



To Fertilize or Not to Fertilize? That is the Question

by Nancy Hawkins, UC Master Gardener

Mandatory water restrictions have forced us to drastically cut back on the amount of water we use in our gardens. Fertilizers require water to apply. Fertilizers encourage new growth, root development and flower production. New growth requires even more water. By now, you should have figured out the answer to the above question. As we reduce the amount of water we apply to our plants, we should also greatly reduce the amount of fertilizer we apply.

When plants are heat- and drought-stressed, their growth slows or stops as they go into survival mode. With limited water, roots will not be able to draw up enough water to maintain growth. They need to be able to stay in survival mode until temperatures drop and rains arrive.

Fertilizing needs to be "slow and easy" during this extraordinary drought. Compost is a good "slow" fertilizer. Compost is a reliable and safe fertilizing method for home gardeners causing little negative impact on the environment. It breaks down over time, usually about a year. Using compost as your primary fertilizer is a good practice, as it covers the entire spectrum of macro and micronutrients and adds humus to the soil.

While compost is the ultimate slow release fertilizer, there are commercial chemical fertilizers considered slow release. When using any commercial fertilizer, slow release or not, liquid or granular, follow the package directions for application and timing. Excess fertilizer leaches into our depleted waterways. Remember, fertilizers feed the plant; they do not benefit the health of the soil.

The three numbers displayed on the front of fertilizer bags or bottles indicate the percentages of three macronutrients in the formulations: nitrogen, phosphorus, and potassium, in that order. High amount of nitrogen forces new rapid green growth. During drought and high heat conditions, excess nitrogen can cause stress and even death to plants in your yard.

Nitrogen fertilizers higher than 10% are common in many liquid and lawn fertilizers. To maintain a lawn, you will want to forego fertilization in times of drought. Cool-season grasses, fescues and ryes, are dormant during the hot months; they don't need fertilization. Bermuda lawns grow quickly during the heat and are usually fed monthly during the summer. With less irrigation, and no fertilization, they should be able to recover when conditions return to normal.



Fruit and nut trees will respond to low irrigation by dropping their immature fruit in order to survive. Wait to fertilize these trees after the weather cools and fall rains arrive. Feeding them before dormancy should replenish their energy stores.

Roses are some of the hardiest plants in our gardens. Established roses planted in well-amended soil are surprisingly drought-tolerant and do not need fertilization during watering restrictions. Summer vegetables will do well on very light monthly feeding with a low-number fertilizer (say 5-10-5). They will need supplemental water (buckets from the shower, cooled cooking water) beyond our mandated bi-weekly irrigation. Remember July and August scorching heat stops growth. No need to feed veggies then.

Four years of drought and mandated water restrictions present serious challenges to Central Valley gardeners. Even with this winter's rain and easing of watering restrictions, water conservation still needs to be a priority. Despite this winter's rain and snowfall being close to average, California's drought problems are far from over. There is no way to know if next winter will be wetter or dryer than normal. Use some of the advice offered in this article to help you through these times.

For more information on drought-tolerant gardening techniques or answers to your gardening questions, visit our web site <http://cetulare.ucanr.edu> and click on Master Gardener. Talk to a Master Gardener at the UCCE Tulare County Office on Tuesday and Thursday mornings from 9:30 to 11:30, at (559) 684-3325 or 684-3326. For Kings County, call (559)852-2736 on Thursday mornings from 9:30- to 11:30.

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