



Summary

The major aim of supermarket quality schemes is to ensure the security of the food chain with little concern for promoting integrated production. Their implementation increases the importance of new stakeholders, such as inspectors, in the production chain. On the producers' side, these schemes do not fully reward the efforts made by growers. Furthermore, even the most demanding schemes do not really favour IPM practices because they maintain high physical quality standards and varietal choice that are reliant on pesticide use.

For further information please contact:

Marco BARZMAN, ENDURE Assistant Coordinator
Centre de recherches INRA
400, route de Chappes - BP 167
06903 Sophia-Antipolis Cedex - France
Email: endure.coord@sophia.inra.fr

About ENDURE

ENDURE is the European Network for the Durable Exploitation of Crop Protection Strategies. ENDURE is a Network of Excellence (NoE) with two key objectives: restructuring European research and development on the use of plant protection products, and establishing ENDURE as a world leader in the development and implementation of sustainable pest control strategies through:

- > Building a lasting crop protection research community
- > Providing end-users with a broader range of short-term solutions
- > Developing a holistic approach to sustainable pest management
- > Taking stock of and informing plant protection policy changes.

Eighteen organisations in 10 European countries are committed to ENDURE for four years (2007-2010), with financial support from the European Commission's Sixth Framework Programme, priority 5: Food Quality and Security.

This publication was funded by EU grant (Project number: 031499), under the Sixth Framework Programme, and is catalogued as ENDURE Social Science Insights Number 2 – The conditions of transition towards Integrated Pest Management (IPM) practices, published in June, 2009.

Website and ENDURE Information Centre

www.endure-network.eu

© Photos, from top to bottom: JKI, B. Hommel; INRA, J.F. Picard; JKI, B. Hommel; INRA, J. Weber; A.S. Walker; INRA, C. Slagmulder; JKI, B. Hommel; Agroscope ART; SZIE; INRA, N. Bertrand; Vitropic; INRA, F. Carreras

Social Science Insights on Crop Protection

Are supermarket schemes a tool for implementing Integrated Pest Management (IPM)?



Isabelle Haynes, Réjane Paratte and Claire Lamine, INRA, France; Jan Buurma, LEI Wageningen UR, The Netherlands; Susannah Bolton, Rothamsted Research, UK

© Carrefour, France



Food Quality and Safety



Supermarkets schemes are drivers of the agri-food system

Supermarket quality schemes are becoming major drivers of European agri-food systems. These schemes contribute to the implementation of risk management for pesticide use.

They are anchored in the Hazard Analysis Critical Control Point (HACCP) method that controls hazards which are significant to food safety. Accordingly, most supermarket schemes implement HACCP in agricultural production through Good Agricultural Practices (GAP) aimed at:

- Documenting adherence to hygiene and safety rules: for pesticides this means adopting storage rules, calibration of spraying equipment and wearing protective clothes when spraying.
- Implementing traceability, self-assessment procedures (log books) and external controls.
- Forbidding the use of some substances that are considered as risk factors (for example human sewage sludge).

Method. Pome fruit formed the basis of our fieldwork. We interviewed representatives in charge of quality in five pome fruit Producers' Organisations (POs), 28 pome fruit producers involved in various supermarket certification schemes, two representatives from the certification industry and three representatives from supermarkets who were either in charge of quality schemes or fruit supply chains. The interviews were supplemented with a web search and document analysis. The countries involved were France, Switzerland, The Netherlands and the United Kingdom.

IPM schemes are scarce

More and more often the certification schemes used by supermarkets include standards for the farm's environmental impacts on water or fauna. However, schemes with specific

IPM demands are scarce and have diverse levels of requirements. Some supermarket schemes go beyond the scope of existing regulations by forbidding the use of some molecules and requiring the use of biocontrol tools. Others do not limit the use of pesticides but require them to be part of an integrated strategy for crop protection.

Supermarket schemes change the organisation of production

Respecting standards which are decided at the head offices of supermarkets (at the general management level) without taking into account local conditions is not easy for producers, hence the rising importance of both technicians and inspectors for the good functioning of these schemes. Hence, also, the importance of Producers' Organisations (POs) that participate in supporting the extra costs involved in the implementation of supermarkets' schemes (certification, monitoring costs etc) and also provide technicians and marketing assistance. Moreover, because they bring together producers sharing the same interests, they can provide them with the social support they need to adapt their practices. Still, according to the techni-

cal managers who were interviewed, only producers with a high level of technical knowledge can get involved in supermarket schemes (which, of course, does not mean that all skilled producers take this path).

Current supermarket schemes' standards and IPM are rather contradictory

For supermarkets, certification schemes are a means of adding value to products. Therefore specific product quality is also demanded in many certification schemes. For example, schemes for pome fruit (apples and pears) impose first class standards for weight and size, specific taste standards (levels of sugar, acidity, firmness) and specific visual standards such as colour distribution, lack of russeting etc.

Maintaining perfect skin quality for orchard fruit is not compliant with reduced pesticide use as pesticides are needed just to meet the physical quality standards demanded by supermarkets. Furthermore, supermarket schemes often require disease-susceptible varieties to be grown.

One possible breakthrough would be the promotion of 'ugly but good' products with lower requirements regarding visual quality standards and higher requirements regarding pesticide use. Some supermarkets are considering this approach for niche products but reject it for mainstream produce such as orchard fruit.

The involvement of stakeholders is often weak

For producers' organisations, supermarket IPM schemes are mainly a commercial condition for being accepted as supermarket suppliers. In fact, the investment required to produce according to IPM schemes is seldom rewarded in financial terms as supermarkets often work on the basis of short-term contracts and provide no commitment to purchase. Sometimes POs receive no forward orders from the supermarkets but still have to achieve certification in order to keep their position as privileged suppliers. Consequently producers may become involved for no more than a single growing season or may switch from one supermarket scheme to another.

Finally, in some countries, such as France, production under IPM schemes is not even marketed as such, as it would emphasise the contrast with the conditions of production for other produce.

We can therefore conclude that, against the background where many growers are lobbying against further limitations on the range of pesticides available, the prospects for increased adoption of IPM through supermarket certification schemes seems limited. Accordingly, some producers and experts suggest that other drivers such as farming subsidies or significant changes in agricultural policy (as in the case of Switzerland) are needed for achieving significant reductions in pesticide use.