# Horticulture 2023 Newsletter No. 28 July 18, 2023

1712 Claflin, 2021 Throckmorton Plant Science Cntr. Manhattan, KS 66506 (785) 532-6173

Video of the Week: When to Pick Tomatoes

# **UPCOMING EVENTS**

## **Kansas Turf & Ornamentals Field Day**

The Kansas Turf & Ornamentals Field Day will be held Thursday, August 3 at the K-State Research Center in Olathe (35230 W. 135th).

The field day program is designed for all segments of the turf & ornamentals industry - lawn care, athletic fields, golf courses, landscape, nursery, and grounds maintenance. Included on the program are research presentations, problem diagnosis, commercial exhibitors, and equipment displays. There will be time to see current research, talk to the experts and get answers to your questions.

One hour of pesticide recertification credit in both 3A and 3B are available, as well as GCSAA education points.

For a copy of the program and to register to attend, go to <a href="https://www.kansasturfgrassfoundation.com/">https://www.kansasturfgrassfoundation.com/</a>

#### REMINDERS

- Tomatoes can be harvested when they are ½ green and ½ red to prevent sunscald and to allow the development of a deeper red color during hot weather. The fruit will have the same quality as if it were vine ripened if allowed to ripen inside.
- Can plant potatoes if you have a source of seed potatoes.
- Can plant cabbage, broccoli and cauliflower from seed to be transplanted later.

## **VEGETABLES**

#### **Tomato Cracking**



Tomatoes often have problems with cracking caused by pressure inside the fruit that is more than the skin can handle. Cracks are usually on the upper part of the fruit and can be concentric (in concentric circles around the stem) or radial (radiating downward from the stem). We don't know everything about cracking but here is what we do know.

Tomatoes have a root system that is very dense and fibrous and is quite efficient in picking up water.

Unfortunately, the root system can become unbalanced with the top of the plant. Early in the

season it may be small in relation to the top growth resulting in blossom-end rot when the weather turns hot and dry. Later it may be so efficient that it provides too much water when we get rain or irrigate heavily after a dry spell. This quick influx of water can cause the tomato fruit to crack. Therefore, even, consistent watering can help with cracking. Mulching will also help because it moderates moisture levels in the soil. However, you can do everything right and still have problems with cracking in some years.

We have evaluated varieties for cracking during our tomato trials at K-State. It takes several years worth of data to get a good feel for crack-resistant varieties but we have found some real differences. Some varieties crack under about any condition and others are much more resistant. The difference seems to be pliability of skin rather than thickness — the more pliable the skin the more resistance to cracking.

The old variety Jet Star has been the most crack resistant of any we have tested including the newer types. Unfortunately, Jet Star is an indeterminate variety that puts out rampant growth. Newer varieties with more controlled growth are often more attractive to gardeners. Mountain Spring, Mountain Pride, Mountain Fresh, Floralina and Sun Leaper are smaller-vined types that have shown good resistance to cracking. (Ward Upham)

Harvesting a Ripe Melon



Melons will have the highest sugar content if allowed to ripen fully on the vine.

When cantaloupes are ready for harvest they will easily separate from the vine. Put a little pressure on the fruit where the vine attaches. If ripe, the fruit will slip off the vine and you will see a dish-shaped depression on the fruit. Twisting the stem to force separation indicates the melon is not ready. Additionally, the skin of the melon should begin to show yellowing instead of solid green

during immaturity. A ripe cantaloupe should have a musky fragrance and the end of the fruit opposite where the vine is attached should be soft. Cantaloupe can be stored in a refrigerator for two weeks.

Watermelons display their readiness to harvest as the underside of the fruit changes from green-white to yellow. The glossy green that was once apparent on a majority of the fruit will also become more dull. The tendril attaching the fruit to the vine will turn black when the fruit reaches maturity. Separate the fruit from the vine by cutting the tendril leaving about two inches still attached to the fruit. Store freshly harvested watermelons at room temperature for one week or in 50-60 degrees F for two to three weeks.

Honeydew melons do not easily pull away from the stem when ripe. Instead, rely on the change in color of the fruit from pale green to light yellow, the softening spot on the fruit opposite from where the vine attaches and the aroma coming from the fruit. Honeydews can be stored for two weeks at 50 degrees F.(Cynthia Domenghini)

## **FRUIT**

# **Protecting Grapes from Birds**



Birds can cause significant crop-loss to unprotected grapevines. The open wounds birds leave on grapes can also be an entry point for disease. For small-scale home gardeners there are a couple of options for preventing birds from hindering the grape harvest. Visual deterrents such as shiny tapes and streamers can be hung near the grapevines. Though cost-effective and easy to install, this method is not typically enough on its own. A physical barrier such as netting is more effective at keeping birds away though

it can be difficult to install. The most common and least expensive netting is the lightweight, black, polypropylene type with a square mesh size of ½" x ½". Woven mesh bird netting is also effective and easier to work with but is more expensive. If your trellis has a wire at six feet high, purchase a net that is at least 14 feet wide so that it can be draped over the grapes and secured along the bottom edge with clothes pins. Nets that are 17 feet wide are less common but give more material to work with and are therefore easier to secure.

