

Plant Nutrients

Plants require 16 nutrients to grow.


They get carbon, hydrogen and oxygen from air and water. Healthy soils provide the other 13 essential nutrients. However, some soils are deficient or cannot supply enough nutrients for plants, such as turf grasses, with high nutrient requirements. In these cases, fertilizers are needed to maintain optimum plant health. Plant nutrients are divided into categories according to the amounts needed.

What In Harmony does

For our tree and shrub customers, we follow a balanced fertilizer program that delivers all of the essential nutrients. We observe plants to determine which nutrients may be deficient and will apply extra fertilizer as needed. When symptoms do not pinpoint a particular nutrient deficiency, we may suggest a tissue or soil sample.

We monitor plant health so we can supply only the fertilizer necessary, thus keeping excess nutrients out of our water supply. We use a complete array of organic fertilizers to meet your plants' nutritional needs while protecting our environment.

Here are some of the fertilizers we use:

- Organic plant fertilizer with mycorrhizae.
- Azomite, an organic product, contains all the essential minerals and micronutrients in a balanced ratio. It will replenish the soil, correct mineral deficiencies and boost plants' immune system.
- Supertrace, a multi-mineral liquid organic fertilizer containing essential micronutrients. 

Primary Nutrients Needed in largest amounts.

Nitrogen (N)	Promotes rapid growth, increases leaf size and quality, promotes seed and fruit development.
Phosphorus (P)	Enhances germination and growth of seeds, stimulates blooming and root growth.
Potassium (K)	Promotes vigor, disease resistance and sturdy growth.

Secondary Nutrients Needed in somewhat smaller amounts than primary nutrients.

Calcium (Ca)	Major constituent of cell walls. Important for root growth.
Magnesium (Mg)	Vital to chlorophyll production. Aids enzyme reactions needed for growth.
Sulfur (S)	Improves root growth and plant growth and seed production.

Micronutrients Needed in relatively small (trace) amounts.

Boron (B)	Aids production and transport of sugars and water intake by cells.
Chlorine (Cl)	Aids plant metabolism and photosynthesis.
Copper (Cu)	Necessary for the production of proteins, important for reproduction.
Iron (Fe)	Essential for formation of chlorophyll and for oxygen transfer.
Manganese (Mn)	Helps nitrogen assimilation and breakdown of carbohydrates.
Molybdenum (Mo)	Helps in the use of nitrogen and formation of root nodules.
Zinc (Zn)	Activates enzymes which regulate plant growth, helps protein production.

References

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