



METADATA

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Abstract

Soils are central to life on Earth because they provide food, clean water and air due to their filtering capacity; raw materials; habitats for living organisms; and climate resilience via carbon sequestration, therefore supporting a variety of ecosystem services. Despite this, soil's life-sustaining functions have been underestimated until recently, and few people seem to be aware of them. It is now clear that soil plays an active role in maintaining life and that life is unable to exist without it. The insights about soils that have been gleaned over the last few decades have revealed that these complex systems are fragile, scarce, non-renewable, threatened resources as well as a crucial link between local and global environmental issues. Pedology is the study of soils as they occur in their environment. This includes soil morphology, formation, genesis, classification, and mapping. These topics make pedology relevant for tackling global issues such as soil, food, energy and water security, and climate regulation

and human health. Pedology is the study of soils as they occur in their environment. This includes soil morphology, formation, genesis, classification and cartography. These topics make pedology relevant for tackling global issues such as soil, food, energy and water security, and climate regulation and human health. Pedology is an integrative and extrapolative science. Pedologists integrate an understanding of landscapes, vegetation patterns, climate and human activity into knowledge about soils and their distribution and extrapolate their knowledge into soil maps. Pedology is the "heart", the "soul" and the "artistry" of soil science: the "heart" because it integrates all the components of soils in their landscapes; the "soul" because it deals with concepts of soil morphology and genesis; the "artistry" because it deals with the location and patterns of soils. Pedology is the "glue" that holds soil science together and is the hard core of soil science that does not fit with any other science discipline.

