

Pesticides

Farmers use synthetic chemicals called pesticides to protect plants from a broad range of pests and diseases, including unwanted insects, pathogens and weeds.

Pesticides can be sprayed onto plants to kill microorganisms directly and also used to coat seeds and protect plants as they grow.



Benefits

1. More food, more money:

Pesticides help farmers to grow large amounts of food on an area of land. This helps to boost food production; providing people with an income and nutritious, calorie-rich diets.

2. Lots of control:

Pesticides kill off a broad range of pests and pathogens. They can protect crops against many damaging diseases and increase the overall amount of food produced.

3. Environment - land:

High yields mean that less land is needed to grow food, which protects natural habitats on the land surrounding crop fields.

Drawbacks

1. Regulation:

The European Union allows chemical pesticides to be applied in a controlled way that limits environmental damage.

If pesticides are used incorrectly they can contaminate water and kill off non-target living things, such as insects, birds and fish. This means that pesticides need to be regularly studied and reviewed to make sure that they are not causing harm to the environment.

2. Cost and environment:

Developing new pesticides is expensive and time consuming. Manufacturing and applying pesticides needs fuel and electricity; releasing CO₂ into the atmosphere and contributing to global warming.

3. Resistance:

The more that crops are sprayed with pesticides, the more likely it is that pathogens will evolve resistance to them. This will mean that new types of crop protection will be needed to control plant diseases.

