

Diggin' in the Dirt: Tomatoes That Won't Ripen

By Chip Bubl
Oregon State University
Extension Service - Columbia County

Tomatoes that won't ripen

The tomato information booth at the recent Garden Fair had a number of questions about tomatoes that failed to ripen. Vernonia isn't known as a tomato hotbed, but many people grow them successfully. Last

year was interesting because we had excellent tomato weather from April through mid-May. Then we got hit with two weeks of cold, cloudy weather that affected tomato vigor during some of the longest days (and most important) tomato growing time of the year. Then we had generally good tomato growing weather with a couple of very hot cycles. So how did the weather affect tomato growth and how did those effects ripple through the season? And what else can affect ripening?

- Many tomato varieties won't set fruit if night temperatures are below 55°. Once a tomato fruit is set it takes 40 – 50 days to ripen. So last May, we lost several weeks of fruit that would have matured in mid July if the weather hadn't turned. It compressed later fruit loads, leading to greater competition for sugars and pigments between more fruits and longer times for individual fruits to ripen. Use of varieties that set fruit in cooler night conditions, like most of the OSU varieties and some others like Stupice and Glacier, might have smoothed this problem out. So would the use of cloches, walls of water or other techniques to keep the plants warmer in their early months. A warm tomato is a happy tomato.

- While we think of tomatoes as hot weather plants, ripening slows down when air temperatures stay at 85°+ degrees for much of the day and/or soil temperatures peg above 80°. The first part of this picture was fairly common last year. The 80-plus degree soil temperatures not so much. Anyway, the warmer it gets, the worse the effect. One theory is that the plant starts growing deeper root systems at the expense of sending the sugars and red pigments that characterize a ripe tomato to the developing fruits. I think that this tends to be less of an issue in western Oregon because our night temperatures drop significantly even on hot days. But there were a few stretches of hot days where the night temps stayed near 80°. That can disrupt the ripening cycle. And there are varietal differences in how tomatoes individually respond to heat. Finally, if watering is uneven, the root development may ramp up to compensate, again shorting the sugars that are sent to the fruit.

- Excess nitrogen fertilizer, especially applied after early July, can cause the plant to become more vegetative and produce fewer flowers and divert its sugars to more stems and foliage and not into the fruits.

- Selective removal of some foliage (especially lower leaves which can be disease reservoirs and new side branches) may help ripening but it needs to be done

carefully since it is the leaves that do the heavy lifting in making the sugars and pigments. And leaves protect the fruit from sunburn if it gets very hot.

- Taking in to account that fruit takes 40-50 days to ripen, it does make some sense to start removing some small fruit in mid-September. But it is worth the gamble to allow some to continue. We have had years where we got tomatoes ripening into late October. So watch the long-term weather forecasts.

- When tomatoes turn from a dark green to a lighter yellow-green, they will ripen inside. If a big rain is coming, pick that fruit and bring it in to ripen. Check the fruit for decay frequently. And spray the plants with copper before a rain to reduce the chance for late blight, the scourge of late tomatoes.

It's not too late to plant peppers

Peppers hate cool weather and don't have the same ambivalent effects noted above regarding hot weather and tomatoes. For peppers, a hot pepper is a happy pepper. In fact, if soil temperatures are below 60 degrees, they go into a pepper funk and it messes with their ability to start photosynthesis when the sun comes up. It takes several days of warmer weather to get them perky again. So wait to plant until the weather improves, warm your pepper bed with clear plastic for a couple of days before removing it and planting, and then protect your plants with cloches, row covers, or other techniques to improve the heat around them. Peppers also do very well in containers – they thrive in the root heat captured by the black nursery pots. I have seen peppers grown in less than six hours of sun on a deck and in 2-3 gallon containers perform magnificently.

Plant an extra row for the food bank, senior center, or community meals programs. Cash donations to buy food are also greatly appreciated.

The Extension Service offers its programs and materials equally to all people.

Free newsletter

The Oregon State University Extension office in Columbia County publishes a monthly newsletter on gardening and farming topics (called County Living) written/edited by yours truly. All you need to do is ask for it and it will be mailed to you. Call 503 397-3462 to be put on the list. Alternatively, you can find it on the web at <http://extension.oregonstate.edu/columbia/> and click on newsletters.

