

Farming: Fertilizers, Water & Pesticides

Fertilizers

Growing crops take nutrients OUT of the soil

Farmers can put nutrients BACK by adding fertilizers.

→ natural fertilizers made from plant & animal waste

→ synthetic fertilizers manufactured by humans.

Leaching = the process by which nutrients are removed from the soil as water passes through it.

Weight the benefits & costs of fertilizers: Please copy information from Table 1 on page 126.

	Synthetic fertilizers	Natural fertilizers
2 examples		
2 advantages		
2 disadvantages		

Water Control

- Irrigating land (adding water) or draining land (removing water) allows for reliable farming.
- see pictures on page 126 -
- Water is obtained from rivers, lakes or groundwater. Problem: Sometimes we can take so much water that there is none left in the rivers for wildlife....or people downstream! (see page 127, Fig. 6)

Pesticides

- Natural ecosystems have more biodiversity and thus are more stable than a field of one crop.
- We grow 'monocrops' – fields on one crop.
- **Pesticides** are used to kill pests. - Pests can be plants or animals. "pesticide" is very general
More specifically....

herbicide – kills plants

insecticide – kills insects

rodenticides – kill rodents etc..

- Broad-spectrum pesticide = a pesticide that is effective against many pests
- Narrow-spectrum pesticide = pesticide that is effective against only a few pests.

From Table 2, copy down information about a broad-spectrum vs. narrow-spectrum pesticide.

Note: point form is fine.

Pesticide	Origin / source	Use	Important characteristics
DDT			
Bt			