



Improving quality and safety and reduction of costs in the European organic and low input supply chain

The European Union is funding a new 18M Euro Integrated Project¹ ‘QUALITYLOWINPUTFOOD’ that aims to improve quality, ensure safety and improve productivity along the European organic and other “low input” food supply chains (see project website: [www.qlif.org](http://www qlif.org) for details).

The Integrated project will involve thirty-one research institutions, industrial companies and universities (listed below) throughout Europe and beyond. , with a total budget of 18 million Euro. Five of the eight industrial partners are Small to Medium size Enterprises and all eight are involved in the production, processing or quality assurance of organic food. Thus, this Integrated Project integrates the critical mass of activities and resources needed to achieve ambitious scientific and technological objectives.

The research will encompass the whole food chain from fork to farm for protected crops (tomato), field vegetables (lettuce, onion, potato, carrot, cabbage), fruit (apple), cereal (wheat), pork, dairy and poultry. *It will measure* consumer attitudes and expectations, and *will develop* new technologies to improve nutritional, sensory, microbiological and toxicological quality/safety of organic foods. All the project’s innovations *will be assessed* for their socio-economic, environmental and sustainability impacts.

The research will provide meaningful information that is currently lacking on the extent to which differences in production systems affect nutritional value, taste and safety of food. *The project* is expected to make a significant impact on increasing the competitiveness of the organic industry to the benefit of the European consumers and organic farmers.

Major results from the integrated project and other completed or ongoing European research projects will be reported at the “**Organic Farming, Food Quality and Human Health Congress**” which will be held between the 6th and 9th of January 2005 at Newcastle University. The conference is aimed at farmers, processors,

¹ NOTE TO EDITORS Integrated projects are designed to generate the knowledge required to implement the priority themes of the European Union's Sixth Framework Programme of Research and Technological Development. These projects integrate the critical mass of activities and resources needed to achieve ambitious and clearly defined scientific and technological objectives. Each integrated project is aimed at obtaining specific results relevant either to increasing the impetus to Europe’s competitiveness or to addressing major societal needs. The integrated project is therefore an instrument to support objective driven research, where the primary deliverable is new knowledge. In addition, integrated projects can also be expected to have a structuring effect on the fabric of European research, by mobilising a critical mass of resources.

traders/retailers, consumer organisations and other stakeholders in the food supply chain (see [www.qlif.org](http://www qlif.org) for details).

Low input for high returns

European citizens want agriculture to provide tasty, safe, affordable and nutritious food without damaging the environment. “Low input” farming minimises or completely avoids the use of synthetic pesticides and fertilisers. The best known low input system is organic farming, which is one of the most dynamic sectors of agriculture in Europe, but also faces substantial challenges to meet consumers’ demands for safe, high quality, affordable organic food. The European Commission’s Sixth Framework Programme (FP6) has allocated 685 million Euro for research and development in the area of Food Quality and Safety, such as “safer and environmentally friendly production methods and technologies and healthier foodstuffs”, “impact of food on health”; and “traceability processes all along the production chain”. The project ‘**QUALITYLOWINPUTFOOD**’ brings together European expertise in an 18 million Euro Integrated Project to improve quality, ensure safety and reduce cost along the European organic and “low input” food supply chains.

Start with the Consumer ...

One of the first investigations will ask consumers what they want from low input foods, and measure what they actually buy, to determine what producers need to do to satisfy consumer demand. Other researchers will compare “low-input” and conventional products for qualities such as nutritional value, taste, shelf life, and processing characteristics, and for risks related to reduced fertility, pathogens and toxins from fungi. The aim here is to understand how these benefits and hazards can be optimised and controlled throughout the chain.

Then the Producer ...

Based on this, scientists will develop novel techniques to produce better products as cost-effectively as possible, and disseminate them to professionals in the food industry. Focus here will be on farm-based research in cereals, vegetables, dairy, poultry and pork production. For example, agronomists will test different management strategies for improvements in soil fertility, disease, weed and pest control to improve yields of high quality, organic plant foods, while livestock experts will assess how improved husbandry methods and feeding regimes can improve the nutritional quality of organic milk and minimise parasites and bacterial infections in pig and dairy production.

The project involves 31 partners, including Universities, Research Institutes and industrial companies. Five of the eight industrial partners are Small to Medium size Enterprises and all eight are involved in the production, processing or quality assurance of organic food.

Each year of the project, a major congress will be held to present the results of this and other projects on organic and “low input” agriculture to representatives of producers, processors, retailers, consumers and other user groups. The first major congress will take place between the 6.-9. January 2005 at Newcastle University, Newcastle upon Tyne, UK and has been jointly organised with the Soil Association, one of Europe’s major organic farming organisations. In addition to first results from the integrated project major outputs from other R&D projects funded by the EU,

national governments and industry will be presented. Details can be found on the project website (www.qlif.org).

Partner List

1. University of Newcastle upon Tyne (Overall Co-ordinator, England, UK)
2. Research Institute of Organic Agriculture (Academic Co-ordinator, Switzerland)
3. Danish Research Centre for Organic Farming/Danish Institute of Agricultural Sciences (Denmark)
4. Praktijkonderzoek Veehouderij BV (Netherlands)
5. University of Kassel (Germany)
6. Campden and Chorleywood Food Research Association (England, UK)
7. University of Wales, Aberystwyth (Wales, UK)
8. Louis Bolk Institute (Netherlands)
9. Alma Matur Studiorum – Universitat di Bologna (Italy)
10. Institut National de la Recherche Agronomique (France)
11. Warsaw Agricultural University (Poland)
12. University of Natural Resources and Applied Life Sciences, Vienna (Austria)
13. Universidad de Tras-os-Montes e Alto Douro (Portugal)
14. Technological Educational Institute of Crete (Crete, Greece)
15. Vysoka Skola Chemickotechnologicka v Praze, Prague (Czech Republic)
16. Bar Ilan University (Israel)
17. University of Helsinki (Finland)
18. TUBITAK-Marmara Research Centre (Turkey)
19. University of Bonn (Germany)
20. University of Basel (Switzerland)
21. Institute of Grassland and Environmental Research (Wales, UK)
22. Universitat Hohenheim (Germany)
23. Universita Politecnica della Marche (Italy)
24. Granarolo SPA (Italy)
25. Roger White and Associates (England, UK)
26. Guaber SPA (Italy)
27. Anidral SRL (Italy)
28. Gilchesters Organics (England, UK)
29. Agro Eco Consultancy B.V. (Netherlands)
30. Swiss Federal Dairy Research Station, Liebefeld (Switzerland)
31. Groupe de Recherche et d'Echanges Technologiques (France)

More information

QUALITYLOWINPUTFOOD Website: <http://www.qlif.org>

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