

Clippings

A weekly column about plants, yards & gardens

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Gardening in Straw

Have you ever thought about creating a vegetable garden in a bale of straw? Well, it's not as crazy as it may sound. It even comes with certain advantages. No digging is required as the bales are placed right on the ground. They can also be placed on a patio or rocky surface. Straw bale gardening actually has much in common with traditional raised bed gardening. It allows you to garden in areas of the yard that have poor soil conditions. For those with limited mobility, the height of the bales makes it easier to tend the plants. Plus, there are generally less pests and diseases to deal with. An added bonus is that after the growing season, the bales can be recycled. Use them for compost or work them into the soil to add organic matter.

If using fresh straw bales, they first need to be conditioned. Conditioning helps get the decomposition process going inside the bale. Fresh straw bales must be allowed to decompose for a few weeks before planting since during this time the bales will get hot. This heat can damage seeds or seedlings placed directly into a fresh bale. If you are using older bales from the year before, you can skip this step.

Conditioning involves keeping the bales wet for three to four weeks prior to planting. If time is a factor you can add fertilizer to help things along. Adding fertilizer will speed up the decomposition process so that a fresh straw bale is usually ready for planting in less than two weeks. To do this method, West Virginia University Extension Service suggests keeping the bales wet for three days. Then on days 4, 5, and 6, sprinkle a nitrogen-rich fertilizer such as a ½ cup of urea (46-0-0) on top of each bale. You can also fertilize with bone meal, fish meal, or compost tea. Work it in well with water and continue to keep the bales moist.

On days 7, 8, and 9, cut the fertilizer application in half adding only a ¼ cup of urea on each bale per day. Again, continue to moisten the bales daily. On day ten, stop fertilizing but still keep the straw damp. Finally, with day eleven check the tops of the bales for heat. They should be warm as a result of the decomposition. Once the bales are cool to the touch, you can start to plant. You can also insert a meat thermometer several inches into the bale to check whether or not the temperature is cool enough to plant.

The bales should be at our body temperature or lower. Keep in mind that with the decomposing straw may come a few mushrooms. It is not necessary to remove them, however, don't eat them.

Now that the bales are ready it is time to plant. Gardeners typically use one of two types of planting methods. One is to dig individual holes in the top of the bale and carefully place a seedling in each. Then carefully firm the straw together with some good quality potting mix around the roots of the plant. For seeds, make several small holes in the top and fill each with potting mix before sowing. The other method consists of spreading soil on top of each bale to about a three inch depth. Then add the seedlings or seeds. After planting, water thoroughly.

You can grow a variety of vegetables in straw bales. How many plants to use per bale will depend on the type of crop. Washington State University Extension suggests for tomatoes use 2-3 plants; for peppers 4 plants and for cucumbers 4-6 plants. With larger vegetables such as pumpkins and winter squash use two plants per bale and with zucchini up to three. Vegetables that you would seed such as lettuce or beans can be spaced as directed on the seed package.

Now that your garden is planted, water the bales as needed. For ease of watering you might consider using a sprinkler or soaker hose. To ensure a well-balanced diet, your straw bale garden will need an occasional boost of fertilizer. Use a water-soluble all purpose gardener fertilizer. Organic fertilizers such as compost tea, blood meal, or fish emulsion can also be used.

For more information on growing plants in straw bales, you can check out a publication titled Straw Bale Gardening by West Virginia University Extension Service and one with the same title from Washington State University, Benton County Extension. For any questions, please feel free to contact me at my email mmurphy@iastate.edu, by phone at (712) 472-2576 or through your local County Extension office.