

2023 July

We are now in the height of our vegetable growing season. Soon we will be harvesting!

WEATHER

This spring we had very cool temperatures. So far it has not hit the 90's yet but it is projected to get that high soon. Hopefully the monsoons will show up in early-mid-July and keep things cooler with the rain.

HAIL DAMAGE- With the monsoons come the possibility of hail so be prepared!

Protection-row cover-sometimes called *Remay* can help protect somewhat from hail. Use medium weight (.5) row cover in summer. Not light weight (.4)-shreds too easily in our wind and don't use heavy weight (.9-1.0). Too heavy in summer and will cook your plants. You can also buy hail netting to cover your crops but you will need to elevate it over some hoops on your raised beds.

TOMATO POLLINATION

Right now, some of my tomatoes are starting to blossom and hopefully set fruit. So far, this summer June has been much cooler than normal. We are only now starting to heat up. **Tomatoes are self-pollinating and won't set fruit at 92°F.** If the temperature gets above 92°F, the tomatoes drop their blossoms, which is called *blossom drop*. This is a self-aborting act to save the plant. But they will keep producing flowers and once the temperatures are below 92°F they will set fruit and once they have set fruit, they can handle higher temperatures as our tomato fruit grows. It is only when they are trying to set the fruit that the temperature is critical. So, let's hope the weather will not get too hot.

BUGS! Don't forget there a lot of good bugs as well as bad bugs. You can encourage good bugs to your garden by planting flowers in your garden.

FRUIT TREES

Aphids-Can be on fruit trees and other plants like kale, broccoli and cabbage

PROTECTION: Neem or better is AzaMax. Use a 1-gallon hand held sprayer. Follow instructions. Both come from the Neem tree but AzaMax does not burn plants and Neem sometimes does if sprayed in the heat of the day PLUS both will harm bees. **Wait till sunset to spray to protect the bees.**

CABBAGE/KALE/BROCCOLI/CAULIFLOWER

Cabbage Looper or cabbage worm- Both are small caterpillars that eats cabbage leaves and anything in the brassica family like kale. The adult is a white butterfly with one black spot on each wing.

PROTECTION: Use Bt as a spray for any caterpillar problem or use row cover over the plants.

NASTURIUMS, EGGPLANTS

Flea beetle-small dark beetle (1/10") that eats leaves-shotgun holes in leaves but doesn't kill plant. It particularly likes eggplants. It should leave sometime in July.

PROTECTION: Yellow sticky traps or row cover.

TOMATOES

Beet Leafhopper—small (1/8") devastating bug for tomato plants. Bites a tomato plant and transmits a virus called Curly Top Virus (CTV). Fatal virus. Is not contagious from plant to plant.

PROTECTION: Floating row cover only. Cover plant around cage from the very top and around cage to bottom so it is completely covered. This is called a *Vector disease* in that it is spread from insect to plant. The leafhopper 'hops' from plant to plant infecting the plants. Plants start to wilt and leaves curl and underside veins turn purple. It is not contagious to the other tomato plants around the sick one. Dispose of plant.

Tomato Hornworms- Be on the lookout but not here yet.

Large finger size green worm that eats your tomato leaves and sometimes eats part of the tomatoes. Very good at camouflaging itself but look for it to hang upside down on stem and usually on the top portion of the plant, not deep inside.

PROTECTION: Hand pick. Can use ultraviolet flashlight to see them at night to pick. Dispose in bucket of soapy water.

SQUASH-SUMMER AND WINTER

Squash Vine Borers-an orange body/black winged moth that lays eggs at the base of squash plants. The larvae hatches inside the stem, eats inside the stem and kills the plant. One day you'll go out and the plant is wilted and dead. It comes late spring thru July. SVBs literally kill your plants by laying eggs in the stem at the base of the plants, then the larva hatch inside and kill your plant. SVBs leave right about the time the squash flowers blossom come. **Protection:** foil around base of stem from ground to first secondary vines. Row cover works even better as you cover the whole plant-works as a physical barrier **but** you need take off the row cover because the bees need to do the pollinating for us once the blossoms appear.

