Bermudagrass is an aggressive, warm-season turfgrass species that rapidly spreads by above-ground stolon and below-ground rhizome stem tissue. It has excellent heat and drought resistance and therefore is a durable choice for a typical Oklahoma yard. However, the traits that make it an excellent turfgrass, unfortunately, make it a very problematic weed in home gardens, which may lead a gardener to ask “How can I control bermudagrass in my garden?” This factsheet will provide options for home gardeners trying to eradicate or suppress bermudagrass from a home vegetable garden plot.

Bermudagrass often has a strong and aggressive root system. Therefore, when the upper vegetation (where photosynthesis occurs) is lost, the root system can quickly re-establish the vegetation. Utilizing energy reserves from the roots comes at a temporary cost to the plant. Once the plant has vegetation again and can photosynthesize, the root system’s energy reserves will be restored, assuming all other plant needs are being met (sunlight, nutrients, water, etc.). Reducing any of these plant needs can inhibit a plant’s ability to photosynthesize, causing the plant to draw upon stored reserves. Because bermudagrass has rhizomes and stolons, it often has vast energy reserves available; therefore, it can require a long and continuous period of poor growing conditions and abuse before the plant succumbs. In other words, you can think of the roots as a savings account for the plant. While the plant is doing its job (photosynthesizing), it is earning an income and not having to use its savings. However, when it loses its vegetation and cannot perform its job, the plant is no longer bringing in an income and needs to use some of its savings’ account (energy in the roots) to survive. Depending on how much savings the plant has stored up (how healthy) and the length of time the plant needs to use those reserves will determine how long it will take to kill the plant.

As we try to eradicate or, more appropriately, suppress bermudagrass, we are looking at which methods will deplete the stored reserves. However, homeowners may qualify their desire to suppress bermudagrass with other priorities such as fastest, most environmentally friendly, least labor intensive, or cheapest way possible. Therefore, what may work for one person may not be the best fit for another.

