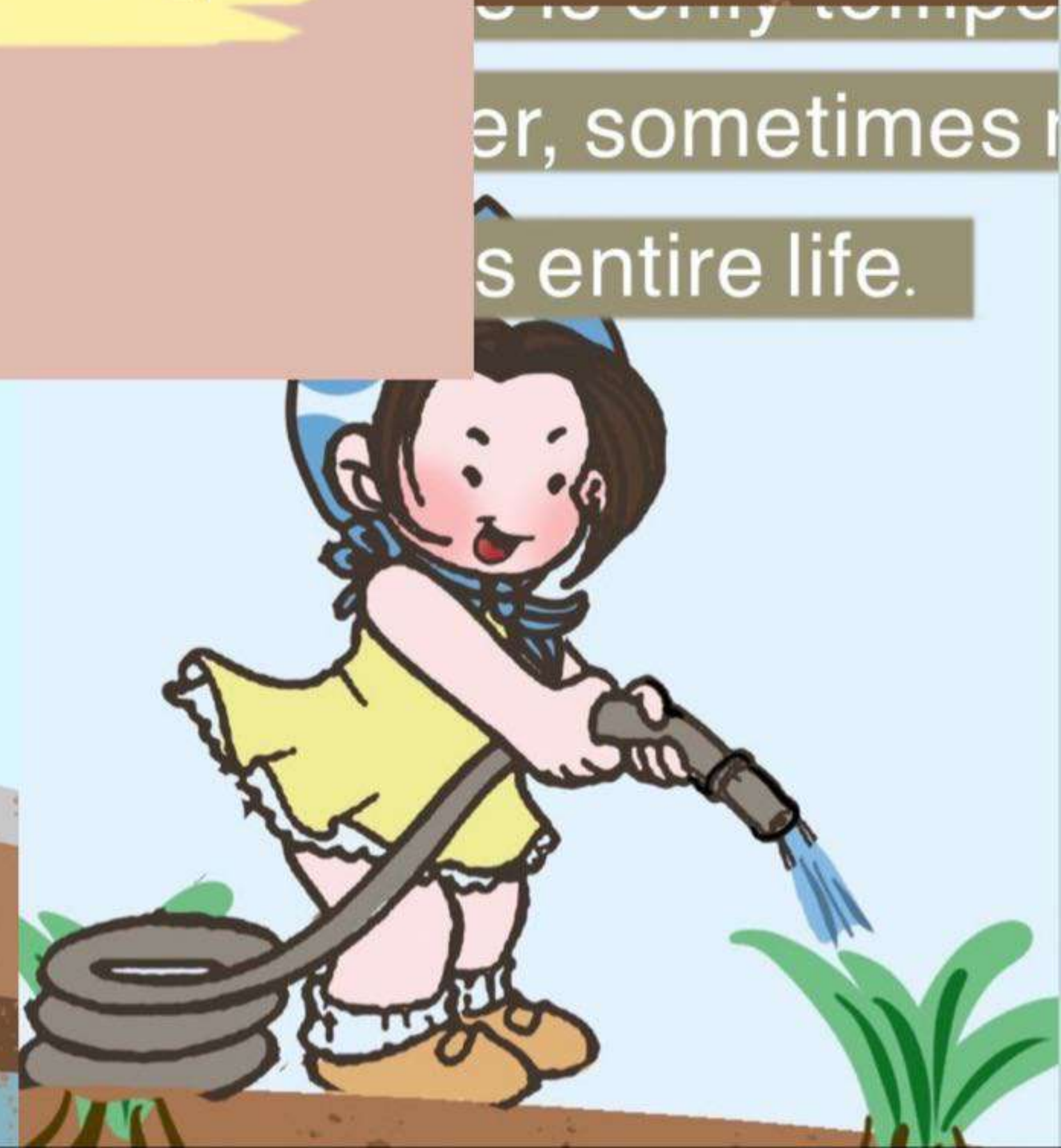
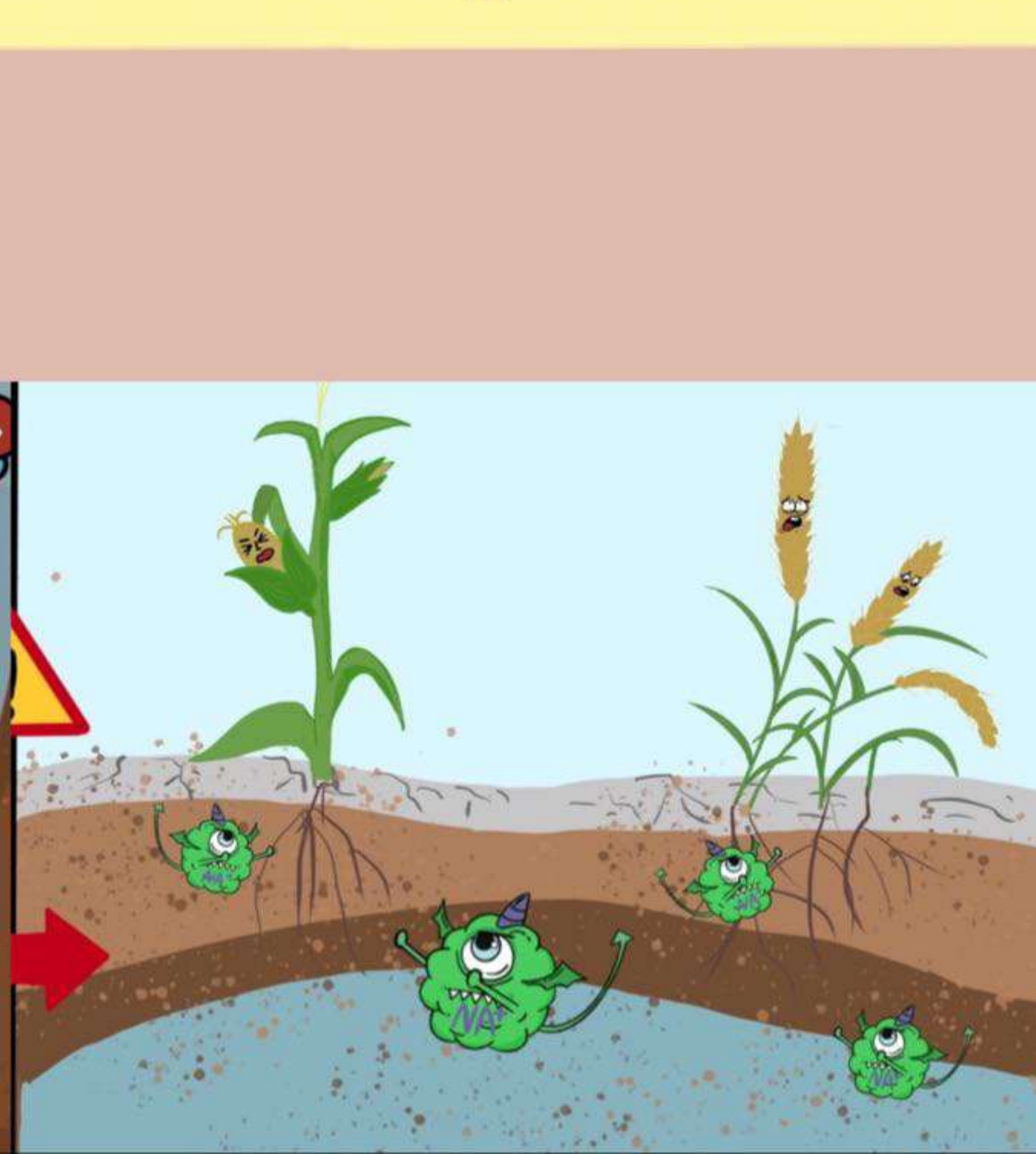
