

Protecting Plants from Heat



Summer Harvest

June is one of the hottest months in Phoenix, Arizona...and it is very dry. Generally the only plants surviving now are the melons, cucumbers, pumpkins, winter squash and peppers. The tomatoes are still producing but need some help from the blistering sun. This year I am utilizing shade cloth to see if this will help protect my tomato plants from the heat.



Summer crop

My garden consists of 5 raised beds, mostly for vegetables and a few flowers. With the help of PVC piping, I can create hoops over the raised beds. These hoops provide a framework for netting, tulle, freeze cloth, plastic or shade cloth. To see more about my garden design, click [here](#).

What is Shade Cloth?



Green shade cloth

Shade cloth was developed over 30 years ago to provide protection for plants from the harsh Australian climate. There appears to be many types of shade cloth and after careful scrutiny, I believe mine is a monofilament knitted green shade cloth with a shade rate of 70%. Open lockstitch design resists wind damage, and reduces heat build-up and wind speed inside the structure.

Things to Consider



PVC hoops for individual raised beds

Since our summer temperatures can get as high as 120+ degrees, it is important to allow enough air flow to prevent heat build-up. The knitted shade cloth has a longer life expectancy than woven shade cloth. It resists tears, fraying and unraveling. To protect your plants from extremely hot weather and make them grow healthily in hot summer, knitted shade cloth is a better choice due to its life expectancy, functionalities and easy installation.

Shade cloth comes in many colors but I always tend to use green. Black and green shade cloths absorb heat and protect from harmful UV rays, and filter light. White shade cloth reflects heat and diffuses UV rays. It reduces the amount of light getting through while not affecting the quality of the light spectrum. It also lowers greenhouse temperatures while black increases them. Determine what color works best for your situation.

Application



Building a new PVC frame

We recently added a larger, PVC structure to cover two raised beds and here is where I will add the shade cloth. Unfortunately, I did not measure the width of the PVC structure, vs. the width of the shade cloth. However, they are both 6 feet wide, which is good! Whew!



Measure your frame

The purpose for the larger PVC frame is to allow enough space between the plants and shade cloth to increase the airflow. When the PVC hoops are close to the plants, it is possible the shade cloth will build up heat, increasing the chance of plant damage.



Completed PVC frame

Affixing the Cloth

In determining how to affix the shade cloth to the frame, I debate whether to put grommets on the edge of the shade cloth. But since this is a non-fraying material, I take an easier route and decide to use stainless steel polished nickel shower curtain rings. I found 12 of these at the bottom of a bathroom vanity and decided to upcycle them.



Upcycling shower curtain rings

The hooks easily penetrate the shade cloth edge. However, the diameter of the PVC pipe is larger than a typical shower curtain rod. Even though I cannot completely close the ring, the spherical balls allow the shade cloth to easily slide and glide along the structure.



No grommets needed

I place 6 curtain rings on each side to secure the shade cloth.



Curtain rings slide easily along PVC

Since the western sun is to the right of the photo above, I allow additional shade cloth to hang down the side. This hopefully, will protect the tomatoes specifically from the hot afternoon sun.



Tomatoes are protected!

Here is a great side view of the application. Other plants are covered in tulle to protect them from the birds. To see a post about protecting my garden from pests, click [here](#).



Protection from western sun

Right now I am only adding shade cloth to two of the raised beds, as this is where the majority of the tomatoes are growing. I will carefully watch the other plants (musk melon, watermelon, pumpkins and cucumbers) to see how the heat and sun will affect them. To source shade cloth, you're best bet is to go to Home Depot or Lowes. Amazon has some [here](#) too.

Thank you so much for joining me today and now it is time for the June Gardening Blog Hop. Keep reading to see what the other gardeners are doing!

Mary

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Monthly Garden Hop



Monthly Garden Hop

Chas from Chas Crazy Creations in Colorado is sharing her Vegetable Garden Ideas [here](#).



Chas Crazy Creations

Stacy from Bricks 'n Blooms gives us a tour of her beautiful New Jersey spring garden [here](#).



Bricks 'n Blooms

Kim from Shiplap and Shells is sharing her Pacific Northwest Cottage Garden tour. You can see her incredible garden [here](#).



Shiplap and Shells

Happy Tuesday! It's a short week so sending sunshine and good weather to all of you, and happy gardening!