ISPA Newsletter 7(7) July 2019: Official Definition of PA, The Impact Factor, Workshop DAP for Turkey, 14th ICPA recap, Upcoming Events, Jobs

Jul 10, 2019

International Society of Precision Agriculture

MONTHLY NEWSLETTER



ISPA Official Definition of Precision Agriculture

> *"Precision Agriculture is a management strategy that gathers, processes and analyzes temporal, spatial and individual data and combines it with other information to support management decisions according to estimated variability for improved resource use efficiency, productivity, quality, profitability and sustainability of agricultural production."*

This Precision Agriculture (PA) definition has recently been recognized by the Board of directors as the official definition of the International Society for Precision Agriculture (ISPA).

There was clearly a need to clarify what Precision Agriculture really is. A non-exhaustive list (http://www.grap.udl.cat/en/presentation/pa_definitions.html) of definitions assembled by the Research Group in AgroICT & Precision Agriculture reported 27 different contributions from the very beginning of PA to date. As the sole international scientific society completely devoted to Precision Agriculture, the ISPA could not avoid the need to provide clarity and guidance on this important concept. The Precision Agriculture concept emerged in the early '90s and was then totally focused on the study and management of spatial variability in crop production. Since then, other components of variability and other sectors of agriculture related to the concept in a duly manner.

From the beginning, the ISPA Board of directors wanted the definition process to tap into the working force of ISPA members and engage them to the highest possible degree. ISPA then President Nicolas Tremblay, from Agriculture and Agri-Food Canada, teamed up with Secretary of the time Viacheslav Adamchuk from McGill University and ISPA member Alex Escolà from Lleida University. A four steps development program was agreed upon, consisting of: 1) a survey for key elements; 2) the elaboration of kernel definitions; 3) a Codigital consultation and; 4) approval by the ISPA Board of Directors.

The survey ran on the ISPA web platform over the months of April and May 2018. Eighty participants contributed to it. Based on the comments and suggestions received, the triumvirate elaborated three definitions which were presented at a plenary during the 12th International Conference on Precision Agriculture in Montreal (June, 2018). These definitions were used as seeds in a virtual process based on the Codigital platform (https://www.codigital.com/) involving 46 PA experts, coordinated by Dr. Escolà and launched in December 2018. The Codigital platform allows the participants to rank existing definitions or to propose new definitions to be subsequently ranked. Alternatively, edits can be proposed to the existing definitions. These are then voted upon by other participants. If accepted, the

former definition evolves into a new version which needs to be ranked again on a pair comparison basis. From the three initial definitions, a total of 17 stemmed out of the consultation. A pause was accommodated to allow participants to comment on them outside of the Codigital platform and the process was reactivated to allow for a short, final round of edits. The top 10 definitions were submitted to the ISPA Board of Directors and the decision was made to adopt the first one as the official PA definition.

This definition was the consensus of 36 active participants in the Codigital process and the result of 76 generations based on the edits and votes of all participants.

The ISPA is proud of both the definition that emerged and the process by which it was achieved. The ISPA Board wants to thank all people who contributed their time and expertise for this important endeavour, and particularly Dr. Alex Escolà from Lleida University and Dr. Viacheslav Adamchuk from McGill University.

Precision Agriculture: The Impact Factor

The Impact Factor for the ISPA Journal Precision Agriculture (published by Springer) has risen from 2.435 for 2017 to 3.356 for 2018. 'That', says John Stafford, co-Editor-in-Chief (Jess Lowenberg deBoer being the other co-editor), 'is a very significant rise!' The Journal was also 4th in the top 20 multi-disciplinary agriculture journals. The three most cited papers counting towards the 2018 IF were -

1. 22 Cites	
Early season weed mapping in sunflower using UAV technology: variability of herbicide treatment maps against weed thresholds	By Lopez-Granados, F; Torres-Sanchez, J; Serrano-Perez, A; de Castro, A; Mesas-Carrascosa, F; Pena, J
2. 13 Cites	
Promoting sustainable intensification in precision agriculture: review of decision support systems development and strategies	By Castaldi, F.; Pelosi, F.; Pascucci, S.; Casa, R.
3. 12 Cites	
Assessing the potential of images from unmanned aerial vehicles (UAV) to support herbicide patch spraying in maize	By Lindblom, J; Lundstrom, C; Ljung, M; Jonsson, A

ISPA active members can login at ispag.org and access the full journal through the members tab (not available for non-members). It's a great perk of ISPA membership.