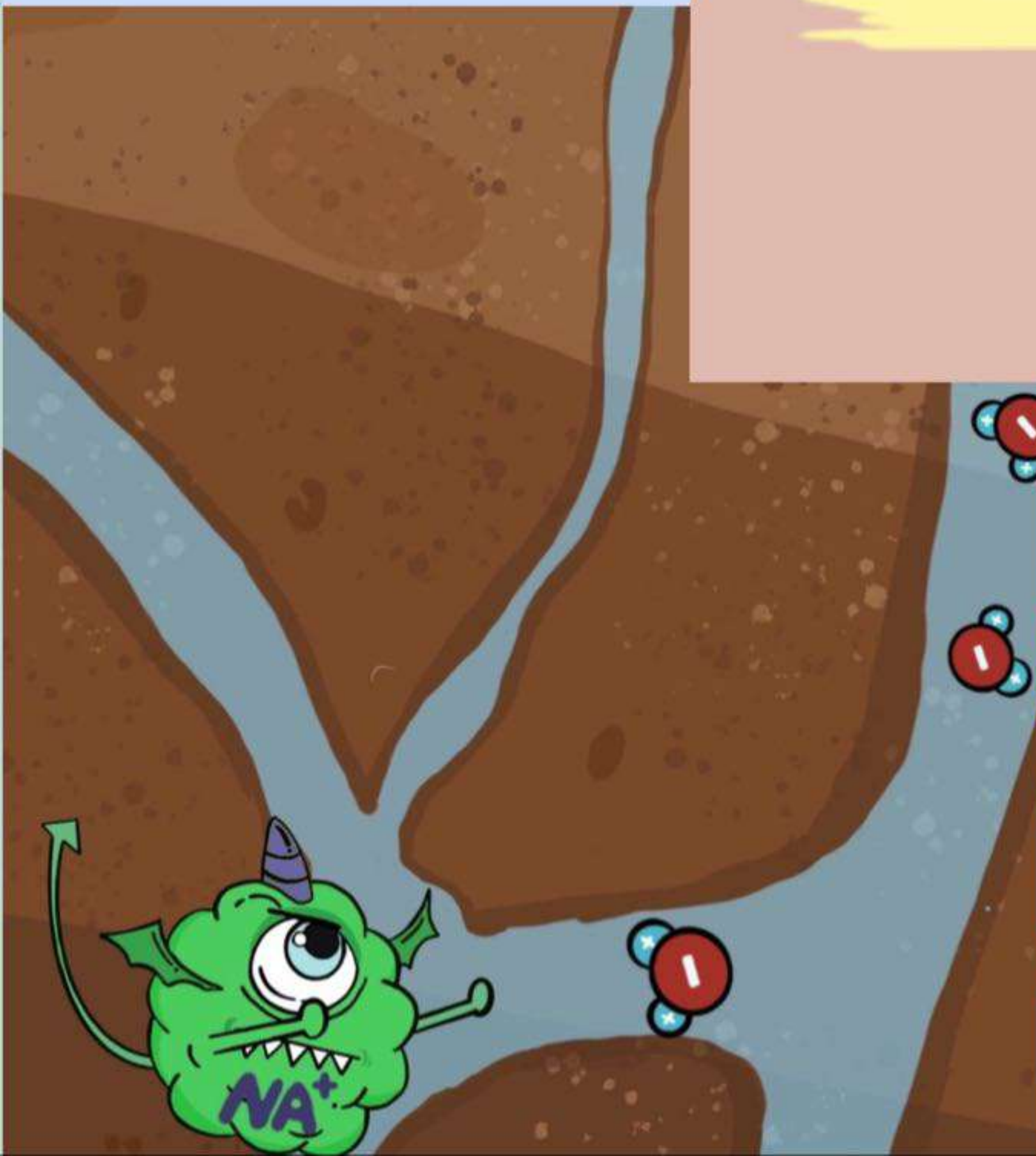


