

3rd AFRICAN CONFERENCE ON PRECISION AGRICULTURE

MAIN CONFERENCE SITE:

Marrakech, Morocco

3-5 • December • 2024



PRECISION AGRICULTURE *in ACTION for AFRICA*

Kenya Satellite Site Program



ORGANIZED BY:



University
Mohammed VI
Polytechnic



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AFRICAN ASSOCIATION *for*
PRECISION AGRICULTURE





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ABOUT THE

African Conference on Precision Agriculture



The mission of the African Conference on Precision Agriculture (AfCPA) is to “connect the science and practice needed to put precision agriculture in action for Africa.” Through this mission, AfCPA seeks to provide a pan-African platform focused on highlighting new advances in the fields of experimental and applied precision agriculture.

The conference is aimed at strengthening and supporting the precision agriculture community within the African continent. AfCPA wishes to engage key stakeholders including scientists, policymakers, extension staff, crop consultants and advisors, agronomists, and service providers towards the common goal of building the capacity and resilience of African cropping systems.

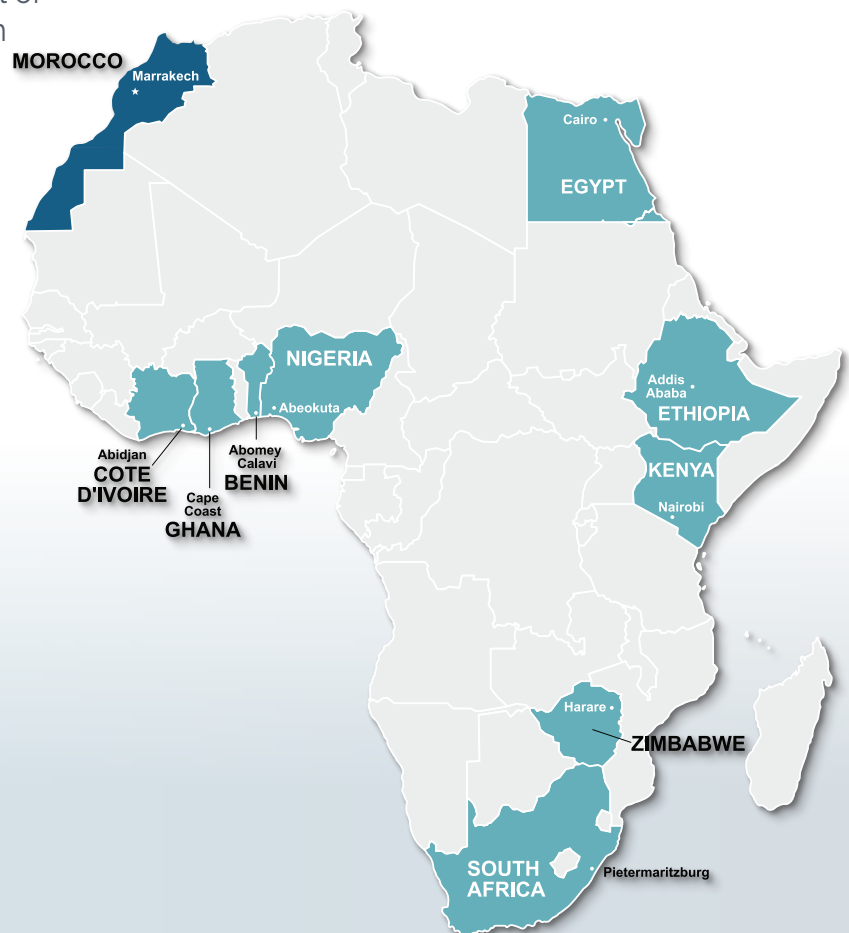
AfCPA 2024 is one conference, multiple satellite site event offering a local opportunity to view presentations from the main conference while participating in a regional precision agriculture program organized by the site's host.

MAIN SITE:

Marrakech, Morocco

SATELLITE SITES:

- Abomey-Calavi, Benin
- Abidjan, Côte d'Ivoire
 - Cairo, Egypt
- Addis Ababa, Ethiopia
- Cape Coast, Ghana
 - Nairobi, Kenya
- Abeokuta, Nigeria
- Pietermaritzburg, South Africa
 - Harare, Zimbabwe



AfCPA is an initiative of the African Plant Nutrition Institute (APNI) in partnership with Mohammed VI Polytechnic University (UM6P), the International Society of Precision Agriculture (ISPA), and the African Association for Precision Agriculture (AAPA).