In September of 2019, a demonstration began to determine possible treatments a home gardener could use to suppress bermudagrass in their gardens. A site was selected at the Cimarron Valley Research Station in Perkins, OK that represented an average home garden site. It was a flat site consisting of mixed grasses and broadleaf weeds. Thirty treatments were replicated three times in ten by five-foot plots. Of these 30 treatments, 13 were spray chemical treatments and 15 were mechanical treatments. Additionally, two control treatments were included; one in both the chemical side and the mechanical side. This resulted in a total of 90 plots (Figure 1). Treatments included synthetic, natural, mechanical, and Organic Materials Review Institute (OMRI) listed organic options (Table 1). Figure 2 identifies the treatment locations and is oriented the same as Figure 1 for visual comparison.
<table>
<thead>
<tr>
<th>#</th>
<th>Chemical Treatments</th>
<th>Treatment Trade Name</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Control - untreated bermudagrass</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2</td>
<td>Glyphosate 41%</td>
<td>Roundup®</td>
<td>5 quarts/Acre or 2% handheld sprayer</td>
</tr>
<tr>
<td>3</td>
<td>Glyphosate (18%) &amp; Diquat (0.73%)</td>
<td>Roundup® Concentrate Plus</td>
<td>6 fl oz/gallon water/300 sq. ft.</td>
</tr>
<tr>
<td>4</td>
<td>d-Limonene (citrus oil) 70%</td>
<td>Avenger Weed Killer Concentrate</td>
<td>1:3 ratio (1 quart Avenger: 3 quarts water)</td>
</tr>
<tr>
<td>5</td>
<td>Ammonium Nonanoate (40%)</td>
<td>BioSafe Concentrate</td>
<td>15% V:V (1.2 pints Biosafe: 6.8 pints water)</td>
</tr>
<tr>
<td>6</td>
<td>Citric Acid (24%) &amp; Clove Oil (8%)</td>
<td>BONIDE Burnout Weed &amp; Grass Killer Concentrate</td>
<td>1:2 ratio (8 fl oz product with 16 fl oz water)</td>
</tr>
<tr>
<td>7</td>
<td>Citric Acid (20%), Clove Oil (15%), and Malic Acid (10%)</td>
<td>Phydera Concentrate</td>
<td>1:2 ratio (8 fl oz product with 16 fl oz water)</td>
</tr>
<tr>
<td>8</td>
<td>Cinnamon Oil (45%) &amp; Clove Oil (45%)</td>
<td>SaferGro Weed Zap</td>
<td>6.4 fl oz Weed Zap with 121.6 fl oz water</td>
</tr>
<tr>
<td>9</td>
<td>Citric Acid (10%) &amp; Sodium Lauryl Sulfate from Palm Kernel Oil (4%)</td>
<td>SNS WeedRot Concentrate</td>
<td>24 fl oz WeedRot with 104 fl oz water</td>
</tr>
<tr>
<td>10</td>
<td>Vinegar (Acetic Acid) (10%), Orange Oil (1%), Molasses (1%), and a natural surfactant</td>
<td>Soil Mender Enhanced Vinegar Ready to Use</td>
<td>Premixed/Ready to Use</td>
</tr>
<tr>
<td>11</td>
<td>Acetic Acid (23%) &amp; Citric Acid (14%)</td>
<td>Summerset AllDown Concentrate</td>
<td>1:2 ratio (8 fl oz product with 16 fl oz water) or 15 fl oz/100 sq. ft.</td>
</tr>
<tr>
<td>12</td>
<td>Mint Oil (5%), Sodium Lauryl Sulfate (5%), Potassium Sorbate (5%)</td>
<td>Torched Weed Killer</td>
<td>10 fl oz/gallon water</td>
</tr>
<tr>
<td>13</td>
<td>Eugenol (6%)</td>
<td>Weed Slayer</td>
<td>2-3% dilution, apply 2.5 product and 125.5 fl oz water or up to 3.8 fl oz product with 124.2 fl oz water</td>
</tr>
<tr>
<td>14</td>
<td>Ammoniated Soap of Fatty Acids (3.68%) &amp; Maleic hydrazide (0.50%)</td>
<td>Natria Grass &amp; Weed Control Ready to Use</td>
<td>Premixed/Ready to Use</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#</th>
<th>Mechanical Treatments</th>
<th>Method</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Control - untreated bermudagrass</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>16</td>
<td>Natural Cellulose Fiber - Heavy Weight</td>
<td>WeedGuard Plus® Organic - Heavy Weight (OMRI Listed)</td>
<td>NA</td>
</tr>
<tr>
<td>17</td>
<td>Soil Solarization with clear plastic 6 mil</td>
<td>Clear 6 mil Plastic Sheeting</td>
<td>NA</td>
</tr>
<tr>
<td>18</td>
<td>Occultation/Tarping with black plastic 6 mil</td>
<td>Black 6 mil Plastic Sheeting</td>
<td>NA</td>
</tr>
<tr>
<td>19</td>
<td>Mulch</td>
<td>4-inch layer tree bark mulch</td>
<td>NA</td>
</tr>
<tr>
<td>20</td>
<td>Cardboard</td>
<td>2 layers of large cardboard boxes</td>
<td>NA</td>
</tr>
<tr>
<td>21</td>
<td>Cardboard plus Mulch</td>
<td>2 layers of large cardboard boxes + 4-inch layer mulch</td>
<td>NA</td>
</tr>
<tr>
<td>22</td>
<td>Tillage only</td>
<td>Tillage in September &amp; February</td>
<td>NA</td>
</tr>
<tr>
<td>23</td>
<td>Tillage + Winter Cover Crop</td>
<td>Tillage in September (pre-plant) &amp; February</td>
<td>NA</td>
</tr>
<tr>
<td>24</td>
<td>Tillage + Summer Cover Crop</td>
<td>Tillage in September &amp; February</td>
<td>NA</td>
</tr>
<tr>
<td>25</td>
<td>Tillage + Clear Plastic</td>
<td>Tillage in September &amp; February</td>
<td>NA</td>
</tr>
<tr>
<td>26</td>
<td>Tillage + Black Plastic</td>
<td>Tillage in September &amp; February</td>
<td>NA</td>
</tr>
<tr>
<td>#</td>
<td>Treatment</td>
<td>Description</td>
<td>NA</td>
</tr>
<tr>
<td>----</td>
<td>------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>27</td>
<td>Tillage + Cardboard</td>
<td>Tillage in September + 2 layers of large cardboard boxes</td>
<td>NA</td>
</tr>
<tr>
<td>28</td>
<td>Tillage + Mulch</td>
<td>Tillage in September + 4-inch layer mulch</td>
<td>NA</td>
</tr>
<tr>
<td>29</td>
<td>Tillage + Cardboard + Mulch</td>
<td>Tillage in September + 2 layers of large cardboard boxes + 4-inch layer mulch</td>
<td>NA</td>
</tr>
<tr>
<td>30</td>
<td>Tillage + Natural Cellulose Fiber Heavy Weight</td>
<td>Tillage in September &amp; February + WeedGuard Plus Organic - Heavy Weight</td>
<td>NA</td>
</tr>
</tbody>
</table>