***Halt soil salinization
boost soil productivity***



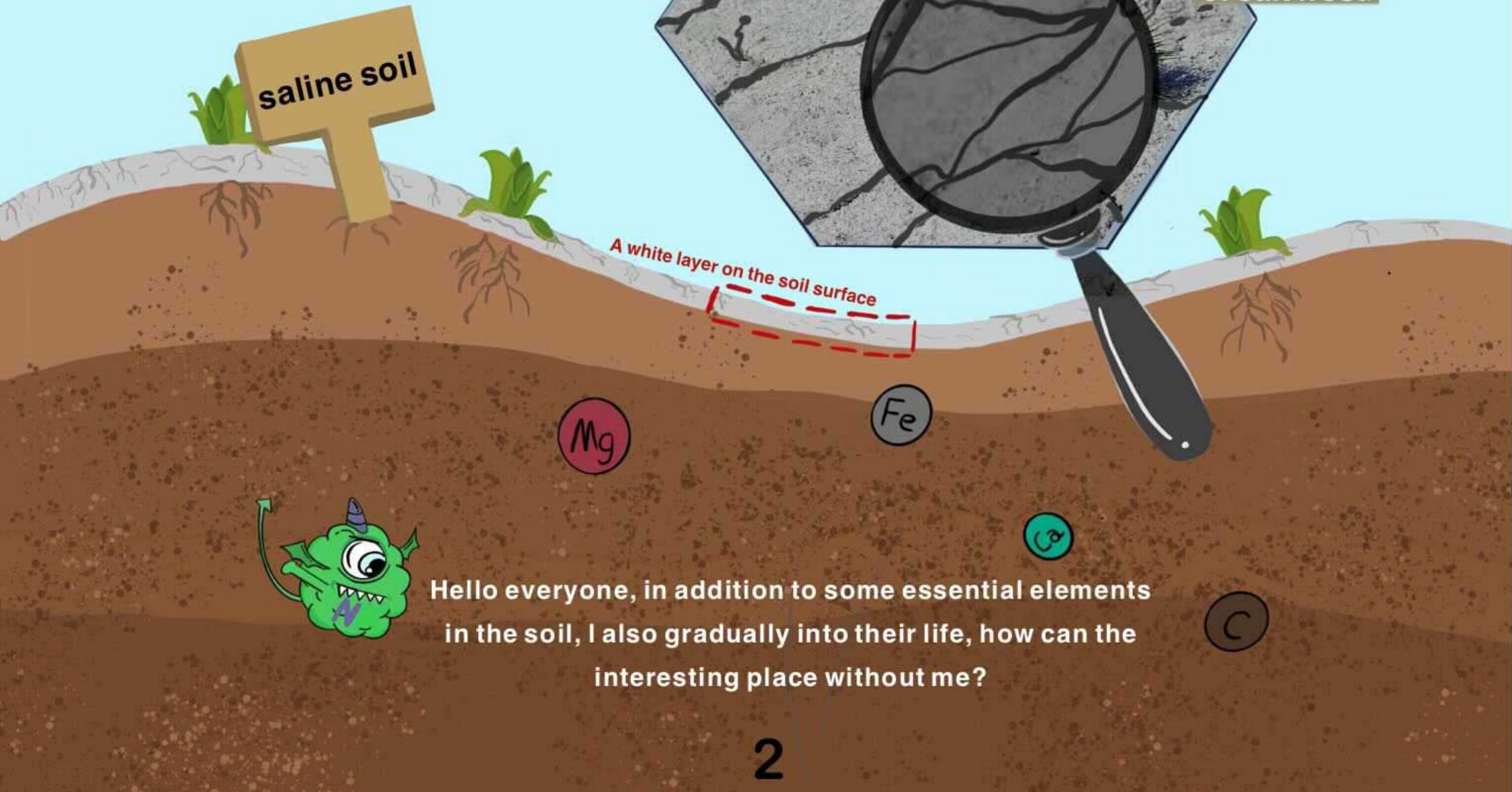
...to only temper
er, sometimes m
s entire life.



The earth is our home, but due to the rapid development of human civilization, the earth is under increasing pressure, and land salinization is one of them.

Hey~! We are plugging the pores and then destroy the soil structure. The plants and soil can't absorb water properly.

When we get together, we will be dissolved in water, and then move up to the topsoil by capillary force. There we form a thin layer of salt frost.



saline soil

A white layer on the soil surface

Mg

Fe

Ca

C



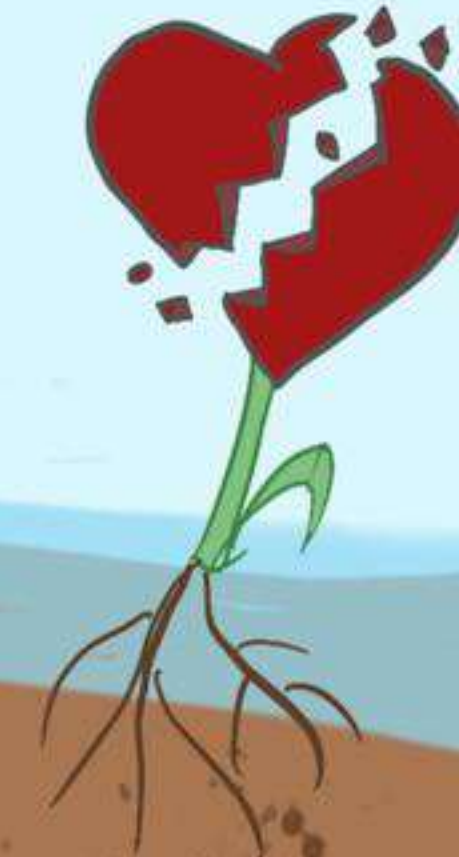
Hello everyone, in addition to some essential elements in the soil, I also gradually into their life, how can the interesting place without me?



