

Gardening with Straw Bales

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What is straw bale gardening?

- Container gardening without the container



Advantages of Straw Bales

- Height – 2 foot raised bed
- No digging, cultivation
- Soil type doesn't matter
- Inexpensive raised bed
- Used bales can be used as mulch, compost
- Mobile at least, initially
- Avoid soil-borne insect and pathogens

Root knot Nematode damage/Tomato



Avoid soil-borne pathogens such as root knot nematodes via straw bale gardening.

Location Considerations

- Sun exposure
- Water source
- Height of plants
- Row width

Sunny location



Bale Conditioning

- Water bales and keep wet for 3 days
- On days 4, 5 & 6 sprinkle ½ cup urea or ammonium sulfate; water in fertilizer
- Continue to keep bales wet on days 7-10
- Check for heat on day 11; bale should be no hotter than 99F

What can be grown in a straw bale garden?

- Vegetables
- Herbs
- Flowers

Straw Bales or Hay Bales?

- Straw bales from wheat, oats, rye or alfalfa are best
- Hay bales more likely to have weed seed and herbicide residues

Planting Methods

- Flat top- create a flat top of growing medium in which to plant
- Pockets/holes- create holes 3-4" deep
- Use a potting mix or compost
- Position bales with twine/bands on the side

Flat top Planting



Planting Guide

Crop	Number of Plants
Cantaloupe	2
Cucumber	3-4
Peppers	3-5
Pumpkins	2
Squash (winter)	2
Yellow squash	2-3
Tomatoes	2-3

Husky Red Tomatoes



Celebrity tomato



Bell Peppers



June 30



Fruit Production from a straw bale garden



July 15



Other Considerations

- Watering
- Fertilization
- Weed Control
- Insect Control
- Disease Control

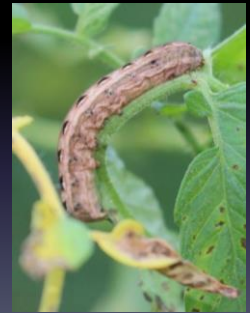
Weed Control

Crop and weed seed will germinate once bales are soaked with water. Use wheat or other cereal bales to minimize weed competition.



Insect Control

Insects that fly or crawl will find their way to your garden. Scout for insect damage and treat as appropriate.



Molds and Mushrooms

Straw bales, once wet, are suitable for the growth of mushrooms and slime molds. Neither are edible.



Plant Diseases

Leaf spot diseases such as gray leaf spot (pictured) can be a problem in straw bale gardens. Use fungicide cover sprays to protect healthy foliage.



Gray leaf spot

Loss of foliage from diseases can reduce tomato production and lead to sun scald of fruit.



More information?

- Volunteer Gardener –Straw bale gardening
- YouTube.com – several how-to videos
- Univ publications online

About the presenter: Dr. Windham is a professor of plant pathology with UT Extension. His specialty is the diagnosis and management of diseases of ornamental plants and turfgrass. He is located at the Soil, Plant and Pest Center at Ellington Agricultural Center in Nashville, TN.