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DESCRIPTION

The *European Journal of Agronomy*, the official journal of the European Society for Agronomy, publishes original research papers reporting experimental and theoretical contributions to field-based agronomy and crop science. The journal will consider research at the field level for agricultural, horticultural and tree crops, that uses comprehensive and explanatory approaches. The EJA covers the following topics:

- Crop physiology
- Crop production and management including irrigation, fertilization and soil management
- Agroclimatology and modelling plant-soil relationships
- Crop quality and post-harvest physiology
- Farming and cropping systems
- Agroecosystems and the environment
- Crop-weed interactions and management
- Organic farming
- Horticultural crops
- Papers from the European Society for Agronomy bi-annual meetings

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AUDIENCE

Agronomists, crop/plant scientists, soil scientists

IMPACT FACTOR

2018: 3.384 © Clarivate Analytics Journal Citation Reports 2019
ABSTRACTING AND INDEXING

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Adaptation to climate change, sustainable intensification of agricultural systems, diversification of crop production, designing crop rotations, resilience to climatic variability, land use change and optimization, yield trends, yield gaps, genetic changes, crop physiology, yield and quality formation Cereals, grain legumes, rapeseed, other grain/seed crops, sugar beet, potato, grasslands

Associate Editors-in-Chief
B. Basso, Michigan State University, East Lansing, Michigan, United States
Crop simulation models (applications, validation, improvements), precision agriculture, remote sensing, GIS in agronomy, climate change, climate variability impact on crop yield and environmental outcomes (N leaching, GHG emissions), nitrogen and water management, soil health, soil organic matter dynamics, ecophysiology, resource use efficiency, cropping systems ecology, conservation agriculture Maize, wheat and other cereals, legumes
A. Delgado, University of Seville, Sevilla, Spain
Fertilization management (all nutrients), soil management (tillage, amendments), plant-soil relationships, conservation agriculture, water management, soil fertility, soil functions as affected by crop management, soil degradation control (erosion, salinity, acidity), pest and diseases, weeds, quality issues Cereals, tree orchards (in particular olive), horticultural crops
T. Döring, University of Bonn, Bonn, Germany
Organic agriculture; Cropping system; Crop rotation; Legume; Diversification; Insect-plant-interactions

Editorial Board
M. Acutis, University of Milan, Milano, Italy
Cropping system simulation models, nitrogen and water management, soil organic matter dynamics, statistical methods.
S. Archontoulis, Iowa State University, Ames, Iowa, United States
Crop modeling; Crop physiology; APSIM; Soil carbon and nitrogen cycling; Soil water; Maize; Soybean; Management practices; Root growth; Groundwater table
S. Asseng, University of Florida, Gainesville, Florida, United States
Cropping systems analysis; Crop productivity and sustainability; Atmosphere-crop-soil systems; Managing climate variability; Climate change impact and adaptation
G. Bergkvist, Swedish University of Agricultural Sciences, Uppsala, Sweden
Cropping systems; Agronomy; Weed control; Nutrient use efficiency; Cover crops; Intercropping
L. Borrás, National University of Rosario, Rosario, Argentina
Crop management; Yield; Yield components; Grain quality; Maize; Soybean; Sorghum; Dry milling; Seed development; Seed weight
G. Bragato, Research Centre for the Soil-Plant System Branch of Gorizia, Gorizia, Italy
H. Brown, Plant and Food Research Lincoln, Christchurch, New Zealand
D. Cammarano, Purdue University Department of Agronomy, West Lafayette, Indiana, United States
Agronomy; Crop Simulation Models; Precision Agriculture; Remote Sensing; Climate Change; Climate Variability; Nitrogen Management
I. Ciampitti, Kansas State University, Manhattan, Kansas, United States
Crop eco-physiology and agronomy, Crop modelling, Corn, soybean, sorghum and oilseeds, Rainfed and Irrigated farming systems, Remote sensing

**N. Colbach**, National Research Institute for Agriculture Food and Environment Bretagne-Normandie Center, Rennes, France

**C.A.C. Crusciol**, Sao Paulo State University Julio de Mesquita Filho - Botucatu Campus, BOTUCATU, Brazil

**J.P.M. De Melo e Abreu**, University of Lisbon, Lisbon, Portugal

**P. Debaeke**, National Research Institute for Agriculture Food and Environment Occitanie-Toulouse Center, Castanet Tolosan, France