strong evaporation



Less rainfall



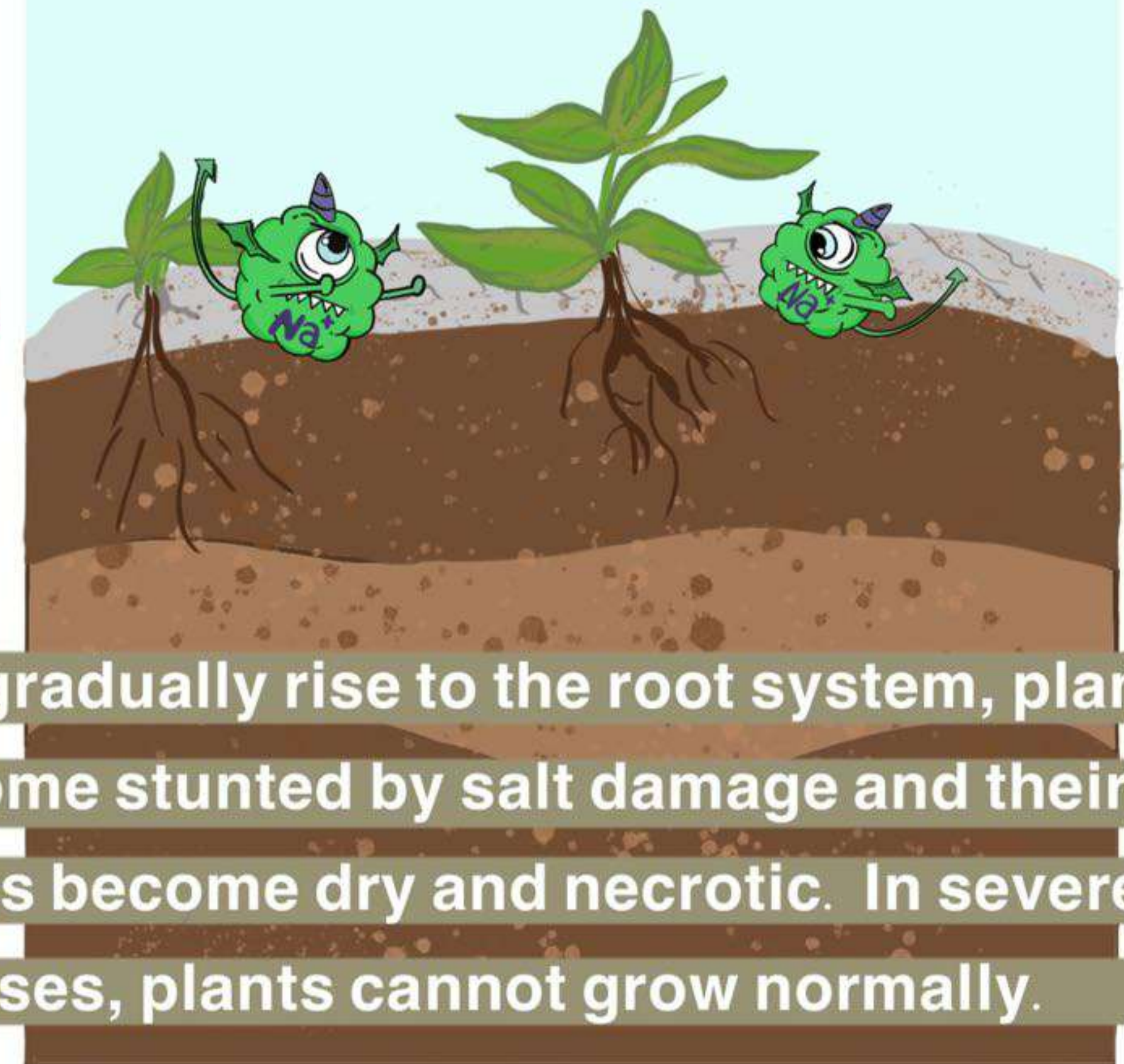
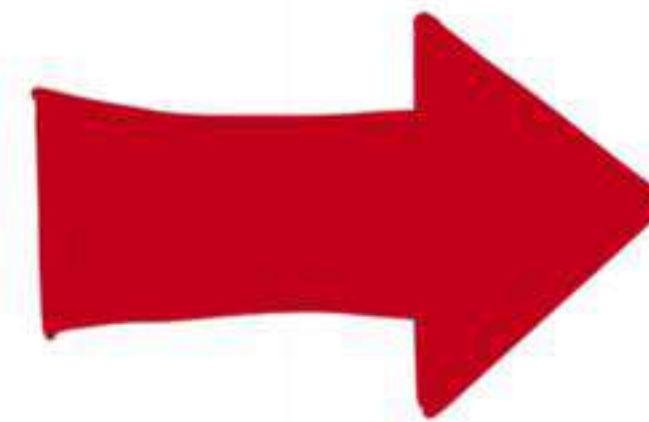
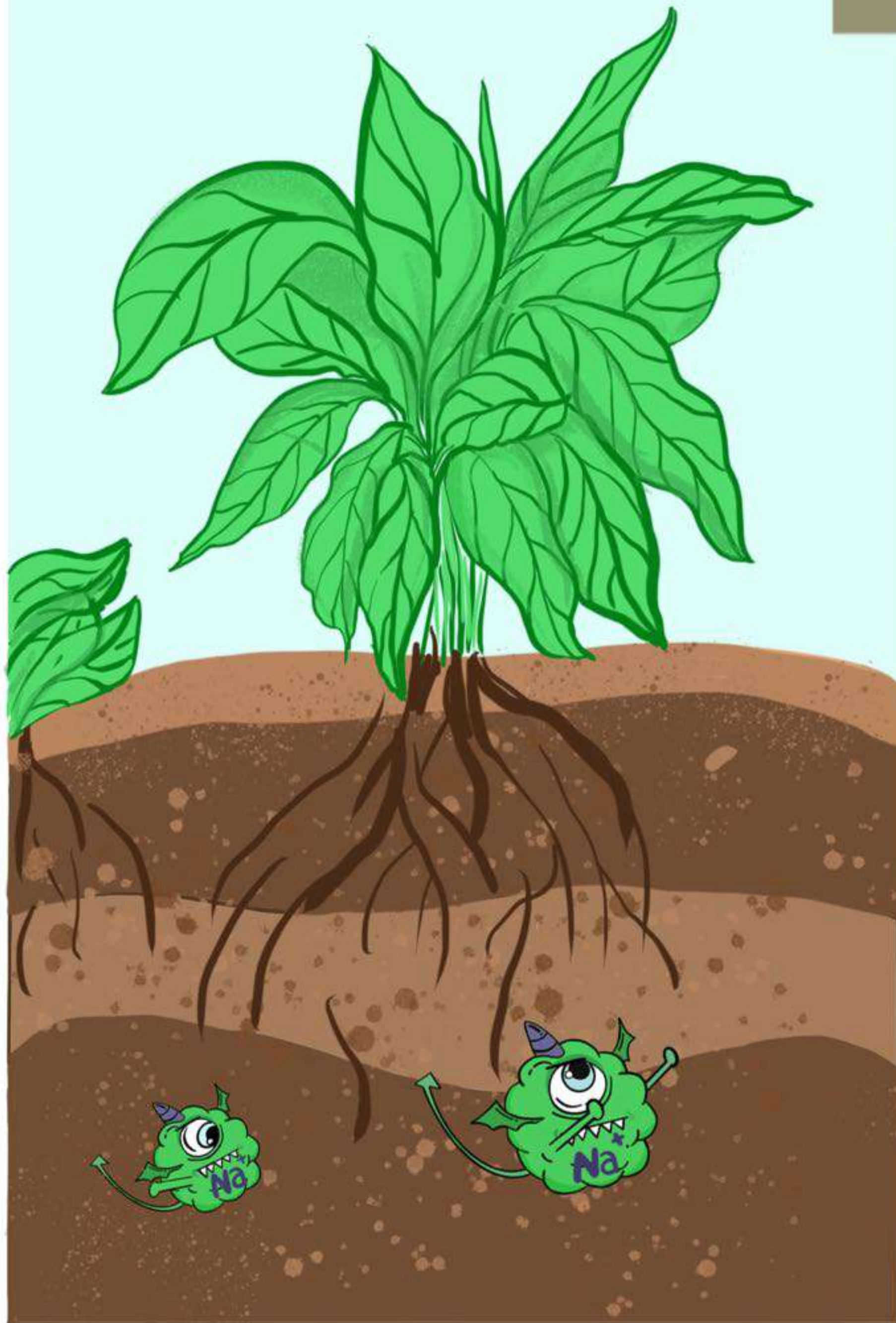
Climatic conditions have an important impact on salt accumulation.

