

Fertilizer and Lime

Fertilizer

When plants are actively growing they need a steady supply of nutrients. Although our soils contain many of the nutrients that plants need it is necessary to supplement them as they grow. In addition the heavy rains in the coastal area wash away much of the mineral content of the soil is each year. But remember that a plants needs change during the growing season.

Depending on the crop we add specific or general fertilizers that contain Nitrogen, Phosphorous, and/or Potash expressed as N-P-K. The amount of each is expressed as a percentage of each component (ex. 6-8-6 has 6% Nitrogen, 8 % Phosphorous, and 6% Potassium). As well as these basic elements quality fertilizers contain micronutrients such as Boron, Calcium, Iron, Magnesium, and Sulphur and others. The rest of the fertilizer is made up of filler which is mostly organic matter.

Nitrogen

- Gives **leaves** their green colour
- Induces rapid growth
- Increases yields of leaves
- Increases protein content of food crops
- Feeds soil micro-organisms during their decomposition of low Nitrogen organic materials

Phosphorous

- Stimulates **root** development
- Stimulates **blooming** and aids in seed formation
- Gives rapid and vigorous start to plants
- Is extremely important to germinating seedlings

Potassium

- Produces strong stiff **stems and stalks**
- Imparts increased vigor and disease resistance
- Increases plumpness of seeds
- Imparts winter hardiness to legumes and other crops

Inorganic fertilizers are made from synthetic substances with concentrated amounts of specific nutrients. You see almost instant results as the nutrients are immediately available.

Organic fertilizers are made from the remains of by-products of once living organisms. They release their nutrients more slowly.

Dry fertilizers come as powders, granules, or pellets that can be spread on the ground. Many are time-release types that break down over several months.

Liquid fertilizers are sold as crystals, granules, or liquid concentrates that need to be mixed with water before applying by watering or spraying on the foliage. They need to be applied frequently as their nutrients wash away rapidly.

Lime

Lime is a soil conditioner, not a fertilizer. Lime changes the pH of soil. pH ranges from 0 (totally acidic) to 14 (totally alkaline). Most plants prefer a pH between 6.0 and 7.0. Some plants such as Rhododendrons and Blueberries prefer acidic soil (pH 4.0 to 5.5). A high pH (above 7.0) or low pH (below 4.0) reduces a plants ability to absorb nutrients from the soil.

Here in the Pacific Northwest the soil is naturally acidic and therefore we need to add lime to our garden beds to provide adequate growing conditions. Lime neutralizes pH, meaning that it raises low pH or lowers high pH, bringing it closer to 7.0. Lime provides the following benefits to your garden:

- Neutralizes soil acidity
- Supplies calcium and magnesium
- Speeds the decay of organic matter
- Increases the fixation of nitrogen by soil and plant organisms
- Improves crop yield
- Improves the physical properties of soils
- Reduces the activity of toxic substances in the soil

The most common form of lime for gardens is Dolomite lime. Dolomite lime is a natural form of lime that contains calcium and magnesium. Dolomite lime should be applied to your garden and lawns during the fall and early spring months. We sell Dolomite lime in granules, and pellets.

Vegetable crops benefit from the addition of lime, especially **tomatoes**. Lime can help prevent Tomato blight and blossom end rot. It is recommended that you add a small amount of lime to your tomato plants once a month during the growing season.