant-breeding/resources/e-learning/en/>
- ZPBA added an additional module 'Principles of molecular breeding' so that participants keep abreast with these modern day techniques
- ZPBA brought together a pool of experts who will facilitate the modules, bringing in the local experience to make the information more relevant to the Zimbabwean situation. Details are as below

<u>MODULE</u>	<u>FACILITATED BY</u>
1. Introduction to Pre-breeding	<u>Mrs. Patience NYAKANDA</u> <u>Plant Breeding Professional</u>
2. Gene bank management relevant to pre-breeding-	<u>Mr. Onismus CHIPFUNDE</u> <u>Plant genetic resource conservation</u> <u>and sustainable utilisation expert</u> <u>Zimbabwe National Gene bank</u>
3. Pre-Breeding project management	<u>Ms. Sakile KUDITA</u> <u>Gene bank expert</u> <u>Formerly with SADC ICRISAT</u>
4. Pre-Breeding: Creating and Managing variation	<u>Prof. Pangirayi B TONGOONA</u> <u>WACCI University of Ghana</u>
5. Pre-Breeding: Distributing, Use and Regulatory Issues	<u>Mr. Kudzai KUSENA</u> <u>A plant genetic resources</u> <u>conservation specialist and Head of</u> <u>Zimbabwe National Gene bank</u>
6. Principles of molecular breeding- <i>This is an additional module developed by ZPBA</i>	<u>Dr. Meluleki ZIKHALI</u> <u>Molecular Scientist, Seed Co group</u>

- The course is being facilitated via the WhatsApp platform- the first for ZPBA, with Mr. Tatenda MAYAYA coordinating the training event
- A total of 65 participants registered.

UPCOMING EVENT- LIMING EVENT IN MHONDORO



QUALITY SEED PFUMVUDZA & LIME

DEMONSTRATION EVENT



Guest of Honour
Dr. John Basera
Permanent Secretary (MLAW&RR)

Date
17 September 2020

Venue
Mhondoro

Who is invited?
Seed Companies
Fertiliser Companies
Farmers' Unions
Agronomists

Program

10:00hrs Arival

10:30 hrs Welcome Remarks/
Introductions

10:45hrs Demo Tour

11:45hrs Guest of Honour
Speech

12:30hrs Closing Remarks
Refreshments

Contact Details

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In partnership with:



This event is to bring to the fore the importance of GOOD QUALITY SEED of IMPROVED VARIETIES, and when combined with liming, good agronomic practices in the Pfumvudza plots, surely yields will improve. Your participation is very welcome.



Contact Us

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

Email: zimplantbreedersassociation@gmail.com

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

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

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 **26th 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

Membership Fees

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.

REVIEW OF MEMBER SUBSCRIPTION

The 2020 Ordinary meeting reviewed the member subscriptions and agreed on the minimum rates indicated below for the year 2020. Those who are able to pay more are encouraged to do so.

CATEGORY	MINIMUM SUBSCRIPTION (US\$)
	(for ZW\$ equivalent use the prevailing bank rate)
Corporate member	250.00
Ordinary member	40.00
Student member	10.00