In arid and semiarid areas, due to less precipitation and strong evaporation, the salt move and accumulate on the surface, which block the absorption of nutrients and water.



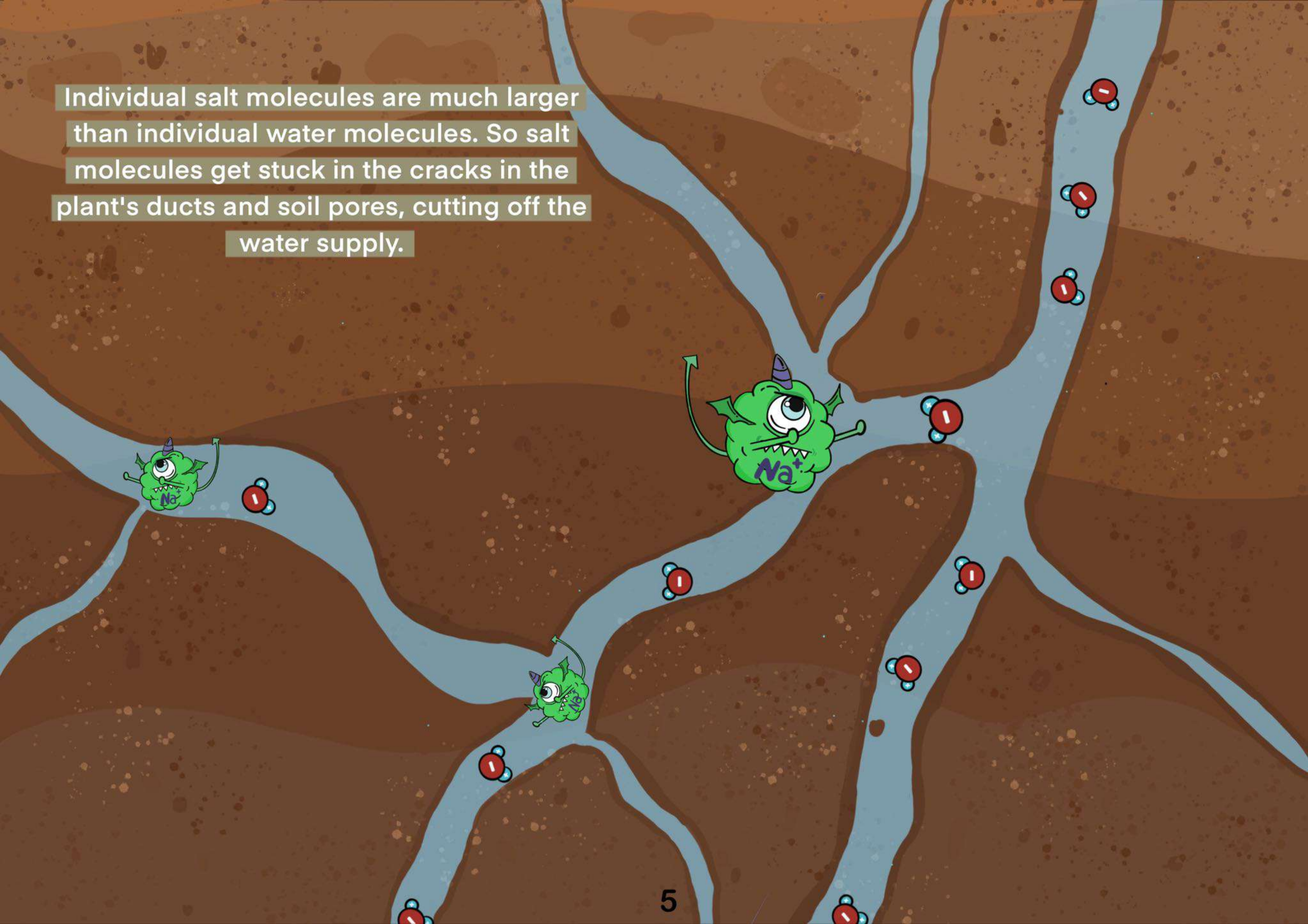
Do you know how do we
damage plants and soil?

