

Features of Soil Profile:

1. The different soil colour and texture help in dividing the soil profile into layers or horizons.
2. There are about four horizons or layers in a typical soil profile.
3. The layers are A horizon or the organic matter layer, B horizon or the topsoil, C horizon or the subsoil and D horizon or bed rock or parent rock material.
4. The topsoil contains dry, decaying and decayed organic materials. It is dark in colour. It consists of humus.
5. The B horizon is also called the sub-soil. The top soil can be divided into two layers based on its colour. The upper layer is dark in colour and contains coarse sandy loam, fibrous branches, taproots, bacteria, fungi, worms and mites. The second layer is yellowish or greyish or brownish in colour. It contains sandy loam, little humus, taproots and is the richest part of the top soil.
6. The top soil and the organic matter layer are easily eroded or scrapped by bad cultural practices, therefore, care must be taken to prevent this. It is ideal for food crop production.
7. The C horizon or parent materials is reddish orange, gravelly and contains sandy clay soils. The clay content is very high. Taproots can be seen here occasionally.
8. The D horizon is the bed rock, and an area in which rocks had not been transformed.

Importance of Soil Profile:

1. It helps to determine the best soil suitable for agriculture.
2. It identifies the part where plant nutrients can be found, that is the top soil, is the richest part of the soil.
3. It also helps to determine the level in which water can be available in the soil.
4. A loosely packed subsoil will reduce erosion and soil run-off.
5. The nature of the parent material will also determine the type of mineral salts available to plants.