

Common Cultural: Fertilizer burn

Use Integrated Pest Management (IPM) for successful plant problem management.

Biology

Excessive use of fertilizers can damage or kill plants. High levels of salts in the soil will damage plant roots, resulting in reduced water uptake. The salts may also accumulate in leaf tissues, causing a dieback or necrosis of leaf tips and margins. Symptoms of overfertilization in broadleafed plants may begin with wilting and slowed growth as the plant suffers from decreased water availability. Tips of young and old leaves will turn brown and tender shoots may be killed. Conifers show damage as needle tip necrosis in a regular pattern throughout the canopy. Container plants are particularly susceptible to fertilizer damage. In containers, additional warning signs to watch for include accumulation of a brownish or whitish crust on the planting medium or along the inside rim of the container. Lawns where fertilizers have been misapplied may show a pattern of stripes where spreader overlap has occurred, or may show patches of browning, dead turf. Often, these patches occur where turns are made with spreaders, or at starting and stopping points where excess fertilizer has been dropped or spilled. Quick-release products that aren't watered in properly or that are applied in hot weather are a common cause. Unlike symptoms of many disease and insect problems, fertilizer burn symptoms are typically evenly distributed on the plant. Even if plants are not damaged, excess fertilization may encourage other problems. Aphids, mites, and other pests often thrive on the lush, tender growth resulting from heavy fertilization.

Management Options

Non-Chemical Management

- ~ Fertilize moderately according to the needs of the plant.
- ~ Never apply fertilizer to plants stressed by heat or drought.
- ~ Do not apply dry or granular fertilizers where they will come into contact with wet foliage, as burned spots on the foliage may result.
- ~ Fertilizers require moisture to work. For best results, apply fertilizers to moist soils and water in thoroughly.
- ~ When in doubt, soil tests will provide information about the levels of nutrients already available in your soil. For the most accurate results, contact a reputable soil testing facility for more information.
- ~ Where excess fertilizer is suspected in container plants, some of the salts may be leached from the soil by watering heavily and allowing the waste water to drain away from the pot. This will only be effective for quick-release or liquid fertilizers, however.

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides

None recommended

Common Cultural: Fertilizer burn

Images



~ Caption:
~ Photo by: R.S. Byther