

## Explore, debate and decide For or against the use of chemical in farming?

See if you can add to the list of advantages and disadvantages for each chemical technique.

Look over the alternative methods, can you structure these into your debate?







Technique	Explanation	Advantage	Disadvantage
Herbicide Spray	Controls weeds and kills unwanted plants This removes competing plants from the crop area	Allows more energy to be transferred to the crop	Reduces biodiversity and is a potential hazard to human health
Pesticide Spray	Removes organisms that come to feed on the crops.	Protects the crop, increasing the likeliness of a higher yield	Reduces biodiversity and is a potential hazard to human health
Fertiliser Spray	Contain minerals to improve soil quality and help crops to grow.	The minerals make the crops grow faster and bigger which means crop yields are increased	Can cause eutrophication, killing plant and animal species in the freshwater

## What are the alternatives?

Technique	Replaces	Advantage	Disadvantage
Manure	Fertilisers	Natural waste product and improves soil structure	You can't control the mineral levels as you can do with fertilisers. Manure is also more difficult and labour intensive to apply to crops
Weeding	Herbicides	No risk to human health	More labour intensive
Crop Rotation	Single Crop	Allows time for the soil to replenish , and reduces the occurrence of diseases	Increased difficulty in growing different varieties of crop