**F. Ewert**, University of Bonn, Bonn, Germany

Climate change (impacts); Agroecosystems (ecophysiology); Resource use and management (land, water); Systems analysis and modelling; Agricultural sustainability assessment

**M. Fotyma**, Institute of Soil Science and Plant Cultivation State Research Institute, Pulawy, Poland

**M. Fuller**, University of Plymouth, Plymouth, United Kingdom

**A. Gardarin**, Physical Chemistry and Ecotoxicology of Contaminated Agro system Soils, Thiverval Grignon, France

Weed science : analysing their life-cycle, their biology, their ecology, accounting for their diversity using concepts from ecology, modelling their dynamics, analysing and modelling their interactions with soil, climate and cropping systems; spatial dynamics of plants (weeds and feral oilseed rape) in agroecosystems (agronomical and landscape ecology approaches, metapopulation models), intercropping (mainly plant establishment and early growth in cereal-legume intercrops, effects on weed control); forage quality in grasslands with a strong ecological approach; biological regulations in plurispecific cropping systems. The originality of my background lies in the fact that I use concepts and methods from ecology to address agronomical questions.

**C. Hoffmann**

**B.W. Hüttsch**, Martin Luther University Halle Wittenberg, Halle (Saale), Germany

**C.R. Jensen**, University of Copenhagen Section for Crop Sciences, Taastrup, Denmark

**Y. Kato**, The University of Tokyo, Tokyo, Japan

Crop physiology and agronomy; Rice; Rainfed and irrigated rice production systems in the tropical, sub-tropical and temperate regions of Asia

**J. Kirkegaard**, Commonwealth Scientific and Industrial Research Organisation, Canberra, Australia

**G. Lemaire**, National Research Institute for Agriculture Food and Environment Nouvelle-Aquitaine Poitiers Center, Lusignan, France

**R.J. Lopez-Bellido**, University of Cordoba, Cordoba, Spain

**B. Maerlaender**, Göttingen University Institute of Sugar Beet Research, Göttingen, Germany

**M. Mastrorilli**, CREA Research Centre of Agriculture and Environment Bari, Bari, Italy

**H. Meinke**, University of Tasmania, Hobart, Australia

Availability, Stability and Environment. 1) Agricultural systems, 2) Systems modelling, 3) Agricultural value chains, 4) Climate risk Assessment and management, 5) Societal impact of science, 6) Sustainable agricultural practices, 7) Food security and stability, 8) Food systems 9) Land and food, 10) Productive landscapes

**D. Moot**, Lincoln University Department of Agricultural Sciences, Christchurch, New Zealand

**C. Nendel**, Leibniz Centre for Agricultural Landscape Research, Müncheberg, Germany

soil and crop modeling; climate change adaptation; soil organic matter mineralisation; C and N cycling in agro-ecosystems; yield assessment and regionalization

**S.I. Nilsson**, Max Planck Institute for Chemical Ecology, Uppsala, Sweden

**J.E. Olesen**, International Centre for Research in Organic Food Systems, Viborg, Denmark

**M. Pagliai**, Research Centre for Soil Science and Agrobiology, Firenze, Italy

**M. Quemada**, Polytechnic University of Madrid Superior Technical School of Agricultural Engineering Food Science and Biosystems, Madrid, Spain

Nitrogen fertilization; water and nitrogen management in agricultural systems; cover crops

**A. Rashid**, Pakistan Academy of Sciences, Islamabad, Pakistan

Soil fertility; Plant nutrition; Micronutrients; Boron; Zinc; Phosphorus; Soil nutrient balances; Soil fertility mapping; Agronomic biofortification; Soil Testing; Plant Analysis

**P. Reidsma**, Wageningen University, Wageningen, Netherlands

Climate change; Adaptation; Resilience; Integrated assessment; Yield gap analysis; Farming systems; Bio-economic farm modelling; Sustainable development

**D.P. Rondanini**, University of Buenos Aires, Buenos Aires, Argentina

**W.A.H. Rossing**, Wageningen University, Wageningen, Netherlands

farming systems, crop-pest interactions, farm-landscape interactions, systems analysis and simulation, innovation.

