



# Fertilizing Tips

## Why Fertilizer?

Just like people need a balance of protein, carbohydrates, and vitamins, plants need “food” in the form of nitrogen, phosphorus, potassium, and other minor nutrients. Fertilizing helps the plants perform their best.

### *Reasons you may need to fertilize include:*

- Encourage shoot growth, root growth, flowering, or fruiting.
- Establish newly planted trees and shrubs.
- Enhance foliage color and plant appearance.
- Correct or prevent nutrient deficiencies.

### *Three prime chemicals elements are found in all mixed fertilizers:*

- N = NITROGEN promotes healthy leaf growth by stimulating the production of chlorophyll (the main chemical involved in photosynthesis—how plants convert sunlight to food).
- P = PHOSPHORUS supports the vigorous development of roots, stems, blossoms, and fruits.
- K = POTASSIUM plays a key role in helping plants digest and manufacture their foods.

Fertilizer “grade or analysis” is the percent nitrogen, phosphorus, and potassium guaranteed by the manufacturer to be in the fertilizer. It is denoted with dashes in the order N–P–K e.g. 10-10-10.

Different Plants have different fertilization needs, general applications include:

### *Early spring (March/April):*

- Apply an organic-based or a slow-release fertilizer to the soil surface area for shrubs at a rate of 1 lb. of nitrogen per 1000 square feet area—the application rate is typically prescribed on the bag.

### *November:*

- A second application of the same spring fertilizer at the same rate would be appropriate for new landscapes until they reach the size you want to retain.

More fertilizer does not equal a healthier plant, and it does not solve every problem (pests). It is possible to overfeed your plants. Too much fertilizer damages or kills plants. Try testing your soil if your plants are struggling and regular fertilization isn't helping. Learn more at <https://www.ces.ncsu.edu/local-county-center/>