

soil sience

EARTH'S COLOR STORY

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DISCOVERING SOIL COLORS

Soil color is like a secret code that tells us a lot about the dirt beneath our feet. It's super important for farming, nature, and figuring out how healthy the soil is.

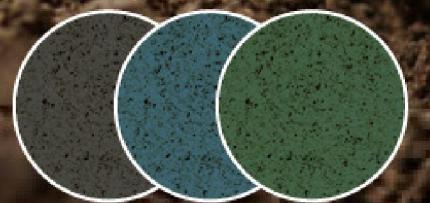
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Determining soil type based on COLOR



Reddish soil:
Location is generally dry with seasonal wetting.
Darker red means higher iron content.



Grey, blue, or green soil:
Location is poorly drained.
If waterlogged for long periods of time, spots or mottles of blues, greys, and greens often result, indicating lack of oxygen.



Dark brown soil:
Within a small geographical area, darker brown often means higher organic matter content, although darker colors do not always mean a fertile soil.



White soil:
Lime or salts are present.
pH is high.



WHY SOIL HAS DIFFERENT COLORS

Lots of things decide the color of soil, like how much stuff is in it (organic matter), what minerals it has, how wet it is, and what tiny living things are inside. All these things affect the soil's color.

SOIL COLOR AND HEALTHY LAND



Soil color is like a checkup for the Earth. It helps us see if the land is feeling good or if it needs some help. It's the Earth's way of letting us know if everything is okay. Just like finding a band-aid for a scrape, we can look at soil color to find if the Earth has any problems. Changes in color tell us if the soil is not feeling well – maybe it's losing important stuff or getting a bit sick.



SOIL COLOR AND FARMING

The color of soil can help farmers know if it's good for growing plants. Dark soil usually means it's full of good things for plants, while lighter soil might need more help.



WATER AND SOIL COLOR

DARK SOIL KEEPS WATER WELL

Knowing if your soil is dark or light helps decide how to water your plants. Dark soil needs less watering because it keeps water longer. Light soil needs more attention to make sure plants don't get too thirsty. It's like giving each soil type the right amount of water for happy, healthy plants.

LIGHT SOIL DRAINS WATER FAST

Light-colored soil is like a speedy runner – it lets water go quickly. This is good to prevent too much water staying around, but it means plants might get thirsty faster. They might need more frequent sips of water.

FIGURING OUT HOW TO WATER PLANTS

Dark soil is like a sponge that loves holding water. It has lots of good stuff (organic matter) that keeps water around for plants. This helps plants stay hydrated, especially when it's not raining much.



WHAT COLORS TELL US ?

The shades of soil are like a history book, quietly telling the story of the land. Each color is a chapter, revealing secrets about what happened in the past and how the environment shaped the soil we see today. When you spot red or yellow in the soil, think of it as the soil blushing with iron. These colors often signal a presence of iron oxides. It's like a treasure map pointing to where iron has left its mark, shaping the landscape over time.

HUMANS CHANGING SOIL COLOR

When farmers work the land a lot, it can change how the soil looks. Plowing, using plant food (fertilizers), and other farm jobs can mix up the colors. It's like the Earth's makeover with human touch. Building cities changes the soil too. Roads, buildings, and cities give the soil a new look. It's like a city's signature on the ground. Understanding this helps us take care of our cities and the land they're built on.





CONSLUSION

In the end, soil color is a cool way nature talks to us. It helps farmers, scientists, and everyone who cares about the Earth to understand what's happening in the ground and how to keep our land healthy. For farmers, knowing soil color is like having a helper for growing crops. It's a tool that tells them what the land likes, ensuring plants have a cozy home to grow. Soil color is like the Earth's way of giving farming tips.

**THANK
YOU**