Flea Beetles

Do you have lots of little holes in the leaves? If so, it could be flea beetles. Flea beetles are tiny, ranging from 1/16 of an inch to ¼ inch long. The color can vary from black to green, yellow, and bluish-black. They came by the name flea beetles because of their enlarged hind legs that allow them to jump like fleas. The grub of the flea beetle is slender and white and they feed on roots and stems underground.

There are several species in Arizona that will feed on cauliflower, broccoli and other Cole crops, young corn, carrots, beans and other vegetables. There is also a variety that feeds on Mexican primrose.

Flea Beetles can cause a lot of damage in a vegetable garden. Keeping a clean garden is one way to control them. The adults overwinter in surface material so remove leaves, plants and other items to take away any hiding places for them. There are beneficial nematodes available to reduce the grub population and keep the numbers of adult beetles down.

Move your crops around. Rotate favorite beetle-food plants to another site and plant something they don’t like. There is some information that using diatomaceous earth, ashes, ground limestone and even flour help reduce populations. Be careful, though, of adding any limestone or alkaline materials to the soil. Arizona soils don’t need to be more alkaline!

Yellow or white sticky traps can also reduce populations. The easiest is to take white or yellow cardboard, poke a hole in the cardboard to attach a hanger or tack it to a stake, smear it with Vaseline and place it in close proximity to the plants. You can use pieces of white plastic or even Styrofoam meat containers to create traps. If you use plastic, you can periodically wash off and smear more Vaseline on and start over.

At the start of the season cover your seedlings with row covers. Row covers need to be anchored down so the beetles can’t get in.

There are insecticides that will kill beetles but to be a bit user-friendly to your yard you could try garlic and pepper sprays. They have to be reapplied after rain. (That shouldn’t be much of a problem considering how little summer rain we have been getting!!)
One of the first problems I encountered when I became a Master Gardener was a mass migration of flea beetles. It was the most amazing thing. There were flea beetles everywhere! They covered the ground, fence posts, even the fence wire. Just glad they weren’t in my garden.

**Blossom End Rot**

Blossom end rot is fairly common in home gardens. It’s commonly linked with tomatoes but can affect other plants including peppers, melons, zucchini and eggplant. On peppers it sometimes looks like sunscald.

You will first notice it as a water-soaked-looking area at the site where the blossom was attached. It grows larger over time, turns browner to dark, mushy and sunken. It is the result of calcium deficiency and water stress from irregular watering. It is often more the result of poor watering practices limiting calcium uptake versus a real calcium deficiency in the soil. Calcium is needed for normal cell growth and in high concentrations for new tissue growth. If there is a calcium shortage, the blossom end is affected first because it is the last place to receive the calcium. It also has the lowest concentration of calcium. In fast-growing plants the calcium cannot move fast enough into the fruit.

Since big changes in soil moisture affect the uptake of calcium the quickest and least expensive correction is simply changing your watering habits. Vegetables like even moisture, not too wet, and no cycles of really wet and really dry. Deep water and monitor the soil moisture until you get a feel for what is happening in the soil. Use a mulch to control evaporation and space tomatoes apart so you reduce the competition for water. You can apply gypsum to the soil, but I would make changes in watering before buying gypsum.

Go easy on the fertilizer, especially nitrogen. You only need to apply a supplement if your soil is deficient. In that case both bagged and foliar applications would help. Get it tested if you are really concerned. No good comes of throwing chemicals into your soil.

I did read in a forum where someone suggested planting a TUMS tablet when you plant your tomatoes. If anyone has tried that let me know.

In my own tomatoes it seems to occur most often in the first tomatoes of the season. Subsequent fruit is generally normal. I think the cooler nights of spring keep the soil more moist than I really think it is. Once the real summer hits with its hot temperatures the problems disappear.
Sad News
by Bob Burke

Jay Fleishman is no longer with us. His passing creates a void in the lives of his friends, associates, and colleagues. I will remember Jay as a friend. Jay had many passions – education, gardening, astronomy, science, sustainable agriculture to name a few. He was a good friend who was selfless in helping those who needed him. He was a strict parliamentarian who suffered no fools in running a proper meeting. I will remember his sense of humor, which could be misinterpreted by people not tuned in to his wit. The Master Gardeners at Monsoon Madness signed a card for Jay designed by Judy Mannen. Someone wrote “Get well soon…” which raised some concern, since his prognosis gave him weeks to live. Some suggested we blank out the sentiment. I took the card to Jay, intending to skip the “Get well soon” part. As I was reading to him the comments and names of the signees I suddenly changed my mind and said “Here’s one you will enjoy” and read the comment. Bobbi Jo chuckled. Jay, with his eyes still closed, smiled a broad grin and gave us a fist pump. He loved it. The Godfather said “Keep your friends close, but your enemies closer”. Jay would say he got it wrong. Jay would advise to keep your friends close, and your good friends closer. Remind them frequently what they mean to you. Enjoy life. The best advice Jay would give is to have a short memory of life’s slights and hardships; be quick to forgive. Remember Jay and the good things he did for the Association and individuals.

