

A soil sample should give you the complete picture!

A soil sample should:

- ◆ Identify what is in the soil (chemical parameters)
- ◆ Identify what is available to the plant (soluble parameters)
- ◆ Identify the cation ratios, as per Ca, Mg, K, Na, and H
- ◆ Identify the soil EC, CEC, pH, Organic Matter and soil solution weight
- ◆ Identify the macro and micronutrients in the soil
- ◆ Identify the ratio of cations to anions

→ *Give you answers and directions to solve problems* ←

This New Exclusive Test covers 42 points, measuring your nutrient parameters.

Terms to know:

CEC – The CEC determines the ability of the soil to hold nutrients

Organic Matter (OM) – Is the measurable amount of carbon dioxide released from the soil in the presence of acid.

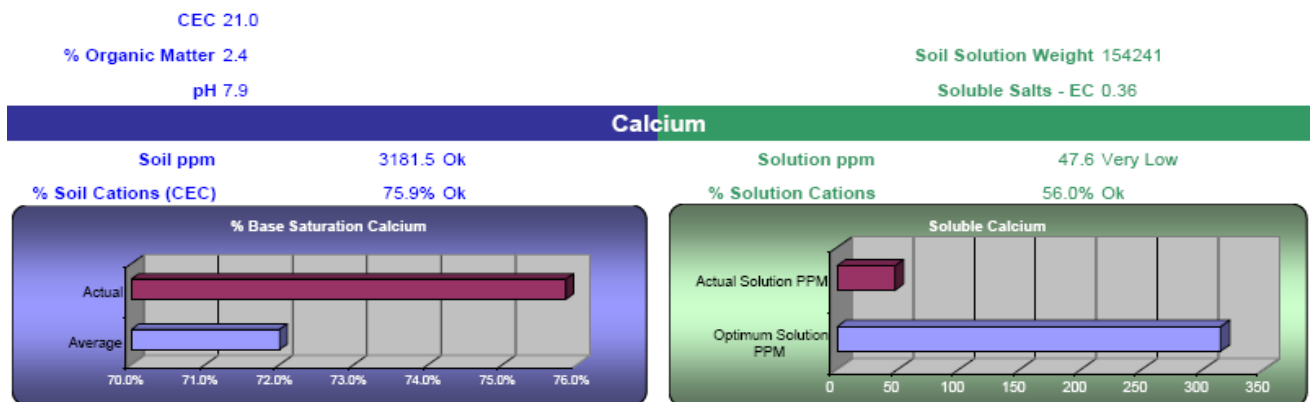
Humus – Is the more active portion of the soil OM

pH – Is the negative log of the H⁺ ion concentration, a low pH means the soil has excess H⁺ ions, and a high pH means the soil has excess OH⁻.

Soil Solution Weight – Is defined as the weight of the water in the soil at field capacity (FC).

The Exchangeable extraction is run by the addition of acidic reagents to the soil to identify nutrients in the soil. This test only identifies what is in the soil and MAY be available, not what is available.

The Soluble Paste extraction is run by the addition of distilled water to the soil to identify nutrients in the soil. This test only shows what is soluble in the soil and what can be available to the plant.



Lets do some math...

There are **3181** ppm of Calcium in the soil. Therefore in the top 6 inches of an acre there are **6,362** lbs. of Calcium.

There are only **47** ppm of soluble Calcium in the soil. Therefore in the top 6 inches of that acre there are only **7.2** lbs. of soluble Calcium.

Why is this important?

A decision based on a traditional soil test (blue graph on left) only "sees" what is actually present in the soil, not what is soluble (ie. readily available, green graph on right). Utilizing this technology we are able to dramatically refine the inputs to achieve maximum effectiveness, and improve efficiencies. As your nutritional cost inputs continue to increase, you'll be happy to have this new compass to manage your resources.