

with
Nutrients
Competition
more & more

Uses of Plant Hormones

Plant hormones, like auxin can be extracted or artificially made and then used to **kill weeds, grow cuttings, ripen fruit or make seedless fruit.**

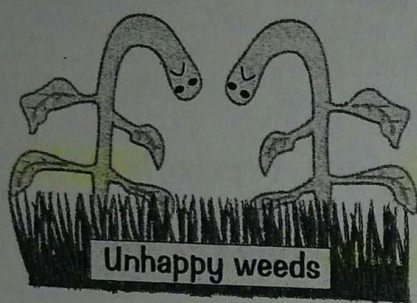
Selective Weed Killers

Most **weeds** are **broad-leaved** in contrast to **grasses** and **cereals**, like wheat, which have **narrow leaves**.

Artificial auxin is used as a selective weed killer. The auxin **disrupts** the natural growth patterns of plants, but only those with **broad leaves**, causing them to grow out of control and **die**.

Plants with **narrow leaves** are **unaffected**, so farmers can kill all the weeds in a field without affecting the cereal crop.

This allows the crop to grow **bigger** because with no weeds there is **less competition** for **nutrients** and **light + water**



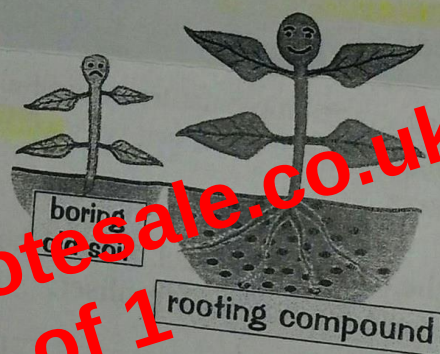
Rooting Powder

Artificial auxins are used in rooting powders.

Plant cuttings, **parts of a plant**, usually don't grow if you just stick them in soil.

If the cutting is dipped in rooting powder they **develop roots** quickly and start growing into **new plants**.

Large numbers of the same plant (**clones**) can be produced **quickly** using cuttings, compared to growing plants from seeds.



Q1.

Suggest one disadvantage, with a reason, of using a selective weed killer.

A disadvantage of a weed killer is if it moves to a place where food for animals is made but the food has an effect on it would die and animals can't eat.