Table 1. Cimarron Research Station Bermudagrass Removal Demonstration 2019-2020 Treatments

Figure 2: Treatment guide to plots.
**Demonstration**

**Chemical Treatments**

There are a variety of chemicals that claim to have effective control on bermudagrass. The chemical treatments for this demonstration were selected based on their claims and popularity. Vinegar is often mentioned as a home remedy, while glyphosate is often the most utilized synthetic chemical control method. This demonstration looked at year-long results of these treatments first applied in September and repeated quarterly throughout the year.

**Mechanical Treatments**

Several mechanical treatments which create a physical barrier have also gained popularity for suppressing bermudagrass growth. These treatments include methods employing occultation, solarization, tillage, and cover crops. Some of these treatments have the potential to add valuable organic matter to the soil as well.

**Occultation** comes from the Greek word “occult,” which means to cover or hide from view. In this demonstration, plastic, paper, and cardboard were used to occult the plot from sunlight. Occultation is intended to trap warmth and moisture underneath to promote weed seed germination. Seedlings will sprout into darkness and then have insufficient sunlight to continue growing. This should cause the weeds to die and decompose back into the soil while depleting the seed bank and energy reserves of rhizomes and stolons.

**Solarization** is a practice in which solar heat is captured upon the soil surface creating extreme temperatures that are unsuitable for weeds, bacteria, nematodes, and insects within the upper soil profile. With sunlight being an essential component, the practice is most effective in the summer months that provide hotter temperatures and more sun exposure. This practice utilizes clear plastic allowing the sun to penetrate onto the soil surface. It is imperative to completely seal the edges of the plastic by burying it under soil, to capture the heat and prevent any loss. In addition to sunlight/temperature and time of year, there are other factors that can greatly influence the efficacy of solarization, such as the soil texture, soil moisture, and containment of the solar heat. For more information about soil solarization, see Soil Solarization for Control of Soilborne Diseases [EPP-7640].

**Tillage** is often used in garden bed preparation. In this demonstration, tillage was utilized for initial bed prep for seeding cover crops, incorporating cover crops, and exposing bermudagrass rhizomes to freezing temperature for an extended time during winter months.

**Cover crops** have many beneficial functions in the garden, such as reducing soil erosion, adding organic matter, and retaining soil nutrients. In this demonstration, cover crops were used as competition against bermudagrass. Utilizing cover crops can deplete resources such as water and nutrients that otherwise would be more available to the unwanted bermudagrass or other weeds. Taller cover crops, such as sorghum-sudan, can further exhaust bermudagrass from its desired full sun requirements by blocking sunlight exposure. For more information about cover crops see Cover Crops for Weed Management in Oklahoma [PSS-2792], Benefits of Using Cover Crops in Oklahoma No-Till [PSS-2161], and Healthy Garden Soils [HLA-6436].

**Mulch** is a readily available material accessible in small to large quantities. It is valuable in the garden as it enhances soil quality, reduces water loss, suppresses soil erosion, moderates soil temperatures, and decreases weed growth. These benefits can vary depending on factors such as existing landscape and depth of mulch cover.

**Results**

**Chemical Treatments**

Upon application, some chemical treatments saw a rapid effect, with vegetation quickly burning. However, looking at long-term suppression of the 13 chemical sprays applied, only three treatments had any degree of bermudagrass suppression: Roundup® (Glyphosate at 41.0%), Roundup® Concentrate Plus (Glyphosate at 18.0% with Diquat at 0.73%), and Torched Weed Killer (Mint Oil (5%), Sodium Lauryl Sulfate (5%), Potassium Sorbate (5%))

Glyphosate, the main active ingredient in Roundup®, is a systemic herbicide absorbed by the foliage then translocated through the plant to the shoots and roots. Its systemic nature makes it a functional herbicide for controlling bermudagrass stolons and rhizomes. Diquat is a contact herbicide that causes desiccation and defoliation, providing quick visible results. Torched Weed Killer claims to be an all-natural product with low-risk ingredients and is therefore not registered by the Environmental Protection Agency (EPA) like other pesticides.

