1st African Conference on Precision Agriculture
8-10 December 2020
Tunis, Tunisia

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CONFERENCE CHAIR:
Dr. Steve Phillips
s.phillips@apni.net

CONFERENCE SITE HOST:
Dr. Hatem Cheikh M’hamed
hatemcheikh@yahoo.fr

CONFERENCE INFO:
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Welcome to the 1st African Conference on Precision Agriculture (AfCPA). Below are lists of oral and poster presentations originating from your conference site. The list of on demand presentations were selected to be recorded in advance. A selection of these recordings are listed on your local conference agenda, but all on demand video content is available to conference registrants from the website.

### LOCAL PRESENTATIONS/POSTERS & ON DEMAND CONTENT

#### TUNIS ORAL PRESENTATIONS

- **CropSAT – opportunities for applications in precision agriculture in Africa / Omran Alshihabi**
- **Soil organic carbon mapping in Tunisia: comparison of different interpolation methods / Meriem Barbouchi**
- **Determinants of the adoption of an intelligent monitoring system and effects on farms performance in Tunisia / Jamel Ben Nasr**
- **Analysis, design and development of a web and mobile application for fertilizer olive orchards recommendations / Ajmi Larbi**
- **Crop water requirements, biomass and grain yields estimation for Sulla (Hedysarum coronarium L.) using cropwat in semi-arid regions of Tunisia / Rim Hajri**

#### ON DEMAND CONTENT - RECORDED

- **Implementation of Proximal Soil Sensing, Data Fusion and Machine Learning to Improve Phosphorus Management at a Field Scale / Abdelkrim Lachgar**
- **Nutrient management tailored to smallholder agriculture enhances productivity and sustainability / Pauline Chivenge / Pauline Chivenge**
- **A precision irrigation app for smart water management by farmers / Aziz Abouabdilah**
- **Monitoring irrigation water use at large scale irrigated areas using remote sensing in water scarce environment / Mohamed Hakim Kharrou**
- **Mechanisation of smallholders in Zambia by agrodealer development / Sven Peets**

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#### TUNIS POSTERS

- **Some essential nutrients, active limestone and pH status of Tunisian soils / Amira Hachana**
- **Small Machinery for Sustainable Intensification of Crop-Livestock System under Biomass Shortage / Udo Rudiger**

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### A review on Sensor based robotics agriculture: Improving traditional Agriculture Practices / Sachin C Karad

- **LiDAR-based soybean crop segmentation for autonomous navigation / Vitor A Higuti**
- **Estimating soil organic carbon from cell phone images / Asim Biswas**
- **Cashew Trees Detection and Yield Analysis using UAV-based Map / Thierry Roger Bayala**
- **Estimating greensnap yield damage with canopy reflectance: a case study / Gabriel Dias Paiao**
- **Market Acceptance and Willingness to Pay for Drone Technology in the Application of Pesticide for the Control of Fall Armyworm / Selorm Omega**
- **Spectral assessment of chickpea morpho-physiological traits from space, air and ground / Ittai Herrmann**
- **Development of Canopy Mapping System of Asian pears (Pyrus pyrifolia Naka) Using Terrestrial Laser Scanning / Jaeowan Lee**
- **Development of Lodging Direction Determination System Using Image Processing / Yuta Arai**
- **Monitoring Corn (Zea mays) Yield using Sentinel-2 and Machine Learning for Precision Agriculture Applications / Ahmed Kayad**
- **Excellence in Agronomy 2030: A new CGIAR-wide initiative to deliver agronomy solutions at scale / Bernard Vanlauwe**