



High on the Desert Cochise County Master Gardener Newsletter

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In a Desert Garden

Oenothera—Evening Primrose Part I

The evening primrose family – Onagraceae is very large and contains many different varieties. This month, I will write about Oenothera, the evening primroses. My first love is *Oenothera speciosa*—'Mexican Evening Primrose.' These little pink wonders are lighting up my garden in late spring. They were the very first plants I planted in my front garden. As they are short-lived but self-seed freely, I never know where they will pop up. This year they decided to grow around the front of my pond in the backyard. Last year I had a small stand there but this year it is dynamic. There are more blossoms than I can count. This plant can grow up to 3 feet high depending on the quality of the soil and the availability of water. These plants form rosettes of lance-shaped green leaves and have fragrant four-petaled pink flowers forming a dense groundcover. They spread by rhizomes and by self-seeding.

I have never planted any primroses in my backyard, but they just arrived and scramble between the orange desert mallow, which I did not plant either. The birds must have brought in or there were seeds in the soil before we bought the lot. These two plants give a bold color statement, but in a natural garden, anything goes. I do not landscape with plants, I landscape around plants. If something pops up somewhere in my garden I get some rocks and place them around these plants in a way that it looks as if I had planned it. This year, I have the evening primroses popping up in different parts of my yard and they are always welcome. From the front where I planted evening primroses many years ago they have taken over several areas of my garden. On this island bed they grow very sparse and very low. The soil here is poor and irrigation is seldom, but they survive and this spring they are lovely despite the poor winter rains. I guess one could call this

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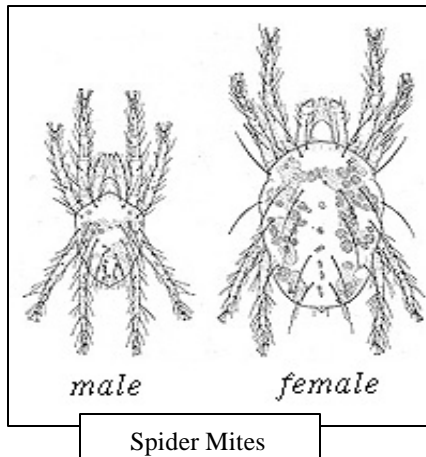
The Agent's Observations

Q We have several Italian cypress trees that are dying. Random limbs and areas on the tree turn a greyish-green and then with time turn brown and die. We are watering the trees well. What is killing these plants?

A It sounds like the trees are infected with spider mites. If the trees are succumbing to drought limbs in the top of the tree will most likely turn brown first. Be sure to water trees at the drip edge. Make sure the water is penetrating the soil at least two feet using a soil probe. To test for mites hold a white sheet of paper horizontally next to the tree. It is best to choose an area where the foliage is not dead but dying. Give a few sharp taps to the limb or shake it. Some plant material may fall on the paper, but remove it carefully. If you see some very small spots moving on the paper they are spider mites. They are not insects but rather arachnids or members of the spider family. They have four pairs of legs, (a total of eight), two body parts (a head and abdomen), no antenna and piercing, sucking mouth parts. Most spider mites are quite small and a hand lens is needed to see and identify them. There are many species of spider mites. A 60X power or greater microscope is needed to identify species. Mites thrive in dry, dusty, and warm environments. They may produce spider webbing and may be found on the needles of the cypress trees.

Control: Spray the entire tree with a hard stream of water

everyday for three days or so. Then every couple of days, until the trees begin to show signs of new green growth. This treatment will wash off the spider mites, decreasing the population. Spraying a commercial insecticidal soap, or a couple of tablespoon of dish liquid per gallon of water may help control mites. Spider mites have natural predators. By decreasing the population through washing, the populations equilibrate and predators will control the offending mites. Spraying an insecticide to control mites will not work very well and may cause more resistant mites. Miticides or acaricides are used for control. Remember mites are really spiders, not insects. Insecticides will kill some mites, but will kill other beneficial insects and cause resistant mites to thrive. There are currently no miticides available for purchase by homeowners.



Q I have some beautiful onions and garlic in my garden that I planted last September. They now have yellow tips on the leaves and then the yellowing progresses toward the base of the plant and causes the leaves to curl. Also the

place on the bottom of the bulb where the roots attach is rotting. Why is this happening so close to harvest? What can I do about it?

A The problem you are experiencing is caused by a soil borne fungus called *Fusarium*. This disease is called "Fusarium Basal Plate Rot" and occurs worldwide. The infection can occur anytime during the growing season. The rot progresses from the stem plate up through the storage leaves causing the roots to rot and infects the bulb. Infected bulbs may appear discolored and when cut affected tissues appear brown and watery. Infected garlic shows reddish or reddish purple discoloration on the stem and bulbs early in the growing season with some discoloration on the bulb sheaths at harvest. This disease may also find entry into bulbs more readily when damaged by insects. Optimum temperatures for disease development are when the soil temperatures reach 77-82°F but the fungus can develop at 59°F. Infected bulbs break down during storage.

