

MASTER GARDENER

plant detective



PHOTOS BY ERIC GEFRE

A photo of large holes in the leaves of sunflower plants. Bitter's daughter sent this photo trying to figure out what is damaging her plants.

Question: What is wrong with my plant?

Answer: Yikes! As a Master Gardener, I have had this question posed to me many, many times.

To be sure, I have also been on the asking end!

To figure out the solution, it is important to be ready to answer a lot of questions. I compare the process of being a good diagnostician of plant problems to being a good detective.

The pictures of the sunflower plant with this article were sent to me by one of my daughters, who was frustrated with the large holes being eaten in the leaves.

No matter if you are the one trying to figure out the problem or you are turning to someone else to help solve it, there are some things you should be prepared to answer to help solve the case:



Janet Bitter
Ask a Master Gardener

1. What kind of plant is this? Do you know what a normal plant of this type should look like? This may seem kind of petty, but sometimes plants have yellow leaves, or crinkly leaves, or any number of traits that might be normal for that plant but a problem for others. Also, if you know the type of plant, it becomes a lot easier to find common diseases or pests for that particular plant.

2. What are the signs of damage? Pay attention to all parts of the plant – underneath leaves, stems or trunks, fruit. Look for insect

signs: eggs, droppings, slime (yuck) or tiny mites (a magnifying glass is helpful). Are there signs of disease like sap, malformed leaves, etc.? Look at the plants in the same area – are there similar types of damage or is it just this one plant? Did the damage happen gradually, or quickly?

3. Think about any changes around that plant lately. Have you used any new chemicals or fertilizer in the area? Has the weather been extreme? Have you changed the amount or how you water? Not all problems are caused by insects or disease. There are abiotic (physical, rather than biological) problems which can be anything from hail damage to weed eater syndrome (you know that one, right?). For example, many trees are slow to show damage from drought. They might not exhibit



After some detective work, it was discovered that finches love to eat the foliage from sunflower plants. One finch was even caught in the act.

symptoms until the next summer or fall. Maybe you pruned a neighboring plant heavily, resulting in another plant receiving way more sun.

So, to answer the problem posed by my daughter, obviously we both knew she had a sunflower plant. It wasn't supposed to have all the large, ragged holes in the leaves. She couldn't see any insects in action, so I recommended that she check for slime trails, droppings, and even come out in the evening with a flashlight and check out the plant.

No insect signs were observed. Her husband noticed that a lot of birds were in their yard and, despite the flowers not in the seed stage, a lot of small birds were perching in the sunflowers.

Eureka! A little bit of bird research later, they discovered that finches love to eat the foliage from sunflower plants! Look closely at the photograph and you will see a bird perched on the sunflower plant caught red-handed (red-beaked?!)

Now, without doing some detective work, I'm afraid many gardeners would have just brought out the chemicals

and sprayed. It is important to know what the pest is before using sprays or fertilizers which may be totally unnecessary and/or damaging to the environment.

The finches, in this case, weren't doing enough damage to kill the sunflowers, and these homeowners enjoy watching the birds. It would have been a shame to spray the plants, possibly causing harm to the birds or to pollinators.

Do you have a plant problem stumping you? If you need help figuring it out, please call the Douglas County Master Gardener's hotline. But, be prepared to answer some questions so our Master Gardener detectives can solve your case!

Do you have a gardening or insect question? Contact the Douglas County Master Gardeners at douglasmg@oregonstate.edu or 541-672-4461 or visit 1134 SE Douglas Ave., Roseburg. Douglas County Master Gardeners are trained volunteers who help the OSU Extension Service serve the people of Douglas County.