

Project overview

Launched in 2007, ENDURE is the European Network for the Durable Exploitation of Crop Protection Strategies, a Network of Excellence funded under the European Commission's Sixth Framework Programme, Food Quality and Security, with funding of €11.2 million for a four year period. ENDURE brings together more than 300 researchers from 16 different institutions in 10 European countries, including research organisations, universities, agricultural extension services and the biological control industry. From the end of this year ENDURE will continue its work, evolving into a European Research Group self supported by its member institutions.

ENDURE's overall aim is to help develop farming systems that are less reliant on pesticides. This is an ambition shared by the European Commission, which last year introduced a package of new legislation that will change both the availability of pesticides and the way they are used in European agriculture.

Certain active substances in pesticides will be banned where they are considered to be particularly hazardous and all Member States will be obliged to 'encourage the development of **Integrated Pest Management (IPM)** and of alternative approaches or techniques to reduce the dependency on pesticide use'.

Thus European farmers will face the situation where certain commonly used pesticides may no longer be available and Member States will have to draw up National Action Plans detailing how they are going to encourage the shift away from agriculture that is overly reliant on pesticides.

ENDURE is playing a key role in meeting these challenges through a broad work package that seeks to provide solutions to farmers in both the short and longer terms. In addition, ENDURE is creating a permanent pan-European agricultural research community, helping policy makers to meet the challenges of the new legislation and ensuring the information and results it collects are effectively shared with agricultural advisers and farmers.



To provide short term solutions, ENDURE is exploiting the knowledge and resources currently available in the network through the use of case studies focused on major crops: wheat, maize, apple and pear, tomato, potato, banana, grapevine, and field vegetables. Each case study has tackled particularly significant pests for the crops concerned and produced leaflets aimed at agricultural advisers. These leaflets are available in several languages on the ENDURE website (www.endure-network.eu).

In addition, ENDURE is conducting two **system case studies**. The use of the word 'system' is key and deserves further explanation. ENDURE believes that in the longer term merely optimising today's farming practices or substituting today's technologies and inputs with new ones will not sufficiently improve agricultural systems made vulnerable by years of reliance on pesticides.

Instead there is a need to examine entire farming systems, an approach that is encapsulated in IPM. For ENDURE, IPM is a continuously improving process drawing on an array of approaches such as biological controls, plant genetics, cultural and mechanical methods, biotechnologies, and information technologies, together with some pesticides that are still needed to address the most problematic pests in critical situations.

The system case studies, focusing on arable and orchard crops, reflect this approach and draw on ENDURE's bank of researchers specialised in these diverse fields, alongside sociologists and economists, with the aim of proposing improved farming systems, the efficacy of which is being tested using modelling and multi-criteria assessment tools.

After 2010 ENDURE will become a European Research Group and will continue to offer the scientific community valuable tools such as the Virtual Laboratory, which provides access to specialist platforms on research into weeds, wheat and potato diseases, and pest characterisation.

To ensure the information and results collected by ENDURE are effectively put into practice, it has created the **ENDURE Information Centre**. For the first time agricultural advisers have access to a European level point of reference for recommendations and advice. It is supported by the ENDURE Network of Advisers, a pan-European group of agricultural advisers keen to share experiences and ensure best practice at field level.

And ENDURE will continue to provide scientific **support to policy makers**, offering analysis of the drivers and barriers to IPM implementation and responding to specific requests for help through its Network of Experts.

ENDURE will be sharing the results of its four-year programme at its second major international conference, Integrated Pest Management in Europe, which will be held in Paris, France, on November 24 and 25, 2010.