Another option for a physical barrier is to secure paper bags around the grape clusters. The bags can be kept in place until harvest. (Cynthia Domenghini)

#### **Green June Beetle**



Description: Green June beetle larvae are cream-colored grubs from ½-inch to two-inches in length depending on the stage of molting. The adult beetle is almost one-inch long with a velvety-green, oval-shaped body. The edges of the body are orange-yellow and the wing covers are reddish-brown. The eggs are round and about 1/16-inch in diameter.

Life Cycle: There is one generation of green June beetles per year. The grubs that hatch from eggs in the fall overwinter in the soil in cases they create from the soil

and a substance that excretes from their body. In the spring the grubs pupate and the adult beetles develop in two to three weeks. The beetles emerge from the soil in late June through July to mate. Females then lay eggs in clusters of 10 to 30 eggs. The eggs hatch within two weeks.

*Damage:* Larvae feed on decaying organic matter as well as roots. As the grubs tunnel below the ground they can cause damage to lawns by feeding on the roots as well as pushing soil up through the tunnel holes creating small mounds of dirt at the surface. Larvae may also feed on underground vegetables such as sweet potatoes and carrots. Adult beetles may skeletonize leaves primarily of fruit trees but also oaks and maples. They can also eat the fruit on the trees.

Control: Many general-use insecticides, including carbaryl (Sevin dust) and malathion, may be

used to discourage feeding. Follow insecticide label instructions for application rates and waiting period between application and harvest. For some crops carbaryl products have a longer waiting period than malathion and vise versa so choose your product accordingly. (Cynthia Domenghini)

#### Raspberries and Blackberries After Harvest



Raspberries and blackberries are perennial plants with biennial canes. What that means is that though the plants live year after year, each individual cane only lives two years. Most commonly the first year canes, referred to as primocanes, grow but don't fruit. Primocanes become floricanes the second year. Floricanes fruit and then die.

So what do you do with these dead canes when they die after fruiting? Though many gardeners leave the canes for removal the following spring, it is best to remove

them immediately after they die if your plants have had problems with disease such as anthracnose (see photo). See <a href="https://ohioline.osu.edu/factsheet/plpath-fru-27">https://ohioline.osu.edu/factsheet/plpath-fru-27</a>. Remove the canes as close to the ground as possible without damaging the primocanes. It is best to discard, burn or bury any infected canes. (Ward Upham)

## **Raspberry and Blackberry Drupelets**



Raspberry and blackberry fruit are made up of drupelets which are the individual cells of the fruit. Ripe berries may display drupelets that are black, tan or whitish in color. The fruit may be smaller in size as well. While the cause of this is not certain it could be a result of environmental conditions such as high heat, low humidity, wind or rainfall. It could also be a result of insect damage, poor pollination, nutrient deficiency or disease.

Regardless of the cause, ensuring proper growing conditions is recommended as prevention. Follow planting and pruning recommendations to avoid crowding. Do soil testing to inform a fertilization protocol. Manage the crop to prevent disease by minimizing weeds and irrigating as recommended.

The fruit that exhibits these symptoms are still considered edible, though they are better used for preserves than for consuming raw. (Cynthia Domenghini)

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## **PESTS**

# Walnut Caterpillars



Description: The round eggs are white and loosely laid in groups on the underside of the host plant leaves. Young larvae are yellowish-green and ¼-inch long. As they mature the larvae turns a dark red and eventually almost black. At the final larval stages, they can be two-inches long. A larval shed can be seen on the trunks which resembles a hairball. When provoked, the caterpillar will arch its head and tail in defense. The adult moth is light brown with four light brown stripes on the forewings. The wingspan is almost two-inches across

Life Cycle: There are two generations of walnut caterpillar per year. During late spring to early summer, adult walnut caterpillar moths emerge from the soil to mate. During June and July, the females lay pale green eggs in masses of several hundred on the underside of the host plant leaves. The eggs hatch into the caterpillar larvae which are pale green at the youngest stage and eventually turn to reddish-brown. The full-size larvae will drop from the tree to the ground where they pupate and begin the second generation. This generation will overwinter to lay eggs the following year.

*Damage:* The larvae feed on leaves. Young larvae primarily skeletonize the leaves while the mature larvae will consume the leaves entirely. They feed on a wide variety of deciduous trees but tend to prefer walnuts, pecans and hickories.

*Control:* Manual removal of leaves that are host to egg masses can eliminate that generation of caterpillars. However, the host trees can be quite tall making this impossible. Creating a sticky barrier around the tree trunk to prevent caterpillars from migrating to the canopy using a product such as Tree Tanglefoot may be helpful.

Insecticides such as spinosad (Natural Guard Spinosad, Captain Jack's Deadbug Brew, Bonide Colorado Potato Beetle Beater and Monterey Garden Insect Spray) permethrin (numerous trade names) malathion or cyfluthrin (Tempo, BioAdvanced Vegetable and Garden Insect Spray) may provide the most practical means of control. The spinosad products are organic controls. (Cynthia Domenghini)

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