

WHY OPTIMISE ULTRA-FINE LIME?

- GETTING TO KNOW YOUR CEC'S

SOIL CHEMISTRY

Cation Exchange Capacity (CEC) measures the soil's ability to hold cations, - it's "holding capacity". More specifically, it is the number of negatively charged sites in a soil that positively charged cations are attracted to.

CEC is comprised of the type of clay, the amount of clay and the amount of organic matter in the soil.

YOUR SOIL TEST

Exchangeable cations are divided into two groups:

Basic Cations

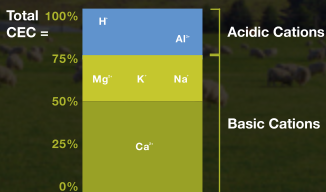
- Ca²⁺
- Mg²⁺
- K⁺
- Na⁺

Acidic Cations

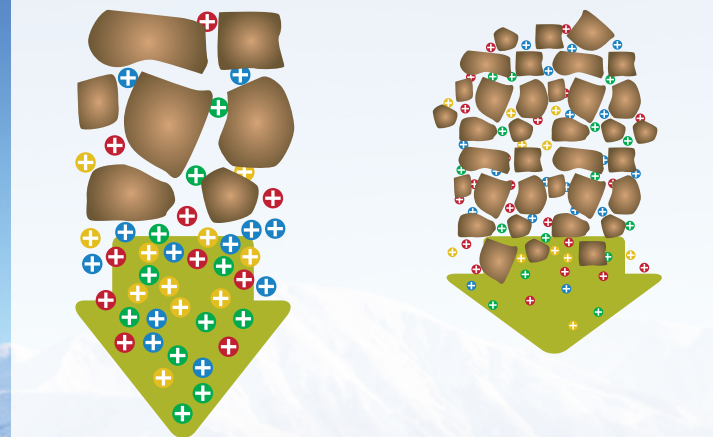
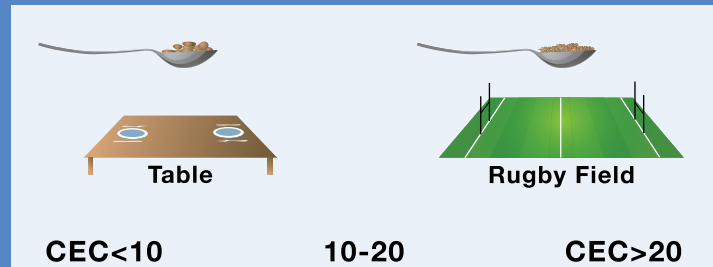
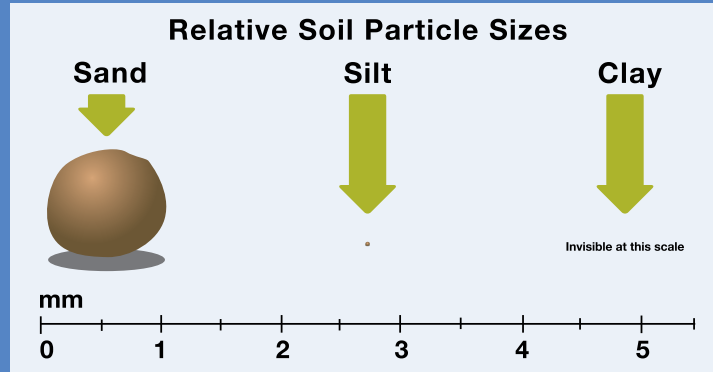
- H⁺
- Al³⁺

Total CEC

Base saturation indicates what percentage of the CEC sites are occupied by the basic cations:



SOIL TEXTURE



SOILS WITH CEC 1-10

- High sand content
- Nitrogen and potassium leaching more likely
- Less lime required to correct a given pH
- Physical ramifications of a soil with a high sand content
- Low water-holding capacity

SOILS WITH CEC 11-50

- High clay content
- More lime required to correct a given pH
- Greater capacity to hold nutrients in a given soil depth
- Physical ramifications of a soil with a high clay content
- High water-holding capacity

SIZE DOES MATTER

Reducing the particle size of mineral nutrients (e.g. lime) increases the surface area and significantly improves availability.

In order for plants to absorb nutrients, the nutrients must first be dissolved.



QUANTITY COMPARISON

100ha =

