



## Scientific innovation for a sustainable development of African agriculture

# Programme

Thursday August 30<sup>th</sup>, 2018

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08.00 – 09.00    Registration/Coffee

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09.00 – 10.15    **Welcome**  
 Chair: Marc Heijde, *IPBO/VIB-UGent, Belgium*

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09.00 – 09.30    **Marc Van Montagu, IPBO/VIB-UGent, Belgium**  
 "From knowledge to wisdom"

09.30 – 09.45    **Patrick Van Damme, Ghent Africa Platform, Belgium**  
 "The Africa Platform of Ghent University Association: more than 10 years of building academic collaboration with Africa"

09.45 – 10.00    **Aurèlie Nowack (Huser), VIB, Belgium**

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10.00 – 10.45    **Keynote 1**  
 Chair: Marc Heijde, *IPBO/VIB-UGent, Belgium*

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10.00 – 10.45 **Denis Kyetere, AATF, Kenya**  
“The role and contribution of plant breeding and plant biotechnology to sustainable agriculture in Africa.”

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**10.45 – 11.15** **Coffee break**

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**11.15 – 13.00** **Session 1: Relevant crops for Africa**  
**Chair: Silvia Travella, IPBO/VIB-UGent, Belgium**

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11.15 – 11.45 **Yves Van de Peer, Plant Systems Biology, VIB-UGent, Belgium**  
“The African Orphan Crops consortium”

11.45 – 12.15 **Hervé Vanderschuren, University of Liège, Belgium**  
“Stories from the lab, stories from the field: advancing tropical crop biotechnology”

12.15 – 12.45 **Patrick Rüdelsheim, Perseus Bvba, Belgium**  
“Stewardship in biotechnology: challenges for African crops”

12.45 – 13.00 **Habtu Shumoy Abraha, UGent, Belgium**  
“Compositional and nutritional properties of Tef and Tef-based food products”

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**13.00 – 14.00** **Lunch**

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**14.00 – 15.30** **Session 2: Creating new plant varieties through scientific innovation**  
**Chair: Sylvie De Buck, IPBO/VIB-UGent, Belgium**

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14.00 – 14.30 **Leena Tripathi, IITA, Kenya**  
“Genetic improvement of bananas with enhanced resistance to pathogens and pests”

14.30 – 15.00 **Jill Cairns, CIMMYT, Zimbabwe**  
“Increasing genetic gain in maize breeding pipelines in eastern and southern Africa”

15.00 – 15.15 **Macy Merriman, Corteva Agriscience, Belgium**  
“Developing the full potential of current plant varieties through scientific innovation”

15.15 – 15.30 **Rose Wangari**, *Kenya Agricultural Livestock and Research Organization, Kenya*  
"Yield stability and farmer preference of Cowpea (*Vigna unguiculata*, L.) lines in different agro-ecological zones of Eastern Kenya"

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**15.30 – 16.00** **Coffee break**

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**16.00 – 18.00** **Session 3: Biotic stresses threatening crop yields**  
**Chair: Godelieve Gheysen, IPBO and Ghent University, Belgium**

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16.00 – 16.30 **Geert Haesaert**, *UGent, Belgium*  
"Toxigenic fungi and their associated mycotoxins: a threat for crop production and food safety in Sub-Sahara Africa"

16.30 – 17.00 **Johnnie Van den Berg**, *North-West University, South Africa*  
"Possible management strategies for Fall Armyworm, a threat to African maize farmers"

17.00 – 17.30 **Steven Runo**, *Kenyatta University, Kenya*  
"Exploiting host resistance to manage the parasitic plant Striga"

17.30 – 17.45 **Victoria Bulegeya**, *Ilonga Agriculture Research Institute, Tanzania*  
"Selection for coupling phase recombination between potyvirus resistance and white endosperm color in maize preferred by farmers in Sub Saharan Africa"

17.45 – 18.00 **Igor Yelome**, *UGent, Belgium*  
"Exploring genetic diversity and disease response of cultivated rice accessions against *Pyricularia oryzae* under rainfed upland conditions in Benin"

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**18.00 – 21.30** **Reception and walking dinner**

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18.00 – 19.00 Poster session and reception

