

## An Ounce of Prevention Yields a Bounty of Tomatoes



By Cindy Murray

Most high-country gardeners are aware of the risk of planting tomatoes outdoors too early in the season. It only takes one night of freezing temperatures to decimate your crop. And so, we surround each plant with a Wall-O-Water or similar insulating device at the time of planting.

But late spring frosts are not the only peril involved in growing tomatoes here. There are a number of ailments that can attack tomatoes throughout the season. The great news is that by taking precautions most of these maladies can be prevented.

First, you must have healthy plants. Choose dark green, thick-stemmed plants around six inches tall with no flowers, tomatoes, insects, wilting, or bronzing.

Soil conditions are a key factor in a successful crop. Wait until the soil temperature is at least 60 degrees F. To achieve this you may put down black plastic tarps *before* planting.

Choose a sunny sight with loamy soil rich in organic matter. Never plant tomatoes where other tomatoes, eggplants, potatoes, or peppers have been planted within the last two or three years.

Once your tomato plants are well-established use a fertilizer low in nitrogen but moderately high in phosphorus.

Since tomatoes are especially finicky when it comes to being evenly moist all the way down to the deepest roots, you may want to plant in self-watering containers, or install a drip irrigation system or soaker hose. To prevent blight, a fungal disease, avoid getting the leaves wet or allowing them to touch the ground and use clean supports to provide adequate air circulation.

One of the first pestilences of the season to hit our region's tomatoes is the flea beetle, a minuscule black or brown beetle that jumps like a flea and is most prevalent in early spring. The tiny round "shotholes" they chew in the leaves will not likely kill the plant, but the diseases these insects carry could, so they may need to be controlled. Neem registered for food crops and insecticidal soaps are good organic methods of attacking this pest, white flies, and aphids.

Blossom end rot, when the bottom third or so of the tomato itself turns brown or black, is common here. It happens when fluctuating soil moisture hampers the uptake and movement of calcium, usually when a dry period is followed by a wet one or after a cold spell. You can give your plant a boost of calcium by adding clean, crushed eggshells to the soil before planting. Shells from about a dozen eggs per plant work well.

Temperatures below 55 degrees F may crack fruit and halt both plant growth and pollen production, so you'll need to blanket your tomatoes on cool evenings. Uneven watering may also lead to cracked fruit.

Sometimes Northern Arizona garden tomatoes drop their blossoms before setting fruit. Usually this is due to environmental factors like: night temperatures below 60 degrees (remedy: cover on cool nights); daytime temperatures above 85 degrees (remedy: lightly shade on hot, sunny days); too much or too little water; hot, dry wind; too much nitrogen in the soil; and poor pollination (remedy: give the branches a brisk shake to loosen pollen).

If you adhere to the previous guidelines, you'll probably ward off most of the defoliating diseases like Septoria leaf spot. But just one hailstorm or tomato hornworm chomping on your plant can inflict similar damage, leading to sun scalding of the fruit. Leave the affected tomatoes in place and avert further damage by covering the plant with a light cloth. Cut the damaged area off before consuming the tomato. Check your plants daily for hornworms and remove them with forceps.

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