Squash bugs-Not to be confused with the squash vine borer-different bug. squash bugs are ¾ inch flat grey-brown bug that lays rust colored eggs around stems and underside of squash leaves. Slowly kills plants by sucking the juices out of them.

PROTECTION: Row cover **before** the plant produces flowers will help prolong the damage. After it flowers you must uncover the plant for pollination by pollinator bugs. All squash need pollinators while some other plants like

tomatoes, eggplants and peppers are self-pollinating. After flowers appear, hand pick off adult bugs, and use masking tape or duct tape to pull eggs off stems and underside of leaves. The life cycle of the squash bug is 7-10 days from eggs to nymphs which are small dark bugs with black legs. You don't want to let the nymphs get big so go out every 7 days and get them early. You can also plant plants that are resistant to the squash bug.

SQUASH BUG RESISTANT VARIETIES

You won't see as many squash bugs if at all with the following squash:

summer squash-*Friulana*-a yellow bumpy zucchini style of squash resistant to squash bugs that is delicious. When cooked, it doesn't get watery like some summer squashes do.

Winter Squash-I like *Butternut squash* after growing many varieties of winter squash and the reason I like it so much is besides it's great flavor, it also is resistant to squash bugs.

Grasshopper-devours plants. Use Nolo bait as soon as you see them-don't wait till you see 10 per their instructions.

PROTECTION: Clear away all weeds from your beds. Use Nolo Bait. Or you can grow in greenhouse or high tunnel OR you can cover it completely with row cover. Nolo Bait does work but most people wait till they see the adult grasshoppers and by then it is too late to control.

Must put it out at the first sign of baby grasshoppers.

DISEASE

Early Blight-Usually appears after the monsoons comes-tomato disease-starts leaves on lowest portion of tomato plant start turning yellow-green, then the leaves die and this fungal disease works it's way upwards through the plant from the bottom and eventually to the top. This is contagious from plant to plant.

PROTECTION: Trim off all leaves/branches that will touch the ground. Disinfect cutting tools in a little bleach in a small bucket to keep from passing from plant to plant. Put straw around each plant to protect from ground fungal spores from getting on plant. Spray with **Serenade**, a biological fungicide that has spores that keep the EB spores from attaching to the leaves. Use more as a preventative especially when monsoons comes. Available at Agua Fria Nursery and maybe other nurseries.

CURLY TOP VIRUS-tomato disease-I think this is the most devastating disease out here for tomato plants in our area. It is a small tiny 1/8 inch green bug that hops from plant to plant and transmits a disease called Curly Top Virus by biting the plant. And the reason its devastating is CTV will kill a tomato plant. Mostly affects tomato plants but can also affect peppers and once it bite a giant pumpkin of mine.

PROTECTION: Row cover only. The plant needs a physical barrier from the bug. Take off row cover after monsoons arrive in earnest when the bug leaves.

POWDERLY MILDEW

A disease that shows up when the monsoons arrives. A fungal leaf disease-like a product called **Green Cure** to control Powdery Mildew and it is completely controllable if sprayed early enough. Mostly affects squash and cucumbers (and roses). Spray at first sign of white powder on leaves. Cut off leaves that are affected badly. Spray both sides of leaves. Usually arrives after monsoons arrive. Works better than baking soda (sodium bicarbonate). Green Cure is Potassium Bicarbonate.

AND FINALLY!

THINGS TO EAT: Mid to late July- If you stop picking any veggie, they will stop producing so keep on picking them.

Beans-for a continuous supply, pick often.

Tomatoes-some tomatoes will be ready to start harvesting. They trickle in during mid-July the come in earnest in August.

Chard-pick outer leaves for a continuous harvest

Kale-pick outer leaves for a continuous harvest

Rhubarb-pick when stalks get bigger but be sure you only eat the stalks. Cut off any flowers

Garlic-Should be ready to pick when the bottom 2 leaves die and the third leaf is starting to turn yellow.

THINGS THAT ARE PROBABLY FINISHED:

Most lettuces are done except **Batavian Lettuces** are supposed to be heat tolerant in the shade.

Peas, Spinach, Arugula, should be done too.