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Network on Recycling of Agricultural,
Municipal and Industrial Residues in Agriculture
(Formerly Animal Waste Management)



SUSTAINABLE ORGANIC WASTE MANAGEMENT FOR ENVIRONMENTAL PROTECTION AND FOOD SAFETY

Vol. I

RAMIRAN 2004

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Network on the Recycling of Agricultural, Municipal and Industrial Residues
in Agriculture*

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Preface

This volume contains the Proceedings of the 11th International Conference of the FAO ESCORENA Network on Recycling of Agricultural, Municipal and Industrial Residues in Agriculture (RAMIRAN) held in Murcia, Spain, from 6 to 9 October 2004. This congress was organised by the Centro de Edafología y Biología Aplicada del Segura (CEBAS) of the Consejo Superior de Investigaciones Científicas (CSIC) and the Department of Agrochemistry and Environment of the Universidad Miguel Hernández in Orihuela.

The theme of the congress was "Sustainable Organic Waste Management for Environmental Protection and Food Safety" and was organised in five thematic sessions: i) Nutrients and carbon cycling in sustainable plant-soil systems; ii) Gaseous emissions and odours; iii) Waste contaminants: lifecycle and entry into the food chain; iv) Organic waste treatments: safety implications; and v) Waste management strategies. The fact that more than 180 participants, from 24 countries, attended showed the relevance and the international interest of the subject.

The conference started with a Plenary Lecture by Dr. Soliva, who gave an overview of the recycling of organic wastes in Spain, highlighting the fact that these wastes can be considered a problem or a resource of nutrients and organic matter. Each scientific session was introduced by a Key Note invited speaker (E. Stentiford, S. Sommer, S. Williams, S. Piccinini, and W. Magette), followed by oral presentations. The poster display and round table discussion, which completed each session, allowed the participation of all contributors in the exchange of ideas.

This valuable, updated book includes state-of-the-art research in the recycling of organic materials in agriculture and in related aspects, especially environmental protection of soils, water and air and the implications of these activities for food safety.

The dissemination of the main results of the RAMIRAN 2004 is covered not only by this Proceedings book but also by the future publication of selected papers in special issues of well known scientific journals, such as *Bioresource Technology* and *Biosystems Engineering*.

The delegates agreed with the offer of Dr. Sven Sommer from the Danish Institute of Agricultural Sciences to hold the next meeting of the Network, in 2006, in Denmark.