Although, chemicals are often assumed to be “the quick fix”, the three chemical treatments which showed the best results required additional applications to suppress the regrowth of bermudagrass. Bermudagrass regrowth in treated areas depends on many environmental factors such as time of year, moisture, temperature, nearby competition, and the health and vigor of the bermudagrass stand.

Many of the other chemical treatments had ingredients such as acids and oils. Vinegar, often associated with claims of being a weed killer, is an acid that causes some desiccation to the exposed vegetation. However, it does not affect the vigorous underlying roots and rhizomes of bermudagrass. Similarly, plant-based oils can cause some desiccation to the treated vegetation by coating the tissue surface and burning it without deterring the roots and rhizomes of bermudagrass. While the vegetation may appear as if some of these treatments successfully kill the bermudagrass, they are often a very temporary sense of control.

**Mechanical Treatments**

Essentially, we used three different materials for occultation—plastic, cellulose, and cardboard. They each had similar results regarding the bermudagrass suppression, however, they each had some benefits and drawbacks. Cardboard is a good material that is cheap, readily available, and provides an opportunity to recycle what otherwise might be trash. It is recommended to get larger cardboard pieces to reduce gaps and overlap multiple layers. Leaving the cardboard unmulched reduced the amount of bermudagrass regrowth on top of the cardboard. However, this cardboard had a very tattered look due to the exposure to the weather. Cellulose fiber is a certified organic product. The price of this product depends on the length, width, and thickness that is purchased. It is easy to install and held up quite well in the garden. While the
elements did break down the cellulose fiber eventually, it had a much tidier appearance than the cardboard. An additional benefit to utilizing cardboard or cellulose product is that they are biodegradable, ultimately adding to the soil and not requiring any removal later, unlike plastic. The plastic we used was beneficial in suppressing growth and had a cleaner look as it did not tatter like the cardboard. However, being black and opaque, it looked unnatural in the garden. Substantial reduction of bermudagrass and other vegetation was noticed under the 6 mm black plastic, however, some blanched rhizomes were still viable underneath the plastic.

In each of the four treatments utilizing mulch, the mulch was more detrimental than beneficial as it served as a substrate for bermudagrass to re-establish itself in the plot. Mulch can be beneficial for anchoring and camouflaging other materials such as cellulose or cardboard and eventually improve the organic matter content in the soil. However, it should be applied extremely thick and monitored frequently and consistently (daily/weekly) to remove advancing bermudagrass by hand. The combination of tillage, cardboard, and mulch slightly suppressed the bermudagrass better than the other three treatments alone. Applying only four inches of mulch over tilled soil or on top of bermudagrass was not beneficial for suppressing the bermudagrass.

While mulch is one way of adding organic matter into the soil, planting a cover crop is another option. If improving soil health is a priority, then cover cropping may be the best option. It would be best to plant a taller cover crop to help shade out the bermudagrass. For this demonstration, only a single crop was planted, but cover crop seed can often be planted together to gain more beneficial qualities. The sorghum-sudan grass did suppress the season’s bermudagrass growth, however, it is an extremely tall cover crop (6-10’) to use in an urban garden. We were able to maintain a shorter height of 2.5’ by regular trimming, but again this added to the labor input and garden debris. While it reduced some growth, bermudagrass was still growing among the cover crops.

Tillage alone did not reduce the bermudagrass growth. While it momentarily delayed it, it quickly recovered. However, tillage did aid in the suppression under occultation of plastic, cardboard, and cellulose fiber.

Of the mechanical treatments, it is hard to say which is most effective as it varies based on time of application, duration of treatment, and other environmental factors that may be out of the homeowner’s control (i.e., temperature, soil texture). When deciding on which mechanical treatment to utilize, it is best to evaluate the time of year and the pros and cons of each of the treatments (See Table 2).

