



Answers

Experiment 2: Investigating how trees prevent flooding and pollution

RESULTS	Potted Plant (Tree)	Pot of Soil
Volume of runoff	Lesser Volume	Greater volume
Colour of runoff	Clearer	Darker
Presence of particles	None or a small amount	Yes - a larger amount

1. Why is there a difference in the volume of runoff from both pots?

The plant roots and creatures (worms, ants, etc.) which live near plants create spaces and holes in the soil where water can be stored.

2. Explain the difference in colour between the runoff from both pots.

The runoff from the bare soil is darker as it contains more soil particles. The roots of the plant bind the soil together preventing soil loss and less soil particles runoff into the water. More trees means less runoff.

3. Can trees help to prevent flooding?

Yes, trees can stop large volumes of water going into rivers too fast which can lead to flooding. They do this with their roots and their relationship with the soil and local environment. One of the many reasons that trees are so amazing!

4. Can trees help to prevent pollution?

Yes, tree roots bind the soil together and this prevents particles of soil and other materials from entering watercourses. They carry out water filtration, cleaning the soil and water. How cool is that!



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