SATELLITE SITE HOSTS

Prof. Adima Amissa Augustin

National Polytechnic Institute
Félix Houphouët-Boigny, Côte d'Ivoire

Prof. Dr. Abdelaziz Belal

National Authority for Remote
Sensing and Space Sciences, Egypt

Dr. Temesgen Desalegn

Ethiopia Institute
of Agricultural Research

Prof. Kwame Frimpong

University of Cape Coast, Ghana

Femi Adekoya

Integrated Aerial Precision, Nigeria

Dr. Tafadzwa Mabhaudhi

University of KwaZulu-Natal, South Africa

Dr. V. Nicodeme Fassinou Hotegni

Genetics, Biotechnology &
Seed Sciences Unit (GBioS),
Abomey-Calavi Atlantique, Benin

Dr. Onesmas Kitonyo

University of Nairobi, Kenya

Dr. Regis Chikowo

Plant Production Sciences
and Technologies
University of Zimbabwe



AfCPA Program Chair

Dr. Steve Phillips

SENIOR CONSULTING SCIENTIST
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Program - Day 1

All times listed are GMT

Conference Program Legend

Plenary Session	Keynote Presentation	Local Session	Panel Session	LS - Live at Site	LV - Live (virtual)	R - Pre-recorded
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Day 1 – Tuesday, 3rd December		
08:00	Arrival and Registration	LS
08:30	Welcome Session	LS
	Remarks by Chairman, Department of Plant Science & Crop Protection	LS
	Remarks by Dean, Faculty of Agriculture	LS
09:30	Photo Session	LS
09:30	Break/Posters/Exhibits	
	Local Session	
	Keynote 1	
10:00	Precision Drones Company Presentation Geoffrey Nyaga	LS
	Keynote 2	
10:30	OCP Presentation Karen Ayabei	LS
11:00	Modelling of Machine Learning Protocols for Laser Weeding: Case Study of Coffee Plantations Mbuge/Wambui	LS
11:20	Application of Machine Learning Algorithms in Early Maize Yield Estimation Using Multiple Source Data in Kenya Mwaniki	LS
11:40	Predicting the Distribution of Groundnut Phytopathogens Under Current and Future Climatic Scenarios in Zimbabwe Chinwa	LS
	Switch to Main Site in Morocco	
12:00	Keynote Presentation 1 Presentation by <i>Anthony Chapoto - Africa Network of Agricultural Policy Research Institutes</i>	LV
12:30	Keynote Presentation 2 Presentation by <i>Richard Ferguson - Rwanda Institute for Conservation Agriculture</i>	LV
13:00	LUNCH BREAK	

Program - Day 1

Day 1 – Tuesday, 3rd December		
15:00	Local Session Keynote 3 IFDC – LS	LS
14:30	Effects of Adopting Fertilizer Management Practices on Yield in Maize-Based Systems of Embu County: An Instrumental Variable Regression Approach Gitau	LS
14:00	Assessment Of Access To And Utilisation Of Treadle And Hip Pump Technology By Farmers In Machakos County, Kenya Teresiah	LS
15:10	Factors Influencing Farmers’ Decisions On Timing And Application Rates Of Irrigation Water In Semi-Arid Regions: A Case-Study Of Mwala, Machakos County, Kenya Mongina	LS
15:30	Break/Posters/Exhibits	
	Switch to Main Site in Morocco	
16:00	Keynote Presentation 3 How 100,000 Automatic IOT Weather Stations for Disease, Irrigation and Fertilizer Management will Change the Life of 10 Million Smallholder Farmers and Create New Local Jobs for 10,000 Digital Farm Advisors? <i>Gottfried Pessl - Pessl Instruments GmbH</i>	LV
	Plenary Session 1 – Precision Ag Service for Smallholders	
16:30	Presentation by <i>Abdellah Hamma - OCP Nutricrops</i>	LV
16:50	Presentation by <i>Musa Mishamo - Hexagon Agriculture</i>	LV
17:10	Presentation by <i>Robert Blair - Blair Farms</i>	LV
17:30	Human-Powered Proximal Soil Sensing for Small Farms <i>Eric Lund - Veris Technologies, Inc.</i>	LV
18:10	Adjourn	

Program - Day 2

Day 2 – Wednesday, 4th December		
08:00	Arrival and Registration	LS
08:15	Welcome Session	
08:20	Local Session Keynote 4 KALRO/KAOP	LS
08:40	Local Plenary Plenary Session 1	
08:40	Today – Tomorrow	LS
09:00	Amani	
09:20	Croplife International	LS
09:40	CABI	
10:00	Break/Posters/Exhibits	
10:30	Plenary Session 2 – Precision Ag Adoption in Africa (pre-recorded) Overview of Precision Agriculture in Africa <i>Samuel Njoroge - African Plant Nutrition Institute (APNI)</i>	R
10:50	Yield of Maize (Zea Mays L.) Varieties as Affected by Neem Oil Coated Urea Application in Southern Benin <i>Vodjo Nicodeme FASSINO HOTEgni - University of Abomey-Calavi (UAC)</i>	LV
11:10	Scalable Artificial Intelligence, Geospatial Big Data Analytics and Digital Agriculture: a Focus on Lessons Learnt and Their Implication for Improved Production <i>Kwabena Niketia - University of Saskatchewan</i>	LV
11:30	Presentation by <i>Tomisin Adefare - GBFoods</i>	LV
	Switch to Main Site in Morocco	
12:00	Plenary Session 3 - Remote Sensing Applications Assessment of Nitrogen Fertilization in Tunisian Wheat Production Using Proximal and Remote Sensing <i>Mouna Mechri - National Institute of Field Crops (INGC)</i>	LV
12:20	Engineering Technology for Crop Monitoring and Disease Identification <i>Manuel Perez Ruiz - Smart Biosystems Laboratory, University of Sevilla</i>	LV
12:40	Presentation by <i>Anthony Hall - Dronelytics</i>	LV
13:30	Keynote Presentation 5 Presentation by <i>Dr. Donald Kelechi Madukwe - OCP Africa</i>	LV
13:50	Keynote Presentation 6 Presentation by <i>Pauline Chivenge - IRRI</i>	LV

