Fertilizing Your Plants

Feeding your plants is essential for their successful growth and development just as proper watering and soil preparation. Picking the correct plant food can be challenging with so many “flavors” to choose from. The following guide is a general explanation of the fertilizer ratio, types of fertilizers available so you can select what works best for you, and how to fertilize different types of plants.

**Fertilizer or N-P-K ratio:** a three number combination that represents the percentages of nitrogen-N, phosphorus-P (in the form of phosphate $P_2O_5$) and potassium-K (in the form of potash $K_2O$) found in a plant food. These nutrients are used the most for plant growth and tend to be very deficient or depleted in garden soil or the landscape, therefore fertilizer is necessary to replenish them.

- **Nitrogen-N** promotes healthy, green top or foliage growth. Lawn fertilizers typically contain high nitrogen for quick grass greening.
- **Phosphorus-P** develops strong bottom or root growth. Starter fertilizers or bulb foods are typically high in P. Phosphorus can also improve fruiting and flowering. We recommend Triple Phosphate for stubborn plants such as Wisteria or Hydrangea that don’t want to produce blooms.
- **Potassium-K** improves the overall growth and processes of the plant, helps develop stronger roots and stems, uniform fruiting and reduces drought stress. Tomato foods and some root stimulators have higher K levels.

**Organic vs. Inorganic**
- **Organic** plant food/soil amendment is derived from natural sources; a product/by-product of animals or plants such as manure, feather meal, bone meal, seaweed, etc. They decompose slowly over time to build-up nutrients, making them available to plants over a longer period of time.
- **Inorganic** plant food derived from synthetic material that is all or partially made from man-made, chemical compounds. They are quick release and readily available for plants to absorb.

**Liquid vs. Dry Forms**
- **Liquid** plant food is typically a water soluble concentrate you mix with water. It is absorbed and feeds rapidly requiring regular applications every 2 weeks.
- **Granular or pelletized** types are slow release that breakdown over a longer period of time (2 months or more) depending on water, heat and microorganism activity.

**Recommended Plant Fertilization**
- **Annuals:** feed regularly during the growing season with a multi-purpose, liquid or slow release fertilizer, like Miracle-Gro or Osmocote. Follow label instructions.
- **Perennials:** Use slow release fertilizers 2-3 times a growing season. Plant-tone and Iron-tone in spring or when planting, apply Osmocote in summer, and Plant-tone in early fall to prepare the plant for winter. Supplement liquid fertilizer to benefit tired looking plants as needed.
- **Trees & Shrubs:** feed at least twice during the growing season with a slow release fertilizer like Plant-tone or Holly-tone & Iron-tone in early spring and again early fall. Follow label instructions.