

Working within the residue limits

Why is minimising pesticide levels so important?

Today's consumers are questioning the role of pesticides and the implications of any residues in the food they eat. Many say they would like no residues at all. At the same time, however, most want all-year-round supply of high quality, pest and disease-free produce at value-for-money prices.

Food retailers have always had to face the challenge of balancing consumers' demands with the reliable supply of fresh produce. But now UK retailers face added challenges. They must meet the 'due diligence' clauses of the Food Safety Act 1990 and, under the Government's 'name and shame' policy, they risk being named in the media if any food is put on the shelves which has residues exceeding the Maximum Residue Level trading standard (MRL). All positive residues are listed as well, even if they do not exceed the MRL. Keen to protect their brand images, all food companies rightly look to their suppliers and growers to deliver produce with the least possible residues.

In practice the availability of high quality, affordable fresh produce and the use of pesticides are inextricably linked. Growers recognise that, for a reliable supply of any field crop, the use of crop protection products will vary from season to season depending on widely differing weather conditions and the degree of weed, fungal or insect attack. Growers may be less aware, however, that the potential for residues increases when pest pressures are high. More chemicals can be used as a consequence and extra care is needed to make sure buyers' quality standards and residue expectations are met.



What can you do in the field to minimise residues?

Of paramount importance, growers must only use products which are approved for a specific crop. Approval can be either from a label recommendation, or by using a Specific Off Label Approval (SOLA), or by use of arrangements for long-term extensions of use. To do otherwise is against the law and risks court action, destruction of the offending consignments and being delisted as a supplier. **Follow exactly the instructions on the product label and use the appropriate rate for the problem. Do not exceed the maximum rate stated.**

To keep residues to the lowest level, growers can adopt a range of techniques and select the best combination to meet both the expected and the unexpected.

Much of this is part of an Integrated Crop Management approach:

- Grow pest and disease resistant varieties;



- Exploit the natural disease and pest breaks offered by crop rotations;
- Monitor weed, disease and pest numbers and treat only when economic thresholds are reached;
- Match the dose of chemical precisely to the required level of control;
- Encourage natural insect predators to help control pest populations.

Specific actions related to residue management are:

- **Check the harvest interval or latest time of application stated on the label:** make sure crops are treated accordingly;
- **Use the least possible number of applications to achieve the task;**
- **Careful harvesting techniques and specialised storage;** keeping stored produce in good condition helps reduce reliance on post-harvest treatments;
- **Use accurate application equipment;**
- **Ensure all spray and application equipment is calibrated and working efficiently;**
- **Seek qualified agronomic advice** to match the application rate to the problem and to avoid any unnecessary use.