

Soil science facts

Did you know...?



Soil development generally begins at the surface of rocks and progresses in depth over the course of time, whereby layers are formed with different properties, called **soil horizons**

Body width of soil organisms largely determines their microhabitats



The **pedosphere** comprises all soils as a whole

The **aqueous phase** of the soil is called soil solution. It consists of free water, dissolved ions and molecules, and dispersed colloidal particles



They serve the **ecological balance** plant and animal production or various uses of civilization



About **40 to 60 %** of the soil volume consists of pores, which can be filled with water (soil solution) or gases (soil air), depending on the actual soil moisture



Soils are the natural sites for all terrestrial plants, developing roots in the soil space that anchor them in the soil, and absorbing water, oxygen and nutrients from the soil through their root system

Soils, as a part of ecosystems fulfill a series of functions for human beings and the environment



Carbon content

Carbon content, or the dark color value, is a differentiating criterion for soil descriptions

Soils are the **biologically active part** of the outermost layer of the Earth's crust, ranging in thickness from a few centimeters to several decameters



[Learn more](#)

Facts taken from the textbook – now available in a first English-language edition

Scheffer/Schachtschabel Soil Science

Blume, H.-P.; Brümmer, G.W.; Fleige, H.; Horn, R.;

Kandeler, E.; Kögel-Knabner, I.; Kretzschmar, R.; Stahr,

K.; Wilke, B.-M.

2016, XVIII, 618 p. 255 illus., 218 illus. in color.,

Hardcover

ISBN: 978-3-642-30941-0