

# The pesticide question: What is the next step for the industry?

**Despite persistent lobbying, the EU regulatory system governing the use of all pesticides is undergoing a stringent tightening of its legislation, which could result in the loss of up to 85 per cent of conventional chemical substances. Elizabeth O'Keefe investigates and asks what steps the fresh produce industry should be taking in preparation**

**A**gree with their use or not, pesticides have maintained the sustainability of UK and European horticulture for decades, helping feed our ever-growing population.

But now the proposed Plant Protection Products Directive 91/414/EEC legislation is being revised based on the intrinsic hazards from the use of a substance, meaning that if a pesticide has a particular property that triggers one of the hazard 'cut-off' criteria, it is likely to be banned.

The consultation on the major piece of legislation is ongoing, but despite DEFRA secretary of state Hilary Benn leading the UK's opposition and lobbying from industry leaders, the revision looks likely to go ahead and will affect fruit and vegetable production across the board in the UK, as well as putting the country at further risk regarding food security.

According to the independent herbicide consultant Cathy Knott, production of carrots, parsnips, peas, dwarf French beans, onions, leeks, lettuce and herbs is at risk, or will become very expensive, mainly because of herbicide losses. Production of strawberries will also be affected by the loss of fungicides for control of diseases that reduce fruit quality and shelf life.

"The definition of endocrine disruptors is

unclear but could affect several fungicides," says Knott. "The non-approval of mancozeb would have a severe impact on horticulture, because this active is important for resistance management strategies. It is used for control of Phytophthora rot and fruit rot in various fruit crops and late blight in potatoes. There are 33 approvals for mancozeb including 26 SOLAs [specific off-label approvals] for control of several diseases, including downy mildew, scab and black spot. The impact on onions will be severe because downy mildew reduces yields and current products are based on mancozeb. The potential loss of triazole fungicides used to control several diseases, like powdery mildew, white rot and alternaria, will affect most crops."

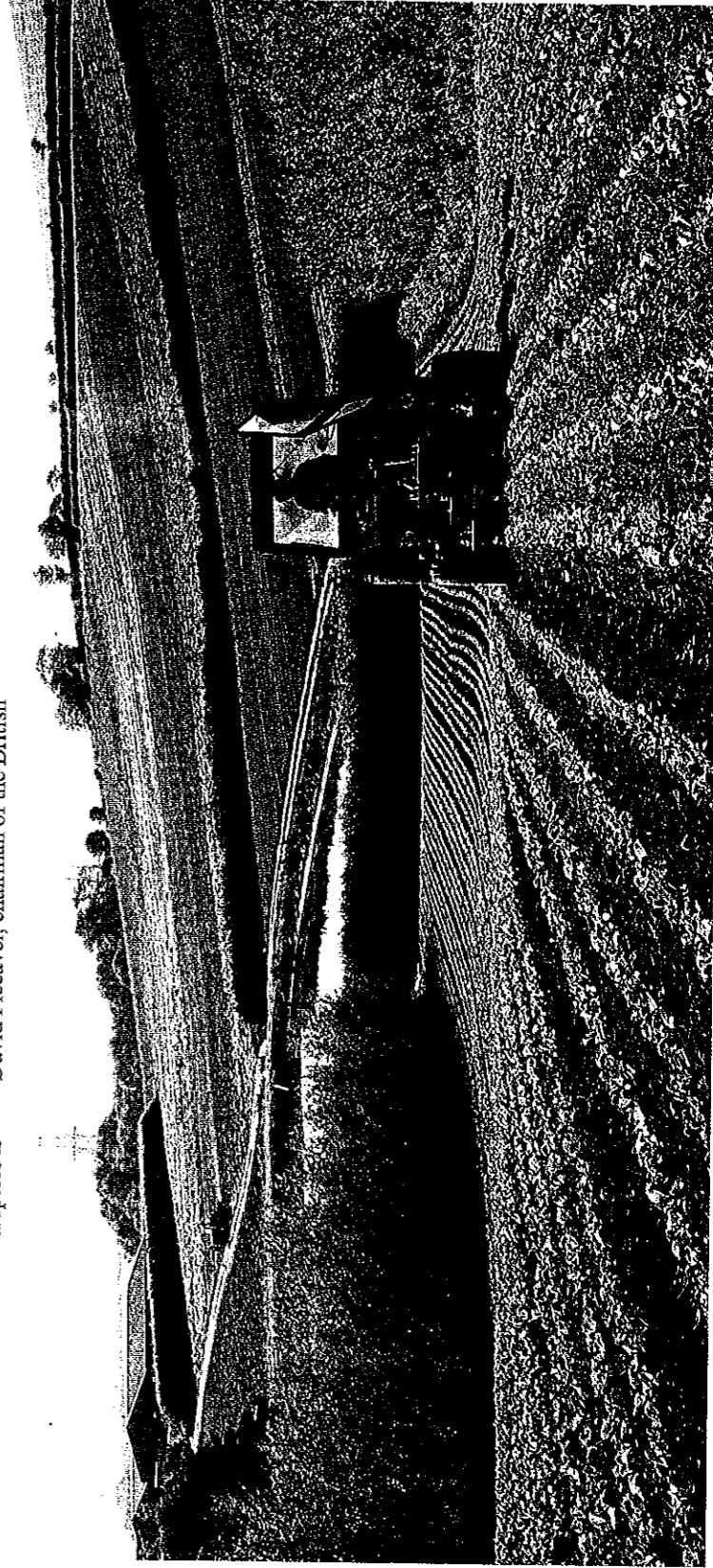
The Fresh Produce Consortium (FPC) agrees that it may become uneconomic to grow some crops and believes lower yields will mean consumers will have to pay higher prices for their fruit and vegetables. "Growers already have a limited range of products to protect horticultural crops and in some instances there will be no viable alternatives for treating common pests which reduce yields and damage fresh produce," says Nigel Jenney, chief executive of the FPC.

David Piccaver, chairman of the British

Leafy Salads Association (BLSA), says that the next three years will see consumer-end prices increase through the restriction of much-relied on chemicals and the absence of any contingency plan from the EU. "We are going to be at more risk when this goes through," he says. "Weed infestation and more disease resistance problems are going to come from not having the chemicals we have had. We are beginning to see the effects now of the deregistration of chemicals, and the one thing that is certain in all of this is the fact that this legislation will cost the industry a lot of money to make up for the chemicals lost."

"The UK has a serious problem, as unlike the US where legislation has already been attached to bio-crops and methods, the UK has had problems with the registration of bio-control. Basically there has been a problem in getting clearance for them because the process is too precise. It has meant that people have not come forward with new products."

But some quarters think that this legislation is a step in the right direction and will force the industry to consider and sustain the environment. The Soil Association believes that the legislation will prove to be a good thing for the industry, protecting those working in the



fields, who are at greatest risk from pesticides, as well as consumers. "Even with the proposed changes, there is still a long way to go, as the new legislation will only cut the use of a small percentage of pesticides," says the Soil Association's policy and campaigns co-ordinator, Emma Hockridge.

"The industry has traditionally been forward-thinking and innovative, and I am sure solutions will be found to this issue."

But some believe that the legislation has the potential to turn the fresh produce industry on its head, giving producers outside the EU the opportunity to take a majority share in the market. With UK supermarket standards high to a fault, it looks as if UK produce may eventually become the underdog, with low yields and questionable quality caused by the exclusion of certain chemicals.

"Outside the EU community production is not constrained by the same regulations and we buy in that product, which is ludicrous," states Piccaver. "It is an unfair marketplace and it means that producing countries out of Europe have a cost and a physical advantage. This is the most stupid thing about this legislation.

"It is going to put food security at risk and the only way to deal with it is to convince the food manufacturers and the retailers to take a more relaxed view on standards. But I can't see that happening."

The Soil Association believes that for greater problems will arise around the potential impacts of climate change and fossil fuel constraints if the legislation does not go through.

"The claims about potential reduction in yields have been vastly overstated, with, for example, one article claiming that there could be a 100 per cent yield loss of carrots," says Hockridge. "It is unlikely that this issue alone will have a large impact on imports from outside the EU. Supermarkets often have stricter regulations than the EU minimum standards, and caterers are beginning to be much more forward-thinking on such issues; for example, by getting involved with the Soil Association's Food for Life Catering Mark, which enables caterers to specify more local, fresh and organic food."

### Finding the next step

The FPC received significant support from MEPs, ministers, including Benn and prime minister Gordon Brown, as well as worldwide trade organisations. Subsequently, the consortium has been involved in further discussions with DEFRA and has presented to the minister's Council of Food Policy Advisors regarding the UK government's strategy on food security.

The FPC will be meeting Benn to continue to call for a common-sense approach and will request safeguards to minimise the impact on UK horticulture before the implementation of the regulation in 2010.

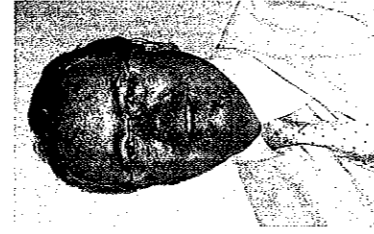
But, in the meantime, long-term solutions have to be found to deal with what some argue could be potentially catastrophic

legislation for the industry.

Many are calling for support and funding to counteract the future effects of the legislation, with biological controls and machinery being top of the list. The problem is that, with dwindling funding coming into horticulture via DEFRA, the UK is not in the best position to face the problems head on.

"We will continue to press the UK government and others to ensure that the

## EATING THE BEST OF BOTH WORLDS



**WHILE CHEAP** prices are attractive, today's consumers are also increasingly conscientious and price is no longer the only factor influencing what enters the shopping trolley, writes Peter McDonald, UK country manager of crop protection firm Certis Ltd.

Consumers do not want to pay a premium for organics; but neither do they want to buy food treated with what they perceive as cheap chemicals damaging to both the environment and their health. The bottom line is that consumers want food that will not cost the earth to buy and will not break the earth to produce.

Diminishing access to products, combined with supermarkets' own independent standards, means that growers are actively seeking out the latest methods of pest and disease control, which allow them to produce food in a manner that is both economically viable and environmentally sound. Integrated Pest Management (IPM) is key to achieving that goal through the integration of good agronomic practices – i.e. crop rotation, use of monitoring systems and beneficials, careful variety selection, and the strategic use of pesticides.

In order to bring about cost-effective solutions to food production in this middle ground between organic and conventional, we have been working to bring new products to the market. Our newest product, Sluux, is a slug pellet based on ferric phosphate. Ferric phosphate is not only a food grade ingredient, its base component is also found naturally in soil and yet when specially formulated it is lethal to slugs. The product has an excellent environmental profile and trials have shown that it delivers pest control as effective as the leading mainstream options – an important factor given that slugs are agriculture's number-one pest and thus demand stringent control.

Furthermore, Sluux also has a derogation for organic production and, crucially, it is priced at a level for mainstream growers, delivering an economic as well as an environmental solution.

Our company ethos could be summed up as "use as much as necessary, but as little as possible" and our track record for producing IPM-suitable pesticides for the horticultural sector is unsurpassable. Floramite is a recent Certis addition to the strawberry grower's armoury for controlling the damaging spider mite pest, and it delivers the all-important control growers need, while being safe to the majority of beneficial insects and natural predators. Uniquely, Floramite is from a completely new class of chemistry and while judicious use is important given the seven-day harvest interval, there is no cross resistance with any other products.

We are also keen to push the boundaries when it comes to residue issues and our sister company BCP Certis produces a range of beneficial insects that act to naturally suppress harmful pest populations. For our own part, we are focusing on naturally derived pesticides such as Spruzit, an insecticide formulated with the natural active ingredient pyrethrin, found in the perennial plant pyrethrum.

Certis continues to invest in development trials and new chemistry in an effort to bring new innovations onto the market that deliver both financial and practical gains for growers. O

industry has the necessary tools to provide a sustainable supply of fresh produce," says Jenney. "It is great that novel methods of pest control are becoming available to growers. However, it will take time for these to replace completely the products being withdrawn from the market.

"The European Commission must resolve uncertainty for growers by putting in place a full impact assessment and providing information of the impact of the regulation on individual crops. The industry needs hard and fast information upon which to make long-term business decisions to ensure that we can continue to provide safe, affordable fresh produce. The indecision by bureaucrats in Brussels to provide detailed information could mean that the industry is the loser."

Piccaver says that the industry has to go back to more traditional methods while further bio-control and machinery are developed to tackle weed and pest control. "We will have to weed mechanically, which can be problematic in the UK as this process does not work if the ground is wet," he says.

"Plastic meshes are being used, as well as netting, and biologic methods need to be used further. We have been highlighting the organic method of stale seedbeds, and also burning the weeds, which of course brings its own environmental concerns. From a mechanical point of view, we currently have standard tractor hoes and sensors that help the machines stick to a row. There is further robotics available to select weeds out of the ground, but we are very much behind on this. Most of the technology comes from the car industry and it is not advanced enough and too slow for horticulture."

The Horticultural Development Company (HDC) is to work with grower groups and consultants to assess the impact of the new EU proposals for approval of crop protection substances on a range of crops, in the first assessment made for horticulture since the new hazard-based approvals were agreed in January. HDC technical manager Vivian Powell tells FPJ: "We do not plan to include all crops within this impact assessment, because there are still a number of parameters to be finalised as the revision continues to develop. For example, at present there is no final definition of the term 'endocrine disruptor' or indeed a final list of 'Candidates for Substitution'. However, to enable the HDC to keep DEFRA fully briefed and to allow us to maintain meaningful discussions with agrochemical companies on behalf of growers, we felt it prudent to produce a document that details the importance and impact of the proposed new legislation on key crops in the horticultural industry. The document will also be used to focus R&D strategies for crop protection issues."

So whether the revision of the regulations will give the industry a shove in the right direction towards more natural and sustainable products, or put the final nail in the coffin, fresh produce businesses need to prepare for a change. O