For more on Jay’s life go to: http://verdenews.com/main.asp?SectionID=1&SubsectionID=1&ArticleID=37495
and: http://verdenews.com/main.asp?SectionID=1&SubsectionID=1&ArticleID=37515

Years ago Jay Fleishman established a foundation to provide scholarships to deserving students who retain a certain GPA and he wanted the effort to continue. The MGA will make a donation in our name. Here is the information in case you would like to make a personal donation.

The Fleishman Foundation
P.O. Box 369
Cottonwood, AZ 86326
What we call Swiss chard today has gone by many names in the past: Leafbeet, White Beet, Silverbeet, Perpetual Spinach, Seakale beet and Mangold among them. A native to the seacoasts of Spain and Portugal, the first varieties have been traced to Sicily. Its life cycle is biennial, meaning it spends time growing the first year and then flowers and goes to seed the second. Easy to grow, sow seeds at same time you would the garden beet or start inside early. It needs space, so plant ten to twelve inches apart. Plan on it staying in place all year, so don’t plant it somewhere that you want to use later in the year. Chard will tolerate some shade so it can go someplace that isn’t ideal for other vegetables. You will be able to pick in four to six weeks. To help reduce the bitter taste, keep it well watered.

It has a few pests, leaf miners and aphids among them. Don’t spray because you will be eating the leaves and you don’t want to be eating insecticides. Just remove the worst damaged leaves. You will outlast the insects as the weather changes. The leaves taste better as it cools anyway.

You are growing it for the leaves and stems. Both young and mature leaves can be eaten. Older leaves will be larger and slightly tougher. It is a very perishable vegetable so growing your own gives you fresh leaves on a continuing basis. Just go out and pick when you need some. The plant has a bitter taste which fades with cooking. Consider using it as a substitute for spinach.

The leaves are very shiny and green with heavy ribbing. The stems can be white, yellow, orange or red. For many years the white or red stemmed varieties were the most commonly found but today you can find it in different colors, including one called “Bright Lights” which is like watching fireworks it’s so colorful.

Chard tolerates poor soils and withstands frosts and mild freezes. In an 1865 book on vegetables they even suggest removing the plant from the ground, pruning the stems to an inch, packing them with sand and overwintering them in a cellar. Then replant outside the following spring. Since most of us don’t have a cellar and it is unlikely that we will get that cold, I don’t think that will be necessary, but it’s interesting.

The leaves do not keep very long either fresh or cooked. If you need to pick ahead of time, place the leaves (do not wash them) in a perforated plastic bag. Even then they will only keep two to three days. Cooked chard has even less of a lifespan. Overnight in the refrigerator they will turn soggy, soft and sour. On the other hand you can freeze the leaves. Remove all the ribs or they will discolor (the ribs will also discolor on cooking). Blanch the leaves two minutes in boiling water then plunge into ice water for two minutes. Drain and then package in a plastic bag and place it the freezer. To retain the color it helps to blanch them first, even if you are using them fresh.

Chard gets high marks for its health benefits. It has high concentrations of Vitamin K, A, C and E along with magnesium, manganese, potassium, iron, and fiber. It contains good amounts of copper, calcium, vitamin B2, B6, B1, protein, phosphorus, zinc, folate, biotin, niacin and pantothenic acid.

Swiss chard is versatile. Simply sauté in butter or oil with garlic or add it to soups, tortes or use the leaves stuffed. They go well with fish, beef and pork as a side or in stews and stir-fries. Give it a try. I know someone that grows beautiful chard in Phoenix so it should grow well here. It will give you an entire year of fresh vegetables.
Always on the lookout for interesting plants, I originally rejected these plants but since then they have started to grow on me. Echeveria is a genus of succulents; you might know them as hens & chickens. The species is part of the family that includes kalanchoes and sedums. They are native to Mexico and northwestern South America. They are named after an 18th century botanical artist, Atanasio Echeveria y Godoy. Echeveria drew thousands of Mexican plants that were collected by Martin Sesse and Jose Mocino. All the original drawings were thought to be lost but in the 1880’s some were discovered to be in the collection of the Torner family of Barcelona. The story of what happened to the collection is actually very interesting (you can find the history at http://huntbot.andrew.cmu.edu/HIBD/Departments/Art/Torner.shtml) Part of the story includes the botanist Alphonse De Candolle who hired 120 draftsmen to make tracings. De Candolle was the one who named the genus after the artist.