Discussion

As concern grows over chemical use, more people are looking for alternatives to suppressing bermudagrass in their home gardens. While none of the chemical or mechanical options proved to be one-and-done solutions, gardeners have viable options depending on their budgets, time commitment, or gardening practices.

To gain the benefits of cover crops, it is important to consider how the crop will be terminated. There are various ways and reasons to stop the growth of cover crops. Often winter cover crops are terminated in late winter/early spring before they produce seed to retain the nutrients in the plants, prevent the seeds from becoming a weed problem later, and open garden space for planting. Some cover crops may be cut and incorporated into the soil, while others may be broken or laid over and left on the soil surface as a type of green mulch. The best option should be based on which cover crop is planted and the intention for using it. To find more information about cover crops see factsheet Healthy Garden Soils [HLA 6436].

Oklahoma winds can be challenging; therefore, it is important to securely anchor materials to work as intended. It may be tempting to look around your home for something that has bulk and weight but avoid things that have points. T-posts may seem like a good option to lay on top of the cellulose or plastic as it can span a good length, but when the wind blows, the points and ends of the post can quickly put holes in the material. These holes and tears lead to opportunities for bermudagrass and weed regrowth. Rocks, bricks, and pavers may also seem like good options, however, the added weight on the cellulose product increased its deterioration due to the close contact with the soil surface. Landscape staples were effective for holding down cardboard and cellulose. They are cheap and found at most garden supply centers. However, landscape staples did not provide an adequate seal to capture the solar heat for solarization. Instead, it is best to completely cover the edge of the plastic with soil. Dogs can be a concern when using plastic, either for solarization or occultation. Their toenails can create punctures that may either allow the heat to escape in solarization or allow sunlight to penetrate through the occultation.

When utilizing occultation, a key factor is reducing the breaks in the material to prevent as much sunlight as possible. This can be achieved by using a larger sheet of plastic, cardboard, or cellulose fiber to cover the given area rather than needing to overlap multiple pieces, allowing for potential opening for bermudagrass to grow.

There is no one solution to fix all the bermudagrass weed problems Oklahoma gardeners face. And unfortunately, even if it is possible to eradicate existing bermudagrass, weeds (bermudagrass and others) will always be an ongoing battle because where there is bare soil, there is an opportunity for seeds to blow in and grow. Selecting a method to control bermudagrass depends on many variables – how much manual labor the gardener is willing to invest, cost of materials, expectations of results (time and level of suppression), time of year, the purpose of eradication, etc. Figure 3 can aid homeowners in determining the best approach by selecting priorities of interest.

