Types of soil

Types of Soil & Their Uses Soil is a complex system of organic and inorganic matter that directly and indirectly supports plant and animal life. It is comprised of minerals, nutrients, water, microorganisms and decomposed living matter that provide the essential elements required to sustain growth. The soils of different geographical areas differ in chemical makeup, structure, pH value, texture and color. Soil makes the basis of the ecosystem and performs functions essential for the survival of living matter. Clay Soil

Clay soils contain high levels of nutrients and minerals and support a variety of plant life if drained adequately. These soils are silky-smooth to the touch and finely grained. Wet clay soils are pliable, lumpy and sticky but they dry to form hardened clots. These soils are often difficult to work with and prone to water logging. Clay soil is used to grow roses, bergamots, compassplant, partridge pea, prairie dock, purple coneflower and rattlesnake master. Grasses that prefer heavy clay soils include Indiangrass, switchgrass and big bluestem.

Clay soil is also used extensively in the construction industry. Clay can be fired or dried in the sun to make bricks, which are then assembled to form different structures. Clay, combined with straw and sand makes cob. Cob is a construction material which is used to make buildings, ovens and benches. Clay soil is also used to make wall, floor and counter top ceramic tiles. Loamy Soil Loamy soil combines silt, sand and clay in a 40: 40: 20 ratio. It's rich in organic matter, nutrients and drains well.

Loamy soil is ideal for plant cultivation and is commonly used to grow flowers, small garden fruit and a variety of vegetables. Tomato plants, lambs

quarters, chickweed, bear's breeches, cardinal flowers, feverfew and geraniums prefer loose, loamy soil. Loam, in combination with straw, is also used in wall construction and applied on the inner surface of walls to control humidity. Peaty Soil Peaty soil is composed largely of decomposed vegetable matter--typically sedges and mosses.

It is light, easily waterlogged and highly acidic. Peaty soil, or peat soil, is typically found in low-lying areas that are susceptible to water logging. These soils are organic, nutrient-rich and fertile and may require additional drainage. They are used to grow azaleas, rhododendrons, primroses, heather and other acid-loving, or ericaceous, plants. Peat soil is also used in nurseries to adjust the pH level of soils. Saline Soil The soil in extremely dry regions is usually brackish because of its high salt content.

Known as saline soil, it can cause damage to and stall plant growth, impede germination, and cause difficulties in irrigation. The salinity is due to the buildup of soluble salts in the rhizosphere—high salt contents prevent water uptake by plants, leading to drought stress. It’s easy enough to test if you have saline soil. You’ll probably see a white layer coating the surface of the soil, your plants are growing poorly, and they’re suffering from leaf tip burn, especially on young leaves. Silty

Silty soil has much smaller particles than sandy soil so it’s smooth to the touch. When moistened, it’s soapy slick. When you roll it between your fingers, dirt is left on your skin. Silty soil retains water longer, but it can’t hold on to as much nutrients as you’d want it to though it’s fairly fertile. Due to its moisture-retentive quality, silty soil is cold and drains poorly. Silty soil

can also easily compact, so avoid trampling on it when working your garden. It can become poorly aerated, too.