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SUMMARY

Bermudagrass was introduced over 250 years ago and is tough as nails. It's also invasive in garden situations, but its very toughness makes it difficult to control.

Non-chemical methods of include drying the soil and repeatedly turning the soil to expose and dry out root structures. A less labor intensive method is soil solarization.

Use the Sun to Get Rid of Unwanted Grass

By Arti Kirch, UC Master Gardener

Eliminating bermudagrass is tough. Let the sun do the work for you.

Q. A few years ago, I replaced the grass in my side yard with a vegetable bed. However, the grass has come back up all over the bed. It doesn't seem to matter how much I weed it out. I don't want to use chemicals where I am growing edibles, but how do I get rid of it?

A. Without having seen the turf, I am betting that your vegetable bed has been reclaimed by bermudagrass.

Bermudagrass (*Cynodon dactylon*) was introduced from Africa in the mid 1700s. It is now common throughout California in gardens, orchards, roadsides and recreational turf areas.

It also is grown as livestock forage and is even used to control weeds because it can grow so aggressively that it will push out many other plants.

Bermudagrass has such widespread applications because it is drought-resistant, traffic-tolerant, easy to establish and grows on hard surfaces and shallow soil. It grows rapidly by rhizomes (underground stems) that

generally are found up to 6 inches below ground and by stolons (above ground stems). Nonhybrid varieties also produce seed. All of these characteristics make bermudagrass very difficult to eradicate.

There are two nonchemical methods to control bermudagrass.

Drying and Turning:

The first method involves withholding water from the area combined with turning or spading the soil two to three times during the summer. This will bring the rhizomes to the surface, where they will dry out and kill the structures that make new bermudagrass.

Soil Solarization:

Unfortunately, the first method will not take care of the likely millions of weed seeds that are in the soil. In this case, you will want to use the second method, soil solarization. Soil solarization is simply using the sun to heat up soil to temperatures usually lethal to bermudagrass. Solarization must be done when the soil will receive the most



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sunlight. In the warmest parts of the Bay Area, this usually means the weeks preceding and following the summer solstice. In areas with more fog or wind, the best time may be August or September.

Four basic steps to solarizing

1. Cut the bermudagrass as low as possible, remove the clippings and water the area well.
2. Make sure the area is as level as possible because you will not want air pockets between the ground and the plastic that you will use in the next step.
3. Place clear, ultraviolet-protected polyethylene over the area. The plastic should extend roughly 2 feet beyond the bermudagrass stolons to make sure the infested area is covered.

4. Maintain the plastic in place and intact for 4 to 6 weeks.

Shade reduces effectiveness.

Shade will reduce the effectiveness of solarization. You will want to prepare the area for planting before solarization. It is recommended that cultivation occur only in the top 2 to 3 inches of soil. This is to prevent bringing viable weed seeds or pathogens to the surface. Unfortunately, soil solarization will take your area out of cultivation for a season, but it has the advantage of being nonchemical and effective in controlling other pests in the area.

To learn more, an in-depth explanation of soil solarization is available from the University of California at:

<http://ipm.ucanr.edu/PMG/PESTNOTES/pn74145.html>