Friday, 26 July de 2019

Special Issue "Smart Decision-Making Systems for Precision Agriculture"

We announce the call for papers for the Special Issue **"Smart Decision-Making Systems for Precision Agriculture"** in the journal AGRONOMY (MDPI Open Acces) (

https://www.mdpi.com/journal/agronomy/special_issues/Decision_Making_Systems [https://www.mdpi.com/journal/agronomy/special_issues/Decision_Making_Systems]). The Guest Editors of this Special Issue are the IPs of the PAgFruit Research Project: Jaume Arnó and José A. Martínez-Casasnovas.

Precision Agriculture (PA) is, conceptually, an agricultural management strategy that aims to improve resource efficiency, productivity, and quality based on a better understanding of the spatial and temporal variability that is usually inherent in many farms. Acquisition of spatial and temporal data on soils and crops is the starting point of the process. For that, farmers usually have a wide variety of proximal and remote sensors, in addition to global navigation satellite systems to georeference all these data. However, moving from sensor data to piece of information, intermediate stages must be addressed in order to make the best agronomic decision, which is still a bottleneck in the real implementation of PA. Thus, data processing, mapping, data analysis, delineation of management zones or prescription map creation are steps to be solved before using variable-rate devices installed on agricultural equipment. Making the right decision at the right time to apply the right amount of inputs is an important issue on which the economy and sustainability of agricultural production ultimately depends. In this respect, the digital revolution in agriculture will only be feasible through the development of smart, compact and easy-to-use systems that, adapted to the needs of farmers, help in decision-making and to run management tools despite the complexity of these new technologies. This Special Issue aims to contribute to the dissemination of new research findings related to (i) data processing and data analysis in the spatial and temporal domains, (ii) decision support, (iii) delineation of potential management zones, (iv) agricultural internet of things (IoT), (v) Agro Big Data, and (vi) efficient sampling methods in forecasting tasks.

Manuscripts should be submitted online at www.mdpi.com by registering and logging in to this website [https://login.mdpi.com/login?_target_path=https%3A%2F%2Fwww.mdpi.com%2Fuser%2Flogin%3FauthAll%3Dtr]. Once you are registered, click here to go to the submission form. Manuscripts can be submitted until the **deadline (30 September 2020)**. All papers will be peer-reviewed. Accepted papers will be published continuously in the journal (as soon as accepted) and will be listed together on the special issue website. Research articles, review articles as well as short communications are invited.

Keywords: precision agriculture, post-process data analysis, real-time data processing, smart sampling, Internet of Things (IoT), decision making, smart farming.