Workshop on Digital Agriculture Profiling for Turkey

The International Center for Tropical Agriculture (CIAT) and the CGIAR Platform for Big Data in Agriculture, in collaboration with the World Bank and the Food and Agriculture Organization (FAO), have committed to work on developing a country profile for Turkey regarding digital technologies for agriculture. Therefore, "**Workshop on Digital Agriculture Profiling for Turkey**" was held on 12th June 2019 in the Grand Hyatt Hotel, Istanbul. This workshop organized and worked with a group of key people in the sector on identifying the existing digital infrastructure, assessing technology maturity, ICT policies, technology drivers, barriers, and the potential of digital agriculture to transform the agricultural sector.

InfoAg Conference Posters Accepted

The InfoAg Conference will accept poster presentations. Many times we have requests from students and researchers who want to come to InfoAg, but need to be able to present a poster in order to justify

the trip. InfoAg offers a space for poster presentations and authors can stand by their posters during the evening receptions to answer questions. More about InfoAg at infoag.org. If you would like to register for InfoAg, contact info@infoag.org. The conference is July 23-25, 2019, St. Louis, USA.

Recap 14th ICPA | Montreal 2018 | Video and Blog Post Release

Dear friends and members of the ISPA

We are very excited and happy to present our recap from the last edition of the ICPA in Montreal. The content, summarizes the ideas and thoughts some of you kindly share with us during the 14th International Conference on Precision Agriculture.

For AV3 AEROVISUAL is very important to bring the attention of the Mexican community that could be interested in this topic; from scientists and academics, to farmers, government officials and representatives from the private sector. Therefore, the video we have made tries to show some of the main scenarios Precision Ag is facing today, and the huge importance for countries like ours to get involved, learn from the experience of others, and take the challenge to innovate in the way we do agriculture in Mexico.

Thank you very much for allowing us to film, interview and photograph during the activities of the last edition of the Conference, the information we gathered and the people we met, have been a key aspect in the development of our division on precision agriculture.

Video and blog post: https://av3aerovisual.com/en/14th-icpa-recap/

Upcoming Events

25-27 FEB 2025
GIS & Drone Applications in Agriculture Conference

29 JUN - 3 JUL 2025
15th European Conference on Precision Agriculture
Barcelona, Spain
ecpa2025.upc.edu/

22-31 AUG 2025
XXXII ISSCT Centennial Congress
Cali, Colombia
issctcennial.com/

14-16 OCT 2025
11th Asian-Australasian Conference on Precision Agriculture
Chiayi, Taiwan
ispag.org/Events/ACPA

2-4 FEB 2026
International Crop Modeling Symposium (iCROPM2026)
Florence, Italy

Week of 13 JUL 2026

17th International Conference on Precision Agriculture and the 11th Brazilian Congress on Precision Agriculture
Porto Alegre, Brazil
ispag.org/icpa

See the ISPA website for a complete list of events.
Do you have an event that would be of interest to our members? Send us an email to let us know.

Jobs Listing

- Postdoc in Digital Agronomy for Climate Resilient Perennial Agriculture
- Tenure Track Assistant Professor in soil spectroscopy at Department of Agroecology, Aarhus University
- Assistant or Associate Professor of Extension Soil Management - University of Kentucky - Department of Plant and Soil Sciences
- Precision Agriculture Technologies Extension Specialist - University of Tennessee - Biosystems Engineering and Soil Science
- Assistant Professor (Extension) - Mississippi State University - The Department of Agricultural & Biological Engineering
- University of Georgia - Assistant Professor - Extension Specialist Precision Agriculture Systems

Do you have a job you would like to post to the ISPA website? Please send your job announcement, a short description, and cutoff deadline for applications to info@ispag.org

Update your ISPA Account to Link with Communities

ISPA Community leaders will get in touch with interested members through the ISPA listserv. Make sure you do not miss important communications from them by keeping your ISPA membership current and updating your interests on your "MyAccount" page, under "Interests".

Contribute to the ISPA Newsletter

Do you have a precision ag event, project, or news article that our members would be interested in? Please let us know. We post events, job opportunities, and news from members from around the globe. Email info@ispag.org or use the handy online form to submit your contribution.

Precision Agriculture Definition

Precision Agriculture is a management strategy that gathers, processes and analyzes temporal, spatial and individual plant and animal data and combines it with other information to support management decisions according to estimated variability for improved resource use efficiency, productivity, quality, profitability and sustainability of agricultural production.

The International Society of Precision Agriculture (ISPA) is a non-profit professional scientific organization.
The mission of ISPA is to advance the science of precision agriculture globally.

Contact newsletter@ispag.org to suggest content for future newsletters or visit www.ispag.org for more about the Society