Keep reading~

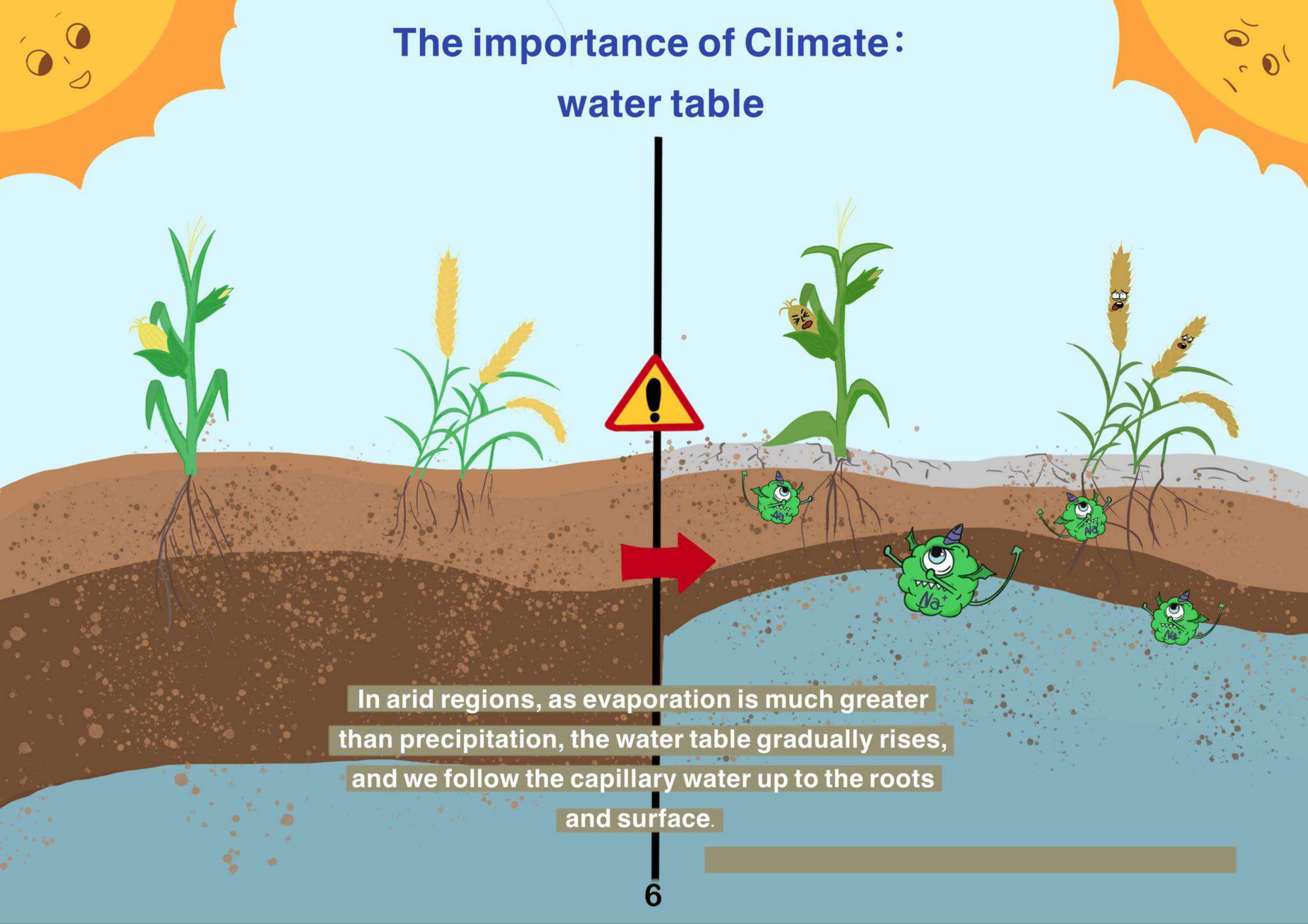


As we gradually rise to the root system, plants
become stunted by salt damage and their
leaves become dry and necrotic. In severe
cases, plants cannot grow normally.

Individual salt molecules are much larger than individual water molecules. So salt molecules get stuck in the cracks in the plant's ducts and soil pores, cutting off the water supply.