Control: Rotation from a known infested soil should be for at least four years. Dipping seedlings in a fungicide before transplanting may reduce losses. Control damaging insects and plant resistant varieties are important control measure along with crop rotation.

Source: *Compendium of Onion and Garlic Diseases*. Howard F. Schwartz and S. Krishna Mohan, Editors. 1995. Page 10.

Robert E. Call
Extension Agent, Horticulture

The Greenhouse Effect—One Man's Opinion Part II

Some would say these issues are so dire that we should immediately assume they are inevitable and take draconian steps to deal with the problem. If we human beings and our governments were completely rational and unbiased we might be able to conceive of a plan to reverse any longer term warming trend without destroying mankind in the process. Unfortunately such is not the case.

One current example of this governmental and political bias is regularly in the news. The United States has steadfastly refused to sign the Kyoto Treaty. Some of our critics, including many in the Green Movement here at home, say our refusal is based purely on capitalistic greed and short-sightedness. They would have us join a large group of governments in a misguided effort to reduce the greenhouse effect. Why is the Kyoto Treaty a misguided effort? Simply put it places the largest burden in this effort on prosperous economies like the United States. On the surface this seems both logical and fair, after all the United States is the largest per capita consumer of the planet's resources so why shouldn't we carry the biggest burden. Were the burden shared equally worldwide, that is every country

bearing an equitable share, the Kyoto Treaty might actually result in some slowdown in overall global warming. While not a complete solution such a slowdown would give us time to develop a more comprehensive solution.

But the treaty is fatally flawed. Not only does it impose a huge burden on the United States and its economy, the same economy that is vital to the financial well being of the entire world, but it allows the "underdeveloped" nations of the world to continue their current contributions to global warming and expand that contribution as their industrial base expands. A recent edition of *The Economist* notes two of these "underdeveloped" countries, China and India, currently account for approximately 20% of the world's greenhouse gases. The same politicians and idealists that would bring the United States to its knees cannot see the inherent conflict in replacing our decreased greenhouse contributions with real

increases throughout the third world. They simply don't want to know implementation of the Kyoto Treaty might very well increase total greenhouse contributions as the exempt developing third world contributions exceed reductions in the United States and other similar economies. When called to task on this issue their only response is "They are poor and underdeveloped and therefore we should not burden them with any share in saving our planet from itself."

There is no easy solution to the problem but we should not take solace in flawed efforts such as the Kyoto Treaty. Doing so amounts to sticking our heads in the sand and hoping the problem will go away. What we need instead is a concerted effort that brings to bear the world's best engineering and scientific minds and technology unfettered by politics, idealism or environmental extremists from either side of the issue. As Master Gardeners we should take the lead in educating our communities on this vital issue. Going up against environmental extremists who support the Kyoto Treaty is unlikely to be popular but it just might balance the scales a bit and provide time for real solutions to emerge.

Douglas Templeman, Master Gardener



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plant invasive. In my front garden I also grow *O. caespitosa*—White Evening Primrose. I will write about it next month.

Angel Rutherford, Master Gardener

May Reminders

- ◆ Deep water
- ◆ Plant warm-season crops
- ◆ Control pests
- ◆ Control weeds (*Controlling Weeds*—a bulletin available from the Cooperative Extension)

Cuttings 'N' Clippings

- ◆ The 13th High Desert Gardening & Landscaping Conference will be held May 4 & 5 at the Windemere Hotel & Conference Center in Sierra Vista. Winners of the Cochise County Master Gardeners Association scholarships to the conference are David Davis and Mary Kay Brady.
- ◆ Sunday, May 7 the Water Wise/ Master Gardener Xeriscape Garden Tour takes place from 1—4:00 p.m. For information contact the Cooperative Extension office in Sierra Vista.
- ◆ The Bisbee Farmers Market opens on May 6. The Sierra Vista Garden Club's Plant Sale will be at the Bisbee Farmer's Market on Saturday, May 13th.
- ◆ Sierra Vista's Farmers Market is held on Thursdays from 9:00 a.m. until 1:00 p.m. at the corner of Wilcox and Carmichael.
- ◆ CCMGA will be cleaning up Campus Drive and the wash on May 13 beginning at 7:00 a.m. Volunteers will meet on Tacoma Street at the wash.
- ◆ The next CCMGA meeting will be June 1, Room 503 at UAS, 5:00 p.m. This is the general business meeting with election of officers

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