Program - Day 2

Day 2 – Wednesday, 4th December		
13:00	LUNCH BREAK	
	Local Session	
14:30	Geo-Precision: Harnessing Geospatial Data and The Geographical Detector Model for Smart Soil Nutrient Management - An Exposition <i>Mwendwa</i>	LS
14:50	Ecosystem Services, Land Use Change, and Greenhouse Gas Emissions from An East African Rift Valley Wetland, Cheleleka Wetland, Ethiopia <i>Ongaya</i>	LS
15:10	Precision Agriculture: Annexing Conservation Agriculture Principles for Sustained Higher Farm Benefits <i>Micheni</i>	LS
15:30	Exploring the Potential of Biochar and Microbial Inoculants for Sugarcane Production <i>Kamau</i>	LS
15:50	Residual Effects of Land Preparation Method and Organic Amendment on Soil Physical Property, Growth and Yield of Collards (Brassica Oleraceae) <i>Kiptoo</i>	LS
16:10	Break/Posters/Exhibits	
	Switch to Main Site in Morocco	
	Keynote Presentation 4	
16:30	Presentation by <i>Dr. Donald Kelechi Madukwe - OCP Africa</i>	LV
	Keynote Presentation 5	
16:50	Presentation by <i>Pauline Chivenge - IRRI</i>	LV
	Panel 1 – Women in Precision Agriculture	
17:20	Women in Precision Agriculture - Panel Discussion <i>Tangi Aziza - UM6P and APNI</i> <i>Mouna MECHRI - National Institute of Field Crops (INGC)</i> <i>Tomisin Adefare - GBFoods</i> <i>Pauline Chivenge - IRRI</i>	LS
18:00	Adjourn	

Program - Day 3

Day 3 – Thursday, 5th December		
08:00	Arrival and Registration	LS
08:10	Welcome Session	
	Local Session	
08:20	Soil Science Society of East Africa	LS
08:40	Building Capacity for Agricultural Sustainability: Implementing a Certified Agronomy Advisory Program for Africa <i>Canon Norris Engoke Savala</i>	
09:00	Inter-Country Cooperation Can Transform Precision Agriculture Education and Research in Africa <i>Kwame Frimpong</i>	LS
09:20	Break/Posters/Exhibits	
	Keynote Presentations 6 – (pre-recorded)	
09:30	Precision Water Management Strategies for Africa <i>George Vellidis - University of Georgia</i>	R
	Plenary Session 4 - Precision Water Management (pre-recorded)	
10:00	Presentation by <i>Yafit Cohen - Agricultural Research Organization</i>	R
10:20	Application of Remote Sensing for Drought Monitoring Using Vegetation Indices in Pineapple Growing Areas in the Central Region of Ghana <i>Emmanuel Hanyabui - University of Cape Coast</i>	R
10:40	Presentation by <i>Zakaria Hazzoumi - UM6P</i>	R
	Local Session	
11:00	On-Farm Experimentation Process Triggers Farmers' Zeal to Test Technologies in Maize Systems of Embu County, Kenya <i>Onesmus Kitonyo</i>	LS
11:20	Enhancing the Suitability of Plant Nutrition Management Technologies to Diverse Smallholder Contexts in Kenya Through On-Farm Experimentation <i>Joses Muthamia</i>	LS
11:40	The Value and Potential of On-Farm Experimentation to Catalyze Agricultural Transformation <i>Ivan Adolwa</i>	LS
	Switch to Main Site in Morocco	
	Keynote Presentation 7	
12:00	Presentation by <i>TBD - OCP Nutricrops</i>	LV

Program - Day 3

Day 3 – Thursday, 5th December		
	Plenary Session 5 – Precision Nutrient Management	
12:30	iSDA's Virtual Agronomist – Expert Advice for Every Farmer <i>Paul Chunga - iSDA (virtual)</i>	LV
12:50	Use of "FertiEdge" Application for Optimizing Wheat Fertilization <i>Ibtihel Sbai - National Institute of Field Crops</i> <i>Mohammed Hmimou</i> <i>Faissal SEHBAOUI - AgriEdge SA, Benguerir, Morocco</i>	LV
13:10	Presentation by <i>Amine Jamal - OCP Nutricrops</i>	LV
	Keynote Presentation 8	
13:30	National Agricultural Data Infrastructure As Bedrock for Precision Agriculture <i>Benjamin Kwasi Addom - Commonwealth Connectivity Agenda for Trade & Investment (CCA)</i>	LV
14:00	Closing Session and Awards - APNI - Kaushik Majumdar	LV
14:30	Adjourn	



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