19.00 – 21.30 Walking dinner

## Friday August 31<sup>th</sup>, 2018

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08.00 – 09.00 Registration/Coffee

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09.00 – 11.00 **Session 4: Abiotic stresses threatening crop yields**  
Chair: Geert Haesaert, *UGent, Belgium*

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09.00 – 09.30 **Dirk Inzé**, *VIB-UGent Center for Plant Systems Biology, Belgium*  
"Strategies for improving drought tolerance and yield in maize"

09.30 – 10.00 **Zerihun Tadele**, *University of Bern, Switzerland*  
"Lodging and drought resistant Tef"

10.00 – 10.30 **Ndiko Ludidi**, *University of Western Cape, South Africa*  
"Comparative proteomics: a tool for understanding drought tolerance in African grain crops"

10.30 – 10.45 **Pieterjan De Bauw**, *KU Leuven, Belgium*  
"Combined phosphorus and water management options towards sustainable intensification of rice production in P-deficient lowlands of sub-Saharan Africa"

10.45 – 11.00 **Ronica Mukaro**, *Crop breeding institute, Zimbabwe*  
"Identification of stable and high yielding heat tolerant maize hybrids and associated secondary traits"

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11.00 – 11.30 Coffee break

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11.30 – 13.00 **Session 5: Mycotoxins, a threat for both human and animal health**  
Chair: Sylvie De Buck, *IPBO/VIB-UGent, Belgium*

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11.30 – 12.00 **Sarah De Saeger**, *UGent, Belgium*  
"Mycotoxin reduction in the food and feed chain: challenges and perspectives in a changing world"

12.00 – 12.30 **Sheila Okoth**, *University of Nairobi, Kenya*  
"Aflatoxin human exposure and *Aspergillus flavus* variability in 2 diverse environments in Kenya"

12.30 – 12.45 **Myriam de Haan**, *Botanic Garden Meise, Belgium*  
"Exploring Myxomycetes for possible applications as antagonists in bio-control of plant pathogens"

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**12.45 – 13.45** **Lunch**

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**13.45 – 15.00** **Session 6: Improved soil fertility to enhance crop yield**  
**Chair: Silvia Travella**, *IPBO/VIB-UGent, Belgium*

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13.45 – 14.15 **Johan Six**, *ETH Zurich, Switzerland*  
"Improving soil fertility to enhance crop yields: from science to practice".

14.15 – 14.30 **Pascal Boeckx**, *UGent, Belgium*  
"Towards integrated intensification of cocoa agroforestry productivity"

14.30 - 14.45 **Olufisayo Adeyinka Onawumi**, *Forestry research institute of Nigeria, Nigeria*  
"Optimal combination of organic and inorganic fertilizers for maize yield in the Forest Savannah transition zone of Ghana"

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**14.45 – 16.00** **Session 7: Enhancing the nutritional value of important crops for Sub-Saharan Africa**  
**Chair: Godelieve Gheysen**, *IPBO and Ghent University, Belgium*

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14.45 – 15.15 **Dominique Van der Straeten**, *Ghent University, Belgium*  
"Towards a solution for hidden hunger: folate biofortification of crop plants"

15.15 – 15.45 **Robert Mwanga**, *CIP, Uganda*  
"Orange-fleshed sweetpotato"

15.45 – 16.00 **Jerome Kubiriba**, *NARO, Uganda*  
"Biotechnology will boost banana industry to impact Uganda's development"

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**16.00 – 16.30** **Coffee break**

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16.30 – 17.15

**Keynote 2**

**Patrick Rüdelsheim, *Perseus Bvba, Belgium***

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16.30 – 17.15

**Jeremy Ouédraogo, *NEPAD-ABNE, Senegal***

The role of scientific research and innovation in the implementation of a sustainable intensified African agriculture

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17.15 – 18.00

**Panel discussion**

**Patrick Rüdelsheim, *Perseus Bvba, Belgium***

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**Panel members:**

Marc Van Montagu

Robert Mwanga

Godelieve Gheysen

Leena Tripathi

Jeremy Ouedraogo

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18.00 – 18.15

**Closing Ceremony**

**Dr. Marc Heijde, *IPBO/VIB-UGent, Belgium***

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