SOIL NUTRIENT TESTS

Gardeners and others often need to know the levels of macro-nutrients in their soil. The La Motte kit we use is widely available to anyone seeking this information and it addresses 4 important soil parameters: pH, nitrogen (N) and phosphorus (P) and potassium (K), the latter 3 being termed NPK (on soil supplement fertilizers).

pH is a measure of acidity with 7 being neutral:

![pH scale](image)

Most plants prefer slightly acidic soil but there are others that like it a little basic or alkaline. The pH does affect the availability of nutrients (mineral) to the plant as seen below:

![Nutrient Availability by pH](image)

[Calscape.org](https://calscape.org) is a great site for CA natives where you can check out the acceptable pH range for each plant.

The Floc Ex you use early on helps remove suspended particles from the solution of water and soil before running each assay. Each test relies on a colorimetric result which yields a range of values for each nutrient. N and P are required for proteins and nucleic acids in plants. The potassium, K, is usually pretty common; it’s needed for a number of cellular functions.
Here are the La Motte instructions to familiarize yourself with the procedures before doing the activity. You’ll receive a copy in class.