Cation Exchange Capacity

Measurement of the capacity of a soil to hold exchangeable cations

Practically, it’s is a measurement of the natural fertility possibilities of a soil

See, it isn’t that difficult!

- The more negative charges, the higher the CEC, the more cations the soil can potentially hold, and hold onto.
- ‘Good cations’: Ca++, K+, NH4+
- ‘Bad cations’: Na+, Mg++ (in California), (others in acid soils)
- Clay vs other mineral elements.
- Organic matter vs clay.
CEC vs Base saturation

- **CEC**: how many cations your soil can hold
- **Base saturation**: measurement of how much of the CEC is full of other cations besides H+
- High CEC, with high base saturation of the good cations. Yipee! (See text: table 8)
- Ca: Mg ratio of 2:1 or better.
- Na: less than 5%.
- How does the Cabrillo soil look? In 2009?, in 2010?