Echeveria is drought resistant and depending on the species will survive a variety of conditions, although they look best with some extra water and fertilizer. Let them dry out between watering but they are not xeriscape plants. Some will tolerate frosts, others shade. The leaves form low-growing rosettes and usually have a waxy sheen. To prevent water spots from marring the leaves, water the roots and not the leaves. Reproduction is through seeds, cuttings or the offsets the plants frequently produce as long as they are not hybrids.

For the most part the plants need bright light, like a heavy soil and need excellent drainage. If the plant starts to have wide gaps between the leaves it likely needs more sun. It is simply reaching up for more light. Most are moderately fast growers.

Some lose their lower leaves in the winter and grow somewhat unattractive over time but since the plants can easily be rerooted or propagated there is no reason not to replace bedraggled looking plants with new ones.

They make excellent garden plants, especially if used along the edges of the garden where people can enjoy the structure and color of the leaves. They also make excellent container plants. I’ve been seeing them a lot in living wreaths or vertical fence gardens. The species has a wide-ranging variety of types and colors with different shaped leaves, smooth or fuzzy leaves, colored leaves, colored edges and lots of other interesting variations.

To have a look at many of the species and learn a little about each species check out http://www.desert-tropicals.com/Plants/Crassulaceae/Echeveria.html
This poem came to Jackie from her mother who is 91 years old.

First, you come to the garden alone, while the dew is still on the roses ..... 

For the Garden of Your Daily Living

Plant three rows of peas 
1. Peace of mind  
2. Peace of heart  
3. Peace of soul  

Plant Four Rows of Squash 
1. Squash gossip  
2. Squash indifference  
3. Squash grumbling  
4. Squash selfishness  

Plant Four Rows of Lettuce 
1. Lettuce be faithful  
2. Lettuce be kind  
3. Lettuce be patient  
4. Lettuce really love one another  

No Garden is Without Turnips 
1. Turnip for meeting  
2. Turnip for service  
3. Turnip to help one another  

To Conclude Our Garden We Must Have Thyme: 
1. Thyme for each other  
2. Thyme for family  
3. Thyme for friends  

Water freely with patience and cultivate with love. There is much fruit in your garden because you reap what you sow.
Congratulations
for completing 50 hours of service:

Barb Waldie
mentor: Bob Burke

MG Association News

Collecting Methods for Moths & Beetles
Continuing Education: Saturday, August 7th

The Program/Education committee is sponsoring this August workshop. Spouses/partners are welcome.

Time: 6pm Potluck, 7-8PM Presentation by Stephanie Shank, 8-9PM set traps, 9pm-? Monitor traps

Place: Prescott Extension Office

Make reservation with Christi Armer, ch_armer@hotmail.com, 713-9881.

MG Information Table @ Mortimer Outreach Fair
If you can help staff an information table at the Prescott Mortimer Nursery Outreach Fair on Sept 11th contact Donna O-Rourke, 708-9407.

Iris Sales
Saturday, July 31, 9:00 a.m. - 12:30 p.m
Sharlot Hall Museum, under the canopy
415 W. Gurley Street, Prescott
No admission charge

Sunday, August 1, 10:00 a.m. - 2:00 p.m.
Dan’s Garden
17618 Foothill Road, Yarnell
Follow signs across from Ranch House Restaurant

Saturday, August 7, 10:00 a.m. - 2:00 p.m.
Growin’ Crazy
3440 N. Hwy 89, Chino Valley

Locally grown iris, New varieties, Historic iris, Iris raffle
Free iris growing guide

FROM THE EDITOR: Please send or email articles and announcements to the address below. All articles must be in my hands by the 10th of the month. Short announcements (no more than 2 or 3 lines) will be accepted until the 25th.
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MG NEWSLETTER

MG Association Meeting, Aug 18, 6:30pm, Prescott

Speakers Jerry and Kathy Hoyer on Wine Making from Non-traditional Fruits and Veggies. Jerry is the immediate past president of the Prescott Valley Mountain View Garden Club.