COASTAL GARDENER COLUMN

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Q: The new growth on my eugenia shrub shows many blisters on the upper leaf surface. Opposite the blister on the lower leaf surface is a cavity. What causes these leaves to deform, and is there a treatment to prevent it?

A: The distorted leaves are the result of feeding injury caused by the eugenia psyllid. Psyllids are members of the leafhopper family, so both nymphs and adults feed on eugenia by means of a hypodermic needle-like mouth. All of the damage done to the eugenia is done by the nymphal stage. Most damage occurs in late winter and spring during the early year growth flush of the eugenia. The adults lay eggs which hatch to a "crawler" stage. The crawlers find a suitable spot to settle and insert their mouthpart to suck sap. As feeding continues, a "feeding pit" develops in which the nymphs live.

A parasitic wasp has been introduced from Australia to help control eugenia psyllid. The wasp has in many landscapes greatly reduced the amount of damage done by the psyllid. However, it will not completely eliminate the damage. If you wish to further reduce leaf deformation, the eugenia should be sprayed with acephate (Orthene®) or imidacloprid (Merit®, Bayer Advanced Formula®). Both products will control the adults and nymphs, but imidacloprid will cause less loss of the parasites. Use all plant protection products according to package label directions for best results.

Controlling the psyllid will not reverse the damage to the leaves. The deformed leaves can only be eliminated by shearing or trimming off the damaged foliage.

Q: My lawn is dying in large patches. I water 3 times a week for 15 minutes. I fertilize every 3 months and have used various plant protection products with no satisfactory results. Please help.

A: The client who asked these questions arrived at my office with a square foot of "dead" turf in a box. He indicated the lawn had been watered that morning for 15 minutes. Examination of the sample showed no signs of insect or disease damage. The sample was, however, very dry. There was no evidence of moisture.

The most likely cause of death in this lawn was lack of adequate amounts of water. First of all, the Central Coast received less than half its normal annual winter rainfall during the 2006-07 precipitation season. Thus most lawns came into the spring/summer growing season with no water reserves in the soil. Now lawn owners have set their sprinklers to their "normal" summer watering schedule, and the amount of water applied is not adequate to meet the needs of the grass. On average summer time water needs of Central Coast lawns are 0.10 to 0.14 inches of water per day. Hence, when sprinklers are running, they must replace that amount of water per day to keep the grass alive. If your lawn is on sandy soil, you may have to increase the amount of water, if the lawn is on clay soil, the water needs will be slightly less. If you water every other day, make sure the lawn gets a two-day allotment of water.

How do you find out how much water your lawn receives? The easiest way is to place empty cat food or tuna fish cans around the lawn. Then run your sprinkler system for 15 minutes. Next measure the depth of the water in the can(s). Finally, set the sprinkler times to run long enough to deliver the equivalent of 0.10 to 0.14 inches of water per day to your lawn.

One final note. Do not assume that your sprinkler system has 100% uniform distribution of water. The timer should be set to deliver the needed amount of water to the "driest" spot on the lawn.

The Coastal Gardener has a leaflet entitled "Lawn Watering Requirements along California's Central Coast." If you would like a copy, contact me.

Send your landscape and garden questions to: **The Coastal Gardener, 624-A West Foster Road, Santa Maria, CA 93455.**