

Below are concise explanations for typical values encountered in a Soil Analysis report.

1. **pH:** This measures the acidity or alkalinity of the soil. A pH of 7 is neutral, below 7 is acidic, and above 7 is alkaline.
2. **EC (Electrical Conductivity):** This measures the soil's salinity, indicating how much salt is in the soil. Higher values can indicate issues with salinity affecting plant growth.
3. **Ca (Calcium):** Calcium levels in the soil, which help improve soil structure and plant cell development.
4. **Mg (Magnesium):** Magnesium content in the soil, essential for photosynthesis and overall plant health.
5. **Na (Sodium):** Sodium content in the soil. Excess sodium can harm soil structure and plant growth.
6. **K (Potassium):** Potassium levels, important for plant growth, helping with water regulation and disease resistance.
7. **Cl (Chloride):** Chloride levels, which in small amounts can be beneficial for plants, but excess can be toxic.
8. **SAR (Sodium Adsorption Ratio):** A measure of the relative concentration of sodium compared to calcium and magnesium. High SAR indicates potential for soil compaction and drainage problems.
9. **Lime:** Refers to the amount of lime required to neutralize soil acidity.
10. **L.P. (Lime Potential):** Measures the soil's ability to neutralize acids or resist changes in pH.
11. **B (Boron):** Boron content in the soil, which is an essential micronutrient for plant growth but can be toxic in excess.
12. **NO₃N (Nitrate Nitrogen):** The available nitrogen in the form of nitrate, important for plant growth.
13. **PO₄P (Phosphate Phosphorus):** The available phosphorus, crucial for root development and energy transfer in plants.
14. **Zn (Zinc):** Zinc content, necessary for various plant enzyme systems.
15. **Mn (Manganese):** Manganese levels, important for photosynthesis and other plant processes.
16. **Fe (Iron):** Iron levels, crucial for chlorophyll production and overall plant health.
17. **Cu (Copper):** Copper levels, important for plant metabolism.
18. **SO₄S (Sulfate Sulfur):** Sulfur content, needed for protein synthesis and chlorophyll formation in plants.