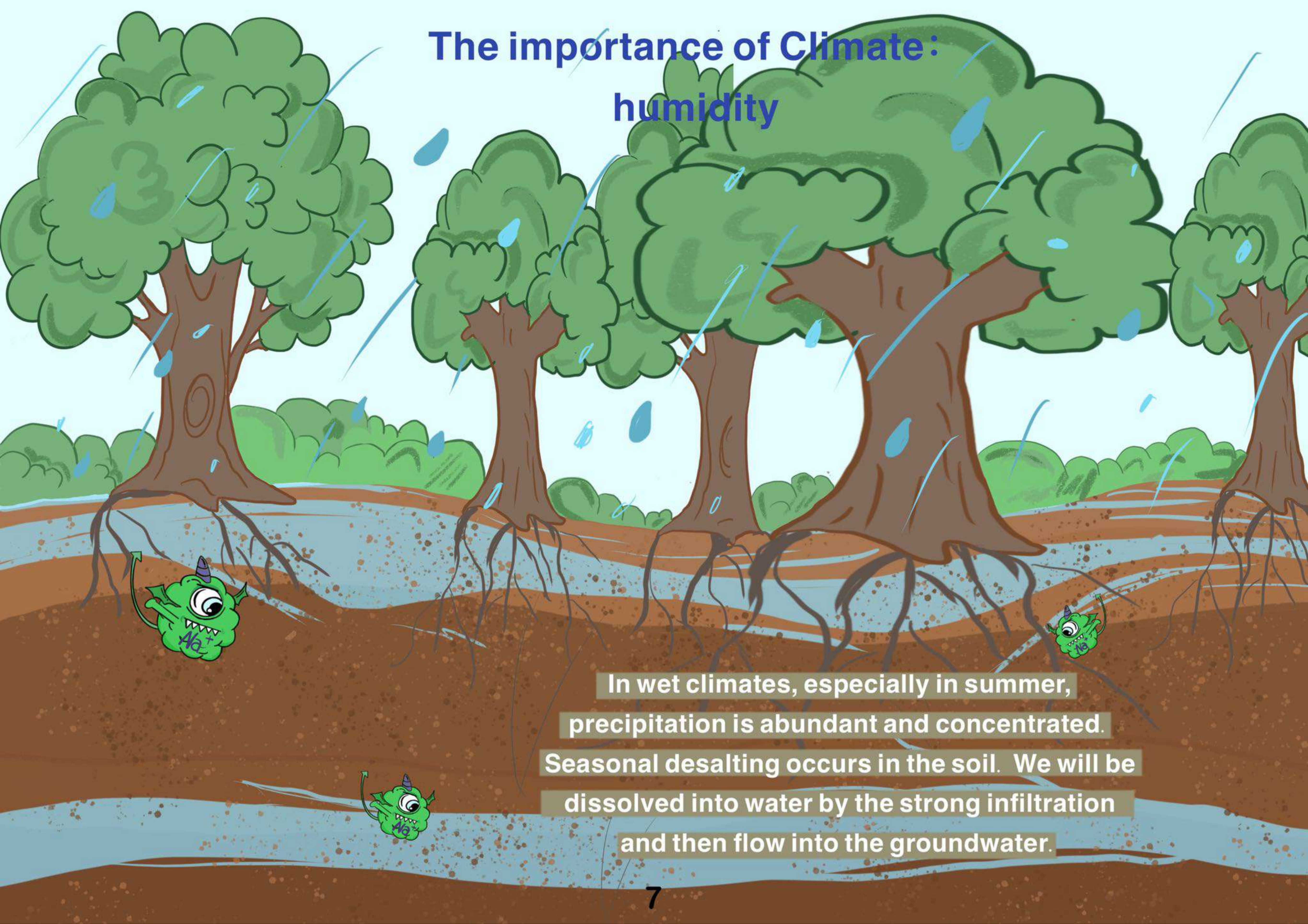


The importance of Climate: water table



In arid regions, as evaporation is much greater than precipitation, the water table gradually rises, and we follow the capillary water up to the roots and surface.

The importance of Climate: humidity



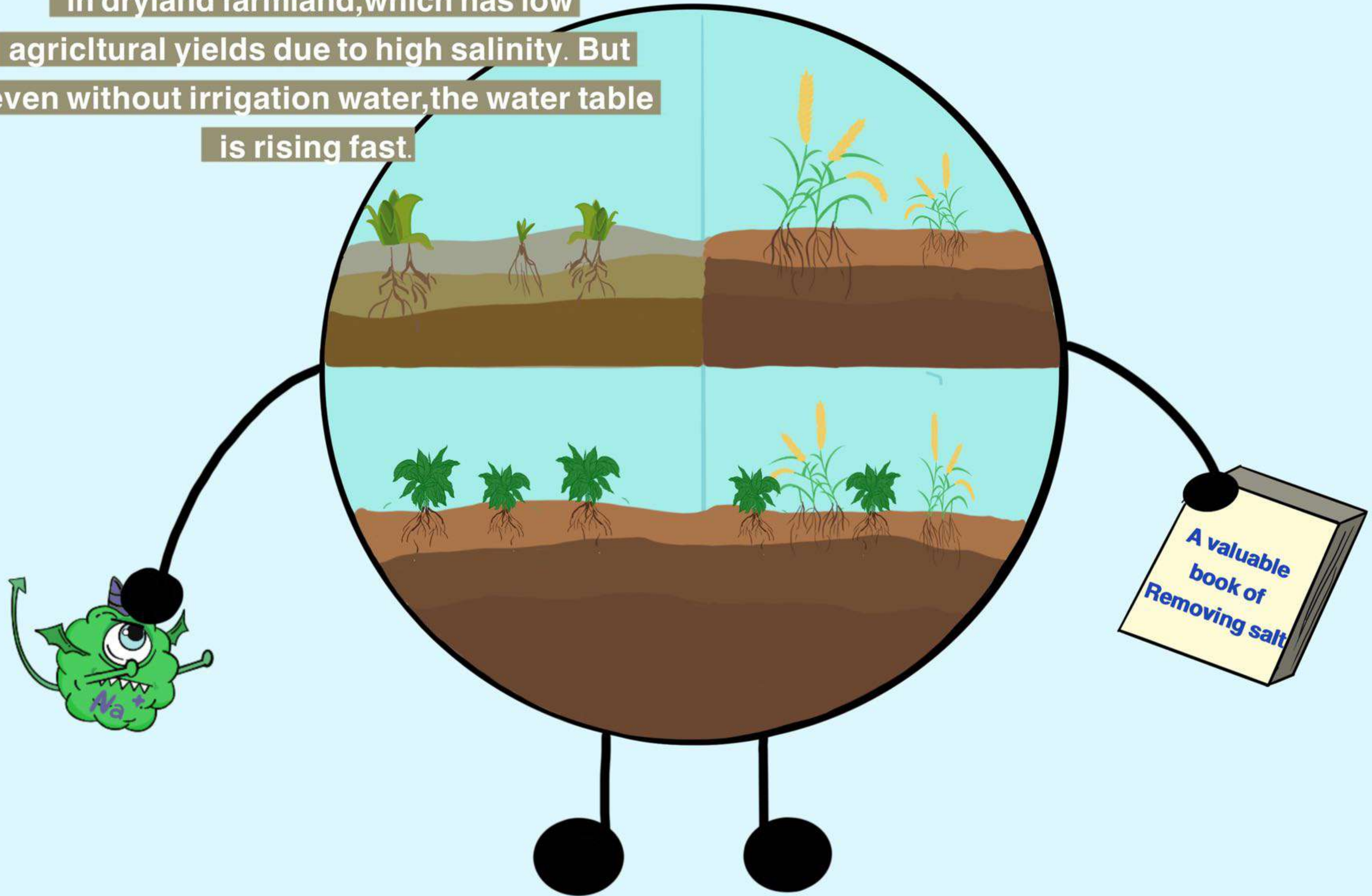
In wet climates, especially in summer, precipitation is abundant and concentrated. Seasonal desalting occurs in the soil. We will be dissolved into water by the strong infiltration and then flow into the groundwater.

