Basic Soil Types

Clay

Typically badly drained – lack of air leads to acidification and locking up of nutrients. Cold and heavy. Slow to warm up in spring. Feels sticky, can be rolled into a ball. Usually contains good range of nutrients/trace elements, which can be unlocked by addition of lime/calcified seaweed (flocculation) and addition of leafmould and other bulky organic materials. Blue-grey clay indicates poor drainage, red clay less so and yellow clay indicates good aeration and drainage.

Silt

Represents accumulation of a range of materials over a long time – alluviation. Tiny particles - so drains badly. Feels silky smooth, slippery, dark, easily stains hands when rubbed. Fertile, but addition of manure/compost, even coarse grit will help hold particles apart. Prevent silt from compaction by keeping cultivated – bare patches should be green manured.

Sand

Light coloured, free draining. Feels coarse and gritty. Warms up quickly in spring, especially if darkened with organic matter. Too dry in summer, nutrients leach in winter. 'Hungry' soil requiring lots of compost, manure, leafmould and mulches, but is highly responsive to improvements and is good for root crops. Keep mulched or green manured when not in use.

Chalk

Thin, dry, 'hungry' soil. Feels dry and crumbly, looks grey-white. Rapid draining, nutrients leach easily. Easy to work, but often shallow so avoid digging up subsoil and make raised beds. Demands lots of organic matter input. Mulching and green manuring essential. Alkaline soil, so naturally acidic materials help: composted manure, composted grass cuttings and veg. waste/crop waste composts, bracken. (N.B. 'green waste' composts tend to already be alkaline). Once improved, good for brassicas.

Peat

Spongy, dark, and when drained, warms easily. But usually waterlogged and acidic. If gets dried out is slow to re-moisten. Low in nutrients, but its fine fibrous physical properties encourage extensive root growth. Will hold added nutrients quite well once added – any bulky organic matter plus seaweed. For crop growing requires conditioning with a liming agent – especially calcified seaweed or magnesian limestone.

5 – 10% humus content + combinations of soil types leads to light/medium/heavy loams

Learner Sig. Date Assessor Sig.

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