

To Fertilize or not to Fertilize

By John Kochanowski

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The good news is - California soils contain most of the nutrients required by plants. The bad news is - they are rarely fertile enough to supply all the nutrients plants need for vibrant growth. Because the area's soil contains most needed nutrients, only the nutrients that are deficient are required. Few gardeners get fertilizing right, most either over or under fertilize. Too little fertilizer produces poor plant growth, and too much wastes money and can potentially run off and pollute our waterways.

There are two ways to determine if fertilizer is needed. The easiest is a visual evaluation. Nitrogen poor plants will have yellowing of older leaves, slower growth and density. In the case of a lawn, the decreased density will be noticed by less clippings and greater invasion of weeds, especially clovers. Nitrogen is naturally low in California soils and is a nutrient that is easily washed out of the root zone of plants. Nitrogen is often the only supplement plants need.

Iron deficiency also produces yellowing of new leaves, but initially does not cause slower growth. Phosphorus is low in highly weathered soils, which are red in color with hardpan or clay pan layers in the soil. Symptoms of phosphorus deficiency are stunted growth with a purplish cast to the leaves. Phosphorus is not mobile in the soil, and should be dug in to be effective.

Improper watering will cause the same symptoms as lack of nutrients because the plants either do not have the water needed to take nutrients from the soil or are drowning. Before adding fertilizer, confirm the soil contains the proper moisture. Contact the local Master Gardener Office if you do not know how to tell. Pest damage will also cause visual damage, but will produce dead leaves and the damage will be localized rather than through the entire plant.

The second method of determining nutrient needs for the soil is to have the soil evaluated by a lab. While Master Gardeners do not provide this service, many local nurseries do. Soil should be gathered from several locations in the garden. The nursery staff can advise you of the costs and may know of the deficiencies in local soils.

Fertilizer use can be reduced by grass cycling (mulching) on lawns and composting and mulching in the garden. Grass cycling can reduce lawn fertilizer needs by 20% and reduces the amount of material going to landfills. When grass cycling, apply fertilizer when needed, when there is evidence of yellowing leaves or slowing growth.

Adding compost or mulches to the garden area will add many nutrients to the soil as well as improve the soil structure. Unless the compost or mulch is well aged, nitrogen may still be deficient since it is used up in the decomposition process and not available to plants.

Look for the right balance. Don't make the mistake of thinking fertilizer is bad, because plants remove nitrogen from the soil and it needs to be replaced. On the other hand, "more" is not better when it comes to fertilizer. Excess fertilizer can wash out of the soil and contaminate the watershed. Excess fertilizer can also burn your plants.

Saturday, August 11th, Master Gardeners present “Lawns and Lawn Alternatives”. Learn about the best practices for maintaining your lawn to reduce the need for and cost of pesticides, herbicides, fertilizer and water. The class is offered at no charge. It starts at 9:00 a.m. and is held in the Veterans Memorial Building, 130 Placerville Dr., in Placerville.

Mark your calendar for the Master Gardener Fall Plant Sale on Saturday, September 15th from 8:00 a.m. to 3:00 p.m. The sale will be held in the parking lot of the Veterans Memorial Building. Fall is the best time to plant ornamental plants in your landscape; it’s also the time to start your winter vegetable garden. You’ll find both types of plants at the sale.

Master Gardeners are available to answer home gardening questions Tuesday through Friday, 9 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome. The office is located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our Master Gardener website at http://ucanr.edu/sites/EDC_Master_Gardeners/. Sign up to receive our online notices and e-newsletter at <http://ucanr.edu/mgenews/>. You can also find us on Facebook.

Do you have 1-gallon plant containers and plastic feed bags to recycle? Master Gardeners will gladly take them at the Master Gardener Office. Call before dropping them off and thank you for the donation.