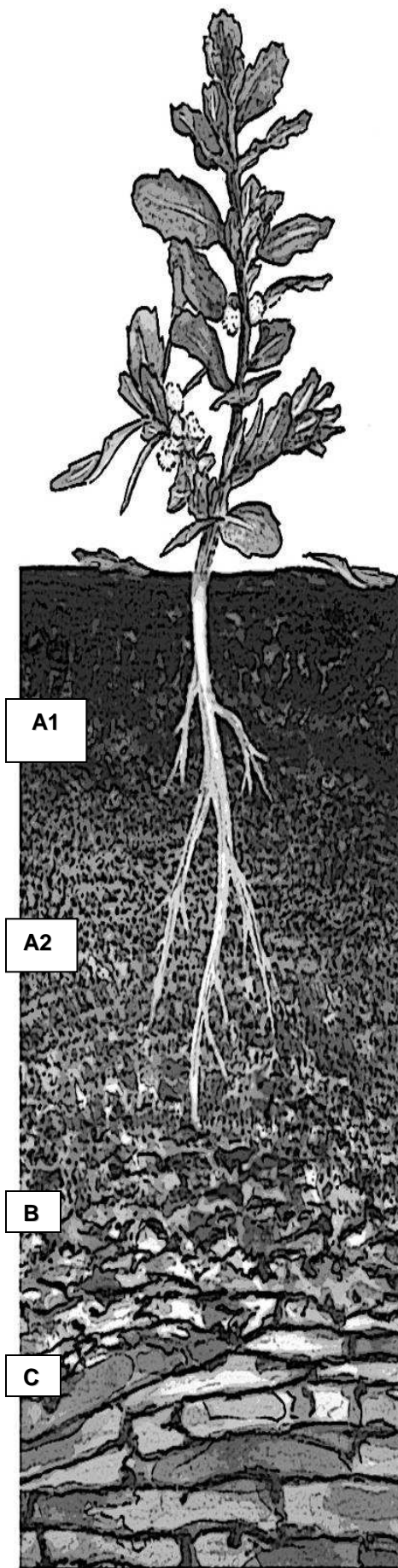


## Soil Horizons



**A Horizon** – This is the top layer, usually what we think of as soil. Decomposed rock is the basis. The type of rock determines the soil classification (e.g., sandy clay). There can be 1-3 sub-horizons, A1, A2, A3, depending on nutrient leaching. The rock is the solid part of this horizon. It typically occupies only  $\frac{1}{2}$  of the volume. The other half is water, air and living matter- the decomposed plants, live animals, fungus, and bacteria. Without this biota, nothing would decompose.

**B horizon** - (may be subsoil) – The B horizon does not always develop. It happens only if colloids, particles so small ( $<.002$  mm) they are suspended in water, are present. Clay, iron, aluminum, and org. matter are carried in the water stream below the A horizon. These particles may pack into an impermeable layer called clay or hardpan.

**C horizon** – This is parent material or crunched up rock with no organic matter.

**R horizon** – bedrock. (not shown)