AGRICULTURAL SYSTEMS

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DESCRIPTION

Agricultural Systems is an international journal that deals with interactions - among the components of agricultural systems, among hierarchical levels of agricultural systems, between agricultural and other land use systems, and between agricultural systems and their natural, social and economic environments. Manuscripts submitted to Agricultural Systems generally should include both of the following:

Substantive natural science content (especially farm- or landscape-level biology or ecology, sometimes combined with social sciences), and Substantive analysis and discussion of the interactions within or among agricultural systems components and other systems.

Preference is given to manuscripts that address whole-farm and landscape level issues, via integration of conceptual, empirical and dynamic modelling approaches.

The scope includes the development and application of systems analysis methodologies in the following areas:

Systems approaches in the sustainable intensification of agriculture; pathways for sustainable intensification; crop-livestock integration; farm-level resource allocation; quantification of benefits and trade-offs at farm to landscape levels; integrative, participatory and dynamic modelling approaches for qualitative and quantitative assessments of agricultural systems and decision making; The interactions between agricultural and non-agricultural landscapes; the multiple services of agricultural systems; food security and the environment; Global change and adaptation science; transformational adaptations as driven by changes in climate, policy, values and attitudes influencing the design of farming systems; Development and application of farming systems design tools and methods for impact, scenario and case study analysis; managing the complexities of dynamic agricultural systems; innovation systems and multi stakeholder arrangements that support or promote change and (or) inform policy decisions.

The following subjects are discouraged:

Econometric, descriptive or other statistical (correlation) analysis of farm, farming systems or household survey data that exclude systems analytical approaches (particularly cross-sectional adoption or economic efficiency studies), landscapes (including the development of typologies), land use change studies, results from crop or livestock trials or other economic analyses without substantive natural science content; Studies focusing on social or political outcomes that lack a clear systems framework and direct application to agricultural systems (i.e. the farm production system
or landscape, their activities or components, their interactions or synergies); Conceptual frameworks without empirical implementation (unless submitted as a short communication) Studies focusing on specific chemical constituents of plant or animal species or their products; Studies of the operation or efficiency of agricultural or food processing machinery, or of agricultural supply chains without a substantive biological component;

Such subjects are not considered for publication unless they clearly provide substantive and highly generalizable new insights regarding processes operating at farm or landscape levels or describe novel analytical methods applicable to a wide variety of agricultural systems.

The journal publishes original scientific papers, short communications. Review articles and book reviews should only be submitted after consultation with the editors. Review papers generally should focus on the application of specific methods rather than descriptive analyses of agricultural production systems or supply chains.

AUDIENCE

Agriculturalists, biologists, veterinarians, economists, social scientists and those interested in management and resource use.

IMPACT FACTOR

2018: 4.131 © Clarivate Analytics Journal Citation Reports 2019

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INTRODUCTION
Agricultural Systems is an international journal that deals with interactions - among the components of agricultural systems, among hierarchical levels of agricultural systems, between agricultural and other land use systems, and between agricultural systems and their natural and social environments. In particular, its aim is to encourage integration of knowledge among those disciplines that underpin agriculture. Many contributions will therefore be multi- or inter-disciplinary. Papers generally focus on either methodological approaches to understanding and managing interactions within or among agricultural systems, or the application of holistic or quantitative systems approaches to a range of problems within agricultural systems and their interactions with other systems. Because of the nature of the readership of Agricultural Systems, the contents of papers should be easily accessible (properly introduced, presented and discussed) to readers from a wide range of disciplines.

The scope includes the development and application of systems methodology, including system modeling, simulation and optimization; ecoregional analysis of agriculture and land use; studies on natural resource issues related to agriculture; impact and scenario analyses related to topics such as GMOs, multifunctional land use and global change; and the development and application of decision and discussion support systems; approaches to analyzing and improving farming systems; technology transfer in tropical and temperate agriculture; and the relationship between agricultural development issues and policy.

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The journal publishes original scientific papers, short communications, review articles and book reviews. Review articles and book reviews should be submitted only after consultation with the editors.

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