Contact information for the Extension office
Oregon State University Extension Service – Columbia County
505 N. Columbia River Highway (across from the Legacy clinic)
St. Helens, OR 97051
503 397-3462
Email: chip.bubl@oregonstate.edu



The Birk
"it's not that far"

FRIDAY MAY 16TH...TRAPDOOR SOCIAL
ALTERNATIVE ROCK

SATURDAY MAY 17TH...CALICO THE BAND
AMERICANA

SUNDAY MAY 18TH...CALICO UNPLUGGED

THURSDAY MAY 22ND...FREEWAY REVIVAL
COUNTRY BLUES

MAY 24&25TH...SUGARAY RAYFORD
BLUES

FRIDAY MAY 30TH...MT. THELONIOUS
INDIE FOLK

SATURDAY MAY 31ST...NORMAN SYLVESTER
BLUES

JUNE 6&7TH...FIREWEEDS
AMERICANA

JUNE 11TH...NICK MOSS
BLUES DINNER SHOW

JUNE 14TH...BILLY D & THE HOODOOS
BLUES

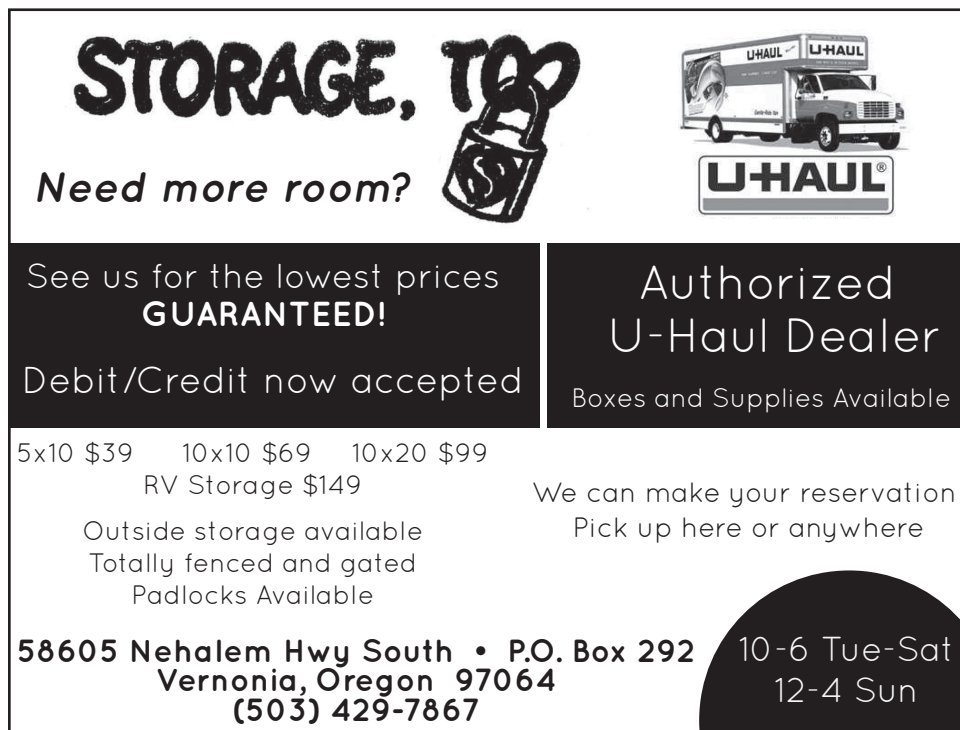
thebirk.com



Terry's Gym

JOIN THE TEAM!

503-901-1705
16720 Noakes Rd. Vernonia



STORAGE. TOP

Need more room?

See us for the lowest prices
GUARANTEED!

Debit/Credit now accepted

5x10 \$39 10x10 \$69 10x20 \$99
RV Storage \$149

Outside storage available
Totally fenced and gated
Padlocks Available

Authorized U-Haul Dealer
Boxes and Supplies Available

We can make your reservation
Pick up here or anywhere

58605 Nehalem Hwy South • P.O. Box 292
Vernonia, Oregon 97064
(503) 429-7867

10-6 Tue-Sat
12-4 Sun



291
a
street
call KIM

Happy Grooming Dog Salon
429-0576

LOVABLE service at a reasonable PRICE

- BATHING
- HAIRCUTS
- NAIL CLIPPING
- NAIL POLISHING
- SPECIALTY SHAMPOOS