ISPA Newsletter 7(6) June 2019: PA in Sweden, Upcoming events, Jobs

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ISPA

International Society of Precision Agriculture

MONTHLY NEWSLETTER



Precision Agriculture in Sweden

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The 2013 May issue of the ISPA Newsletter contained a country report of precision agriculture (PA) in Sweden at that time. This text focuses on new developments of PA in Sweden during the last six years. In this time, PA has become a more generally accepted concept, and it is now regarded as an important part of the solution to many of the challenges that we are facing concerning e.g. need for increased and sustainable food production. In the National Food Strategy for Sweden by 2017 (Government bill 2016/17:104), it is for example stressed that knowledge and innovation are keys for a more productive and efficient agriculture, while at the same time striving for relevant national environmental targets. The increased accessibility of useful digital data, and the current rapid digital transformation of the society at large, including the agricultural sector, are also beneficial for the development of digital tools and in turn increased adoption of PA. Now, more or less all farmers in Sweden have access to free and easy-to-use decision support tools for various applications of PA. This is one aspect that we think has been important for the spread of PA recently.

Since its launch in 2014, the satellite image based system CropSAT (the first of its kind in Scandinavia, mainly used for variable-rate application (VRA) of nitrogen in grain crops), has become a very widespread tool for advisors and farmers, both for visual inspection of the fields by “near-real time” Sentinel-2 data, but also for wireless transmittance of VRA files to the machinery. That system has also opened the market for a number of other satellite-based systems now available to the Swedish farmers. CropSAT was first a system only for Sweden developed in collaboration between university researchers, advisory organizations, authorities, and private enterprises, but it is now available in different languages, and can be used globally, still for free (CropSAT.com).

Another major development has been the Digital Soil Map of Sweden (DSMS), which is a soil properties database with predicted values of soil texture and other properties every 50 m ´ 50 m. DSMS is available open-access and has been used in different soil based decision support systems. One such system is the web application Markdata.se in which farmers can produce VRA seeding files and prescription files for liming. Through interactive functionality, the user can upload their own soil data and downscale the DSMS maps to become more correct locally.

We are still waiting for drones to have a general break-through in practical PA applications in Sweden – it is today only the more enthusiastic pioneers who has embraced this technology. The availability of decision support systems for drone images, such as the Swedish application Solvi.nu, where the user

easily can turn hundreds of images to VRA maps and practical implementation, can possibly facilitate this process.

Will PA be mainstream until 2025? It is quite possible.

More info and references on the applications mentioned in the text can be found on the Swedish University of Agricultural Sciences (SLU) web page Laboratory for intelligent agricultural decision support systems (LADS)

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

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.

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