

Recycling Newspaper for Mulching Pumpkins



West Virginia University extension faculty have done extensive research on using old newspaper for mulching pumpkins. Shredded and chopped newspaper was found to be the best forms of paper to use for mulching. Slick pages of any paper product are not recommended because some inks in these materials may still contain heavy metals. Most inks now used have organic soybean oil or petroleum as a base. Recycling old newspapers into a mulch material, rather than dumping it in landfills is an environmentally friendly practice.

If the suggestions in this fact sheet are followed, newspaper mulch should provide adequate weed control, improve plant growth, improve fruit cleanliness, improve color and shape, increase yields, and help conserve soil moisture.

Using Newspaper Mulch for Pumpkins

Using shredded or chopped newspaper in pumpkin production has several advantages; two major ones are that the newspaper controls weeds and retains moisture. Other advantages are that the pumpkins are cleaner, have better color, and are

better shaped. Newspaper mulch will prevent 95 percent of the dirt normally found on pumpkins that are not mulched. Also the color of the pumpkin is much more uniform on the entire outer surface. The soft paper prevents the formation of flat rough surfaces on the pumpkin. The entire pumpkin is clean, uniform in color, and contoured correctly.

When to Apply the Mulch

Newspaper mulch should be applied just before the vines begin to run. This allows the soil time to warm to the minimum of at least 73 degrees F. Never apply newspaper mulch to cool soil. The newspaper mulch will lower the soil temperature slightly. Also, the mulch acts as an insulating material, which does not allow the soil to warm much after the mulch is applied. Pumpkins need warm soil.

Fertilizer to Apply

Apply the fertilizer and lime recommended by a soil test, or apply 35 pounds of 10-10-10 fertilizer per 1,000 square feet of area. Apply the fertilizer before you mulch. Keep the fertilizer at least 2 inches away from the plants. If possible, apply the fertilizer just before the final tillage.

Weed Removal

Remove all weeds before applying the mulch. Mulch is effective when it blocks the sun's rays from weeds and weed seeds. If all weeds are removed, the mulch will prevent the germination of most seeds. During the summer, pull any weeds you see growing through the mulch.

Amount of Mulch to Apply

The amount of mulch applied is vital for weed control. Too little mulch will allow sunlight to reach the soil and allow weed seeds to germinate and grow. Apply the mulch to a depth of 4 to 5 inches. This requires 500 pounds of shredded newspaper or 600 pounds of chopped newspaper per 1,000 square feet of area. Do not worry about applying too much. Check the mulch often and replace the newspaper in areas where its depth is too shallow. Sometimes wind

causes the newspaper to move until the paper stabilizes as a mulch.

Sources of Chopped and Shredded Newspaper Mulch

Chopped newspaper is available in small bales in Grant, Preston, and Randolph counties and in large bales in Greenbrier County. Currently, shredded newspaper is available only in Monongalia County. Some county solid waste authorities are considering the processing and marketing of chopped newspaper. It is anticipated that the increased use of old newspapers