

## 2006 IFA International Crop Nutrition Award

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IFA Award Recognizes Dry Area  
Agriculture's "Renaissance Man"

Dr John RYAN



**John Ryan**, who has been selected to receive the 2006 IFA International Crop Nutrition Award, has worked with a wide variety of techniques and issues in order to improve soil fertility and make agriculture more successful. Sustainable agriculture is only possible using a multidisciplinary approach, given the constraints of a growing and urbanizing population and limited natural resources. Such an approach considers agricultural needs, waste management and competing demands for water, among other factors.

Experimentation with lime, phosphorus, zinc, iron, sulphuric acid, industrial and human waste, micronutrients, irrigation methods – at first glance, Dr Ryan's work might seem to involve a surprisingly wide range of research areas. A closer look, however, reveals a common thread: wherever he has worked, he has applied a rigorous site-specific approach leading to responses to problems that integrate locally available resources and up-to-date technologies (sometimes in surprising ways) to improve yields. The types of expertise combined have included the management of soil fertility, irrigation, and industrial and urban waste.

In a field largely dominated by specialists, Dr Ryan is a "Renaissance Man". Moreover, he has often worked under extreme conditions, ranging from harsh climates to civil war.

Dr Ryan, who hails from Ireland, earned a doctorate in soil science from University College Dublin, followed by a Master of Science in agricultural education and extension from the University of Arizona (United States). Early in his career, he came to appreciate the need to communicate effectively about agricultural research with end-users. A flair for innovation revealed itself in Arizona, where he used acid amendments from copper mining to increase native P and micronutrient availability in calcareous soils. This imaginative solution helped to reclaim sodic soils, reduced losses of nitrogen through volatilization and enhanced the efficiency of nitrogen fertilization. It also demonstrated that industrial wastes are not necessarily environmental problems, but can be a valuable agricultural resource.

Dr Ryan was Professor of Soil Science at the American University of Beirut for 11 years. After a year spent as Visiting Professor at the University of Arizona, he joined the University of Nebraska (United States) as Professor of Agronomy and Soil Scientist based at Settat, Morocco, as part of the USAID-sponsored Dryland Development Project. Throughout this period, he worked with scientists from other disciplines to develop new synergies.

For the past 14 years, Dr Ryan has been a Soil Fertility Specialist at the International Center for Agricultural Research in the Dry Areas (ICARDA) in Syria. ICARDA is one of the 16 centres of the Consultative Group on International Agricultural Research (CGIAR). At ICARDA, Dr Ryan has supervised the soil laboratory, developed laboratory techniques and training, emphasized nutrient dynamics in cropping systems, studied the implications of soil carbon changes in soils and demonstrated the potential of municipal wastewater as a source of nutrients. This work has contributed to improved fertilization and integrated water management for irrigation, as well as supporting the provision of additional sewage plants in the Middle East.

The prestige of Dr Ryan's work, especially in the field of dryland agriculture, is reflected by the many awards that recognize both its quality and its international dimension. These include the International Soil Science Award and the International Service in Agronomy Award. Dr Ryan is a fellow of the American Society of Agronomy and the Soil Science Society of America. In recognition of his contribution to international scientific literature, he has also been made a Doctor of Science by University College Dublin.

Dr Ryan is an associate editor/editorial board member of several regional and international journals, including the *European Journal of Agronomy*, *Nutrient Cycling in Agroecosystems* and *Renewable Agriculture and Food Systems*. He is on the Scientific Advisory Committee of The World Phosphate Institute (IMPHOS).

IFA Member Kemira GrowHow Oyj nominated Dr Ryan for the IFA award, which he will accept on 6 June during the Opening Session of the **74<sup>th</sup> IFA Annual Conference**.

For more information or a high resolution photo of the laureate, please contact:

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