This demonstration was intended for identifying specific merits and drawbacks of common individual treatments. This demonstration did not utilize the possibility of applying both chemical and mechanical treatments together, which could be a viable option for homeowners. For example, perhaps an initial spray of Roundup® or Torched followed by cellulose treatment would allow a homeowner to have the quickest initial control and then be able to maintain it in a more environmentally friendly way. Although bermudagrass is a formidable opponent, the good news is Oklahoma gardeners have several options to employ.
Figure 3: Flow chart to help guide homeowners toward an appropriate solution to suppress bermudagrass based on their interests.
<table>
<thead>
<tr>
<th>Treatment</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roundup®</strong></td>
<td>• Quickly kills upper vegetative growth.</td>
<td>• Not organic.</td>
</tr>
<tr>
<td><strong>Roundup® + Diquat</strong></td>
<td>• Systemic so chemical will translocate down into underground plant tissue.</td>
<td>• Repeat applications are necessary.</td>
</tr>
<tr>
<td><strong>Tорched</strong></td>
<td>• Claims to be “natural”.</td>
<td>• Not organic.</td>
</tr>
<tr>
<td></td>
<td>• Quickly kills upper vegetative growth.</td>
<td>• Repeat applications are necessary.</td>
</tr>
<tr>
<td><strong>Cardboard</strong></td>
<td>• Suppresses some vegetative growth through occultation.</td>
<td>• Has varying degrees of success.</td>
</tr>
<tr>
<td></td>
<td>• Will break down.</td>
<td>• Requires regular maintenance.</td>
</tr>
<tr>
<td></td>
<td>• Free/Inexpensive.</td>
<td>• Will break down and can look unsightly.</td>
</tr>
<tr>
<td><strong>Cardboard + Mulch</strong></td>
<td>• Suppresses some vegetative growth through occultation.</td>
<td>• Has varying degrees of success.</td>
</tr>
<tr>
<td></td>
<td>• Will break down.</td>
<td>• Requires regular maintenance.</td>
</tr>
<tr>
<td></td>
<td>• Free/Inexpensive.</td>
<td>• Will break down and can look unsightly.</td>
</tr>
<tr>
<td></td>
<td>• Mulch helps hold down cardboard and reduces its unsightly appearance.</td>
<td>• Mulch allows bermudagrass to quickly re-establish on top of cardboard.</td>
</tr>
<tr>
<td><strong>Cellulose</strong></td>
<td>• Certified organic.</td>
<td>• Will break down and can look unsightly.</td>
</tr>
<tr>
<td></td>
<td>• Suppresses vegetative growth through occultation.</td>
<td>• Can be difficult to anchor.</td>
</tr>
<tr>
<td></td>
<td>• Will break down.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Can use it as a weed barrier around plants.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Has a cleaner appearance than cardboard.</td>
<td></td>
</tr>
<tr>
<td><strong>Black Plastic/Occultation</strong></td>
<td>• Suppresses some vegetative growth through occultation.</td>
<td>• Has varying degrees of success.</td>
</tr>
<tr>
<td></td>
<td>• Inexpensive.</td>
<td>• Can tear and look unsightly.</td>
</tr>
<tr>
<td><strong>Clear Plastic/Solarization</strong></td>
<td>• Inexpensive.</td>
<td>• Tears/holes reduce effectiveness.</td>
</tr>
<tr>
<td></td>
<td>• Can reduce seed bank due to heat.</td>
<td>• Can be difficult to anchor.</td>
</tr>
<tr>
<td></td>
<td>• Can help control soil-borne diseases, insects, nematodes, and weeds.</td>
<td>• May require additional maintenance.</td>
</tr>
<tr>
<td><strong>Cover Crop</strong></td>
<td>• Competes with bermudagrass for resources.</td>
<td>• Cover crop will need to be terminated at the end of the season.</td>
</tr>
<tr>
<td></td>
<td>• Adds organic matter back into the soil.</td>
<td>• Will likely take more than 1 season to out-compete bermudagrass.</td>
</tr>
<tr>
<td></td>
<td>• Can be used in winter or summer.</td>
<td>• Requires additional maintenance.</td>
</tr>
<tr>
<td><strong>Tillage</strong></td>
<td>• Can kill underground rhizomes when exposed to freezing conditions.</td>
<td>• Has varying degrees of success.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Has the potential to spread rhizomes and expose new seeds.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Timing is critical.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Requires additional maintenance.</td>
</tr>
</tbody>
</table>

Table 2: Viable bermudagrass suppression treatments with pros and cons.
Works Cited


Hartnett, Caitlin, and Julie Dawson. Staff Claire Strader, Dane County Extension and FairShare Cooperators. Carps to Terminate Cover Crops Before No-Till Organic Vegetables. 2019.


“Selecting a Lawn Grass for Oklahoma - Oklahoma State University.” Selecting a Lawn Grass for Oklahoma I Oklahoma State University, extension.okstate.edu/fact-sheets/selecting-a-lawn-grass-for oklahoma.html.


Additional Resources

Soil Solarization for Control of Soilborne Diseases EPP-7640. https://extension.okstate.edu/fact-sheets/solarization-for-control-of-soilborne-diseases.html

Cover Crops for Weed Management in Oklahoma PSS-2792 https://extension.okstate.edu/fact-sheets/cover-crops-for-weed-management-in-oklahoma.html


Healthy Garden Soils HLA-6436 https://extension.okstate.edu/fact-sheets/healthy-garden-soils.html

Videos:

Turfgrass Eradication Research https://youtu.be/ym0WDvUYoto

Mechanical Bermudagrass Eradication https://youtu.be/lNTuKPufEwQ

Bermudagrass Eradication Spring https://youtu.be/xDKGCvwsTbs

Mulch Bermudagrass Eradication https://youtu.be/D3uHXiigq_po

Bermudagrass Eradication Study – Early Natural Product Results https://youtu.be/5vLykWJ0jo

Bermudagrass Solarization https://youtu.be/o70WSLULrMA

Solarization Update in Eradicating Bermudagrass https://youtu.be/07WSLULrMA

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