

Christmas Tomatoes

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This year our garden's tomatoes produced lots of tomatoes, but very late in the season (late September and October). There are still many green tomatoes on our plants. My wife and I came up with a way to protect the plants from the October frosts (we're in the northwest US at about 45° latitude).

My wife uses concrete reinforcing wire cages around the tomatoes, so we wrap these with old blankets and hold them in place with clothespins. Then we run strings of Christmas lights to each plant to provide a bit of heat during the night. These incandescent lamp strings consume from 120 to 150 W of power and let us heat about three plants with one string.

Here's a picture of the tomatoes covered in early October:



Here's what they look like at night:



We've trimmed back to the three most important plants as of today (26 Oct). Here's how a string of lights is put on one plant:



This morning, I used my little IR thermometer to measure the fence temperature at 34 °F. Inside the tomato plant coverings, it was a toasty 65-72 °F, so the plants are well-protected from the frost.

While the use of a light bulb to provide heat isn't new, I liked the idea of using something we already had around the house. Of course, make sure the lights are powered from a GFI outlet to protect a bit better from shocks if things get wet.

We continued getting tomatoes from our plants after Thanksgiving. We finally gave up because we had gotten most of the edible tomatoes from the plants. The only other twist is that it helps to continue to water the plants occasionally, as we rarely have rain during October.

Update 17 Jan 2020

We again used this Christmas tree light heating technique last fall for the four or five tomato plants in a 4x20 foot planter I made a few years ago. We had the concrete wire cages around the tomato plants, so we covered them with a large reinforced plastic tarp, then my wife would toss some old blankets over the tarp for additional insulation. My wife's brother ruefully commented yesterday that all his tomatoes died in October from the first frost after my wife told him about this Christmas light tip and that we were still getting tomatoes from the plants.

This year, one string of 25 C9 Christmas lights were inside keeping the plants warm. I measured the power consumption of these lights with a Kill-a-Watt and it was 180 W. The lights were left on continuously. Where I live, this costs around \$9 per month for power. The next time I do this, I'll put a thermostat under the tarp and this should easily cut the power consumption in half.

Yesterday (16 Jan) we took the last of the tomato crop from the plants, about 5 pounds. Interestingly, it has been one of the mildest winters I've experienced in the 40 years I've lived here and we've only had four or five snowfalls, usually only an inch or two (I've only used the snowblower once). Usually, it never gets above freezing from December through February.

We last watered the tomatoes probably in late October. The plants would have done much better if we kept them watered, as the stems dried up pretty badly. But it still proved that the best place to store your vegetables is on the plant.

Last November we constructed a concrete patio in front of our kitchen, so next year we will be growing our tomatoes on this patio, as there are outlets for electricity and water faucets. I'll probably build some frames around the planters and turn these into temporary greenhouses over the winter, so we will likely be able to get tomatoes any time during the year.