**M.C. Rufino**, Lancaster Environment Centre, Lancaster, United Kingdom

**G. Russell**, The University of Edinburgh, Edinburgh, United Kingdom

**R. Savin**, University of Lleida, Lleida, Spain

Cereals (non-rice); Crop physiology; Grain quality; Abiotic stresses; Nitrogen use efficiency; Field crops (mainly wheat, barley, maize and sunflower)
J. Schellberg, University of Bonn, Bonn, Germany
H.W. Scherer, Institute of Plant Nutrition, Bonn, Germany
U. Schmidhalter, Technical University of Munich Chair of Plant Nutrition, Freising, Germany
J. Shrestha, Nepal Agricultural Research Council, Kathmandu, Nepal
G. A. Slafer, University of Lleida, Lleida, Spain
Wheat; Barley; Cereals; Crop-Physiology; Yield; Yield components; Water use efficiency; Nitrogen use efficiency; trait useful for breeding.
H. Stützel, Leibniz University Hanover, Hannover, Germany
M. Tagliavini, Free University of Bozen-Bolzano, Bolzano, Italy
F. Tao, Chinese Academy of Sciences, Beijing, China
E. Triboi, National Research Institute for Agriculture Food and Environment Clermont-Auvergne-Rhône-Alpes Center, Clermont Ferrand, France
N. Vignozzi, Research Centre for Soil Science and Agrobiology, Firenze, Italy
Plant-Soil relationships;Tillage and soil management
D. Wallach, Agroecology Innovation Territories, Castanet Tolosan Cedex, France
C. Watson, Scotland's Rural College Crop and Soil Systems Research Group, Aberdeen, United Kingdom
J. Wery, Montpellier SupAgro, Montpellier, France
B. Wollenweber, Aarhus Universitet Institut for Agrookologi - Flakkebjerg, Slagelse, Denmark
P.J. Zarco-Tejada, University of Melbourne Faculty of Veterinary and Agricultural Sciences, Melbourne, Victoria, Australia
hyperspectral remote sensing, stress detection, manned and Unmanned Aerial Vehicles (UAV RPAS), thermal, water stress, nutrient stress, radiative transfer
X. Zhang, Institute of Genetics and Developmental Biology Center for Agricultural Resources Research, Shijiazhuang, China
Water use efficiency, Evapotranspiration, Crop productivity, Climate change, cultivation, Soil water, Soil nutrients, Crop modelling.
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INTRODUCTION
The European Journal of Agronomy, the official journal of the European Society for Agronomy, publishes original research papers reporting experimental and theoretical contributions to field-based agronomy and crop science. The journal will consider research at the field level for agricultural, horticultural and tree crops, that uses comprehensive and explanatory approaches. The EJA covers the following topics:
crop physiology crop production and management including irrigation, fertilization and soil management agroclimatology and modelling plant-soil relationships crop quality and post-harvest physiology farming and cropping systems agroecosystems and the environment crop-weed interactions and management organic farming horticultural crops papers from the European Society for Agronomy bi-annual meetings In determining the suitability of submitted articles for publication, particular scrutiny is placed on the degree of novelty and significance of the research and the extent to which it adds to existing knowledge in agronomy. Confirmatory research and results routine cultivar or agronomy trials in which there are no identified biological processes will not normally be considered for publication. Modelling studies have to be informative and innovative and used to illustrate important generic issues facing agronomy. Studies in which a model is only tested against observed data for its goodness-of-fit are not generally welcome. Field experiments need to be either multi-locational or multi-year and normally three at least and be accompanied by appropriate statistical analysis. Glasshouse experiments are only accepted in exceptional circumstances. Review articles are normally written on invitation from the Editor-in-Chief. Authors intending to prepare review papers for the Journal are advised to consult the Editor-in-Chief before writing their reviews. Forthcoming special issues are focusing on uncertainty analysis in models and the status of non-renewable resources in agriculture.

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To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

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State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

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Results
Results should be clear and concise.

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This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section should be avoided. Avoid extensive citations and discussion of published literature.

Conclusions
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

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If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

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**Acknowledgements**

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

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Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

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This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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All biotica (crops, plants, insects, birds, mammals, etc.) should be identified by their scientific names when the English term is first used, with the exception of common domestic animals.
All biocides and other organic compounds must be identified by their Geneva names when first used in the text. Active ingredients of all formulations should be likewise identified.

For chemical nomenclature, the conventions of the International Union of Pure and Applied Chemistry and the official recommendations of the IUPAC-IUB Combined Commission on Biochemical Nomenclature should be followed.

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