In good conditions, the plants will not be able to absorb water, resulting in slow growth. In bad cases, the plants will die.

The original vegetation will be replaced by shallow-rooted plants, and more rainwater will flow directly into the groundwater, causing the groundwater level to rise.

Rainwater will dissolve the accumulated salt and bring the salt water to the roots of the plants.

A quarter of the earth's salt content is found in dryland farmland, which has low agricultural yields due to high salinity. But even without irrigation water, the water table is rising fast.



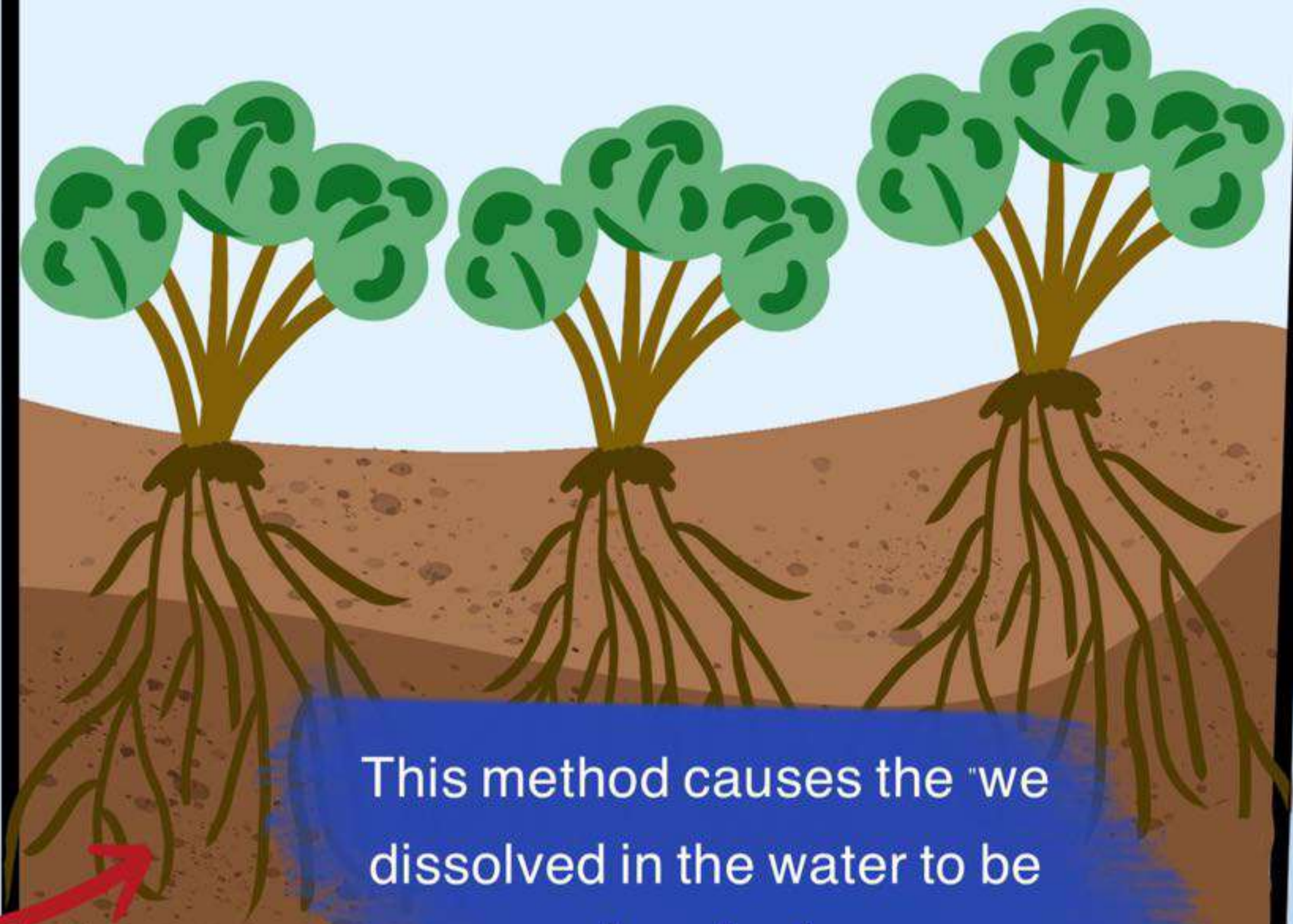
Two ways to remove salt

Rinse the soil regularly with enough fresh water to wash out the salt. But this is only temporary for us, and it requires a lot of water, sometimes even more than the plant need for their whole growth period.



A valuable book of Removing salt

Plant trees or shrubs that have deep roots that can absorb most of the water that seeps into the ground and lower the water table.



This method causes the "we dissolved in the water to be absorbed.

Will the children become little soldiers to defend us?





Food and Agriculture Organization
of the United Nations

2021

Halt soil salinization ***Boost soil productivity***

