Agronomy for Sustainable Development

When the journal *Agronomie* was created 24 years ago, agronomy was still mainly the science of crop production and soil fertility. Scientific investigation has since progressively taken into account the study of the environmental impact of agriculture, as well as the setting up of advanced cropping systems that reconcile both production and environment. Since 1990, the framework of the journal *Agronomie* has been adapted to integrate new environmental topics, leading to the addition of the sub-title *Agriculture & Environment* to the current journal name. Nowadays the scientific sub-disciplines of Agronomy are broadening to answer issues regarding sustainable development, which require knowledge about the relationships between technical, ecological, economical and social processes. The investigations should, for instance, try to connect studies on various scales from the single plot to the farm, the production basin and the landscape. They should also bridge the short-term effects of day-to-day agricultural practices and the long-term evolution of natural resources. Moreover, there is a growing need for new methods that allow the evaluation of the sustainability of current practices. There is also a need for innovative cropping systems, farming systems and landscape organisations. Furthermore, the forecast of the future impact of global warming on production and cropping systems is a major concern.

Such changes along scientific lines in agronomy will foster the development of multidisciplinary studies that associate agronomy with ecology, economics, sociology and geography. Therefore, the title, the topics and the format of the journal *Agronomie, Agriculture & Environment* are currently being adapted to novel, cutting-edge research fields located at the frontiers of agriculture and sustainable development. The new journal title will be *Agronomy for Sustainable Development*. Accordingly, a new “Aims and Scope” section is shown below. The selection of articles will also be slightly increased to focus the manuscripts better on innovative points. The number of journal issues will thus be reduced to four per year. Short articles demonstrating outstanding findings and review articles will be particularly welcome. The journal will also publish solely articles written fully in English to gain a wider audience and to allow more submissions from non-French-speaking scientists. Those changes are planned to take place definitively in January 2005.

**Aims and scope**

*Agronomy for Sustainable Development* is an international journal for scientific research on the interactions between cropping systems and other activities in the context of sustainable development. The Editors welcome monodisciplinary contributions in agronomy that will constitute the grounds of sustainability from environmental, economical or social viewpoints. The Editors also welcome multidisciplinary articles that bridge agronomy with ecology, environmental and social sciences. Manuscripts should focus on novel findings underlining those relationships. The journal publishes original research articles that demonstrate a clear scientific breakthrough versus current knowledge. The material should not have been previously published elsewhere. Review articles on a particularly hot subject may be suggested to the Editor-in-Chief. Contributions may be on either methodological approaches, or approaches addressing major issues in the scope of the journal. The journal covers application fields such as sustainable agriculture, sustainable land use, agriculture and global changes, agriculture and preservation of natural resources and health, agriculture and biodiversity, ecological, economical and social impacts of genetic engineering applications, agricultural production of renewable energies, environmental management in agriculture, food quality and security management, geographical indicators for agricultural products, decision support systems, and social and economical issues of agricultural changes. Selected examples of topics covered by the journal are given below.

**Environmental impact**

- Impact of agriculture on ecosystems
- Soil, water, air, plant and food quality
- Biodiversity changes
- Agroclimatology and modelling
- Biogeochemistry of agrosystems
- Ecotoxicology, risk assessment, food safety
- Use of genetically modified organisms (GMOs) in cropping systems
- Any other topic relative to the environmental impact of agriculture

**Ecological production**

- Ecological production methods
- Ecological farming systems
- Ecological pest control, biopesticides
- Methods for production of organic food
- Methods for preservation of natural resources
- Methods for production of renewable energies
- Agrochemistry and soil fertility
- Any other topic relative to ecological production

Drs. Eric Lichtfouse, Robert Habib, Jean-Marc Meynard, François Papy