ENDURE background and objectives

For decades, innovation in crop protection has been largely in the hands of agrochemists. But, as European Union policy is rapidly moving towards a more restrictive approach on the use of plant protection products, other fields of research must come into play and contribute innovative solutions to construct new strategies. The goal is to meet the requirements of sustainability in advance of increasing demand for agricultural products.

Pooling forces at the EU level is obviously needed to meet this challenge. This was the motivation for creating the ENDURE Network of Excellence, which brings together 18 major players in research, education, extension and industry from 10 European countries. Our priorities are based on the real issues identified at the field level and we seek to address them by mobilising the vast basic knowledge on crop-pest systems which has been accumulated in recent years but has had little impact as yet on how crop protection is performed. At the same time, we actively involve the extension and advisory systems, which are in close contact with farmers, to consider the factors affecting the adoption and implementation of new methods.

Given the rapid changes in the sphere of crop protection, farmers are in urgent need of new solutions. ENDURE has selected the most important specific problems and pooled its expertise to identify in each of these 'Case Studies' what is at hand or could be made available in the short term. Thanks to its international reach, ENDURE is in a position to compare solutions devised at the national level, consider their transferability between countries, identify their performance and shortcomings, explore their potential for combination and detect the gaps and needs for additional knowledge. Five of these studies have just been completed and their conclusions will be presented at this conference.

In the longer term, new technologies and new alternative methods will increase the possibilities for reducing the risks posed by pesticides and for reducing their use. ENDURE is assessing the potential of these methods and seeks to identify the factors that might speed up their availability.

We must also realise that cropping systems have evolved in Europe under the assumption that pesticides will provide a solution to most crop protection problems, which in turn has made European systems more vulnerable to these problems. It is a basic assumption in ENDURE's programme that the need for using pesticides can be further reduced by modifications at these system levels. The exceptionally wide range of disciplines brought together in ENDURE allows us to consider pests, diseases and weeds all together, exploiting the combination of a multiplicity of methods, devising strategies over larger time and space scales, and taking into account the interactions between agronomical, ecological and landscape factors as well as the socio-economic framework in which these strategies will be implemented.

This holistic approach is particularly relevant when one considers the factors affecting the success or failure of implementing integrated pest management schemes. By taking this approach, ENDURE is exploring promising avenues for 'Diversifying Crop Protection'. At the same time ENDURE can offer scientific support to policy makers and other stakeholders in the implementation phase of the EU Thematic Strategy on the Sustainable Use of Pesticides, which largely relies on IPM concepts.

After being operational for 18 months, ENDURE is delighted to present its first results to the world's scientific community attending this meeting. But we also expect to learn from the experiences and achievements that you are bringing to us from other institutions, countries and continents. We are grateful to everyone who has accepted our invitation for allowing us to benefit from your wide-ranging visions on this subject.

On behalf of ENDURE's scientific community, let me wish you all a very fruitful and enjoyable conference in La Grande Motte.

Pierre Ricci
ENDURE coordinator