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## Winterizer Fertilizers

Many gardening advertisements recommend fertilizing ornamental trees and shrubs to increase vigor and speed growth. When fall rolls around, the gardening advertisements also recommend “winterizer” fertilizers. While each gardener will do as they see fit (and what their schedule and budget can afford), you may wonder if fertilization is really necessary? Well, read on and you can make your own decision.

Fertilizers containing nitrogen will speed growth of ornamental trees and shrubs, but is this really what we’d like to do? My answer is no. Faster growth translates into weaker wood, more succulent foliage (which is more attractive to herbivorous animals and insects), and may lead to excessive pruning to control the increased growth. Pruning creates wounds in the plant which increases susceptibility to disease and uses energy to heal the wounds. Larger, more succulent plants can increase irrigation demand.

Fruit trees, lawns, crops, flowering annuals, roses, bulbs, and indoor plants do require regular fertilization. This is because we are placing increased demands on these plants. Most locally adapted ornamentals do not require regular fertilization. Proper irrigation is usually all ornamental plants need to become established and perform in the landscape.

Fertilizers should only be used on ornamentals when nutrient deficiency symptoms appear. Symptoms may include poor or chlorotic leaf color (pale green to yellow), reduced leaf size and retention, premature fall coloration and leaf drop, reduced twig and branch growth and retention, and overall reduced plant growth and vigor. Some of these symptoms are caused by soil compaction, limited light, excessive heat, poor drainage, poor aeration, and other factors.

Assess the performance of each ornamental plant individually and resist the urge to apply fertilizers without reason. Cool season lawns (fescue, bluegrass, and rye) should be fertilized with nitrogen in the fall and spring (not summer). Warm season lawns (Bermuda, Buffalograss, and gramas) should be fertilized with nitrogen during the summer months.

Fruit trees and roses should be fertilized with nitrogen in the late spring, summer, and early fall. Rose growers also have their “secret” fertilizers (fish emulsion, alfalfa meal, etc.). Vegetable crops, flowering annuals, and bulbs should be fertilized with nitrogen and phosphorus during soil preparation. Organic matter is also critical during soil preparation of these plants. Bulbs planted during previous seasons should be fertilized when they have leaves present to store nutrients for the following year.

Winterizer fertilizers are often proportionally low in nitrogen and high in potassium. I have already said fertilizers are not normally necessary for ornamental trees and shrubs, but the advertisements are often directed specifically at lawns. The logic used is that potassium can help the buildup of carbohydrates and proteins in the root system, making them more likely to resist the cold and survive the winter. If you are growing bermudagrass or another warm season grass, this makes more sense. Cool season grasses are just initiating their growth and will not be storing energy. Rather, they will be mobilizing stored carbohydrates and proteins to initiate growth.

When trying to grow healthy lawns, there is no substitute for proper mowing height, irrigation, and fertilization with nitrogen at the appropriate time of year for that grass. Warm season grasses may benefit from winterizing fertilizers if all these cultural practices are in place. Grass should be mowed as high as possible and irrigated deeply and infrequently (not every day). This will develop a deep root system and allow the water to be used at a greater depth within the soil profile.

Excessive fertilization can also be harmful to beneficial soil microbe populations. When beneficial soil microbes are present, they can help meet plant nutritional demands through natural processes. Fertilizers can also build up excessive soil salts and pollute nearby water bodies. .

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