Fertilizer No Cure All

Dennis Hinkamp
Utah State University

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For some reason we have the erroneous idea that giving a plant extra fertilizer should cure any ailment. This makes about as much sense as prescribing a bowl of ice cream for a broken leg.

Fertilizer is not a magical medicine that can heal all plant problems, says Jerry Goodspeed, Utah State University Extension horticulturist. In reality, it is not curative at all, but simply a source of nutrients for their survival. Most sickly plants do not need an extra dose of fertilizer because it only stimulates new growth. Most ailing plants need time to heal.

Fertilizer only helps fix problems when the plant is deficient in a certain nutrient, he explains. Most plant ailments are not caused by a lack of nutrients, but rather because of incorrect watering, or an attack by insects or diseases. Even iron chlorosis, which is an iron deficiency, is normally a symptom of over-watering. Once the watering is reduced, the plant often recovers.

Fertilizers replace missing nutrients in the soil, he says. Mother Nature supplies them on her own, but at a much slower rate than we normally would. Plants in their native setting do not receive additional fertilizer to help them grow and they do just fine. However, since we often put plants closer together in our landscape than they normally would be in nature, they may need a few extra nutrients to help them perform at their peak.

Most plants in our landscapes are not grown to harvest, Goodspeed says. We just want them to look good, so normally we do not have to push extra growth. For most plants this can be accomplished by re-suppling a small amount of nutrients in the soil each spring.

When adding fertilizer to the soil it is important to know something about how it acts once it is in the ground, he says. The three numbers on a bag of fertilizer indicate the percent of nitrogen (N) content of that product, phosphorus (P) and potassium (K), respectively. These are the nutrients that are needed in the largest amounts by plants.

Nitrogen is a very mobile nutrient in the soil, Goodspeed explains. It moves with the water through the soil and is broken down quite quickly by microbes and natural chemical processes. It is also the nutrient that turf needs the most because of its growth habits. Most other plants take up enough nitrogen in the spring to last them the entire year, so they only need fertilizing once in the spring.
While nitrogen moves quickly through the soil, phosphorus and potassium are essentially immobile, he says. Once these two elements are applied to the soil, they can remain there for many years, or until a plant uses them. This is why we should only apply them, at most, once a year. In addition to fertilizers, many of our soils in Utah are already abundant in P and K -- almost to a toxic level.

So, as we get into the growing season this spring, be careful when applying any extra fertilizer, Goodspeed says. And, if you have a plant that seems a little troubled, find out what's wrong before you stuff its soil with more fertilizer. That may not be the answer.

For more information, contact your local USU County Extension office.

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