

Thousands of tons of organic food produced using toxic chemicals

By DAVID DERBYSHIRE - 1st January 2008

Thousands of tons of organic vegetables sold in British shops this year were produced using toxic chemical pesticides, it emerged yesterday.

Many shoppers - who pay premium prices for "naturally" grown veg - are unaware that any chemicals are allowed on any organic produce.

Under Soil Association rules, a small number of sprays are permitted.

But yesterday it emerged that increasing numbers of potato farmers have been asking for special permission to use large amounts of copper fungicide over the summer and autumn.



Toxic chemical pesticides are being used to produce organic vegetables, it has been revealed

According to new figures, a third of UK organic potato farmers were given permission to spray crops with fungicides made with copper - a heavy metal that can cause liver disease.

The pesticide is one of a handful approved by the Soil Association - the charity that certifies and promotes organic food.

The association's website describes it as toxic, while the EU is planning to ban it in the next few years following concerns about its health effects.

Farmers were forced to resort to chemical sprays after one of the worst summers on record for potato blight - the disease that caused the 19th century Irish famine.

The Soil Association said 30 per cent of its growers had applied for special permission to use the fungicide while industry sources said organic farmers had bought "close to record" amounts over the summer.

Professor Tony Trewavas, an Edinburgh University plant scientist and critic of organic food, said copper compounds were 1,000 times more toxic than fungicides used on non-organic potatoes.

"It's not only poisonous for people, but also for wildlife," said Prof Trewavas.

"The trouble is, organic farmers haven't got anything else to replace it. Blight destroys the whole crop - it gets into the leaves and you end up with nothing. Organic farmers cannot afford to lose a crop."

He added: "The Soil Association makes a big play out of the fact that it is 'natural' farming.

"But farming can never be 'natural' - it is an unnatural thing to clear land of trees, plant crops and then try to stop anything else eating them."

Syngenta, the agribusiness company that makes pesticides and fertilisers, confirmed that demand for copper sulphate pesticides from organic farmers had "gone through the roof" this year.

The problem hit the late potato crop, harvested from September.

Professor Lewis Smith, head of regulatory science at Syngenta, said: "The impact of potato blight was devastating across the country - although some areas suffered more.

"Organic farmers used significant amounts of copper sulphate to reduce the impact. Copper sulphate is poisonous if you have enough of it. It can stay around in the soil and you can end up with high concentrations."

The shortage of organic potatoes meant that Israeli and Egyptian varieties are already being flown in - despite the high carbon footprint, he added.

Copper sulphate only works as a preventative pesticide. If organic farms are struck by potato blight, they are forced to remove all vegetation from the surface and the lift the potatoes within a few days.

Conventional farmers complain that organic neighbours increase the spread of diseases like blight.

Copper has been used for hundreds of years. It is commonly applied to soil as a conditioner. People need small levels in their diet. However, at high concentrations it can cause liver, kidney and blood disease.

The Soil Association said it was phasing out copper sulphate - and that a growing number of organic farmers were switching to blight-resistant strains.

Lord Melchett, an organic farmer and spokesman for the association, said: "It was the worst year for blight in 50 years - and we had expected that 60 or 70 per cent of our farmers would use copper. But in fact, it was a much lower proportion than we predicted.

"The standards are changing over time to reduce the amount that farmers can use and resistant strains of potatoes are being developed.

"The amount that organic farmers use is tiny compared to the amount used on conventional farms, where it is applied as a soil conditioner."

Sensible crop rotations can prevent the built up of copper in the soil, he added.

Last year, 58 farmers applied to the Soil Association to use 2.2 tonnes of copper. This year, around 100 applied for permission.

Potato blight is caused by the fungus *Phytophthora infestans*. It spreads quickly in wet and humid conditions, and can destroy an entire field of potatoes.

The spores develop on the leaves and can then be washed into the soil where they spread to neighbouring plants. They can also be carried miles on the wind.