

Soil Amending

Know your soil – have it tested for pH and soluble salts.

Well water for irrigation – have it tested for pH and salt intrusion.

These factors contribute greatly to how and what you will use for amending

Aluminum sulphate or any sulfur/sulphates based (even in fertilizers) will acidify the soil and reduce the alkalinity.

Lime pelletized or hydrated will “sweeten” or increase the alkalinity and raise the pH. Pelletized is slow release and hydrated is quick release.

Amending soil should be done to entire beds, not just individual planting holes.

Exception: Roses and Citrus or Edible Fruit Trees, must continually amend soil through top dressings for greatest production

N = Blood Meal is organic nitrogen – organics are slow release

Nitrogen promotes growth and deep green color

P = Bone Meal is phosphate, develops sturdy root systems, stimulates plant-blooms

Phosphorous also helps plants relieve stress. Soil tests indicate that our residential soils often have plenty of phosphorous and additional applications are not needed.

K = Muriate of Potash very strong source of potash not recommended for container grown plants.

Potash is immediately available to plants. It helps with photosynthesis, water balance and cold tolerance.

Vermiculite – Inorganic soil amendment. Does not have any nutritional value. Does add volume and air to soil and has moisture retention abilities.

Perlite – Inorganic soil amendment. Again, does not have any nutritional value. Does add air and volume to soil and allows for healthy root growth. Keeps the soil drier for begonias, succulents, etc.

WATCH OUT! Pre-mixed soils,

Look for where fertilizers and additives are derived from. Sulphur based products add acid to soil. If soil is too acid or too alkaline it locks up the nutrients in the soil and makes them unavailable to the plant.

Benefits of Adding Organic Matter to the Garden

1. Improves tilth, condition, and structure of soil.
2. Improves ability of soil to hold water.
3. Improves ability of soil to hold nutrients.
4. Improves "buffering" capacity of soil; that is, keeps soil from "over-reacting".
5. Supports the soil's microbiological activity (or the life of the soil).
6. Contributes nutrients, both minor and major.
7. Releases nutrients slowly.
8. Acids arising from the decomposition of the organic matter help to convert insoluble natural additives such as ground rock into plant-usable forms.
9. Helps vegetables survive stress, as from nematodes.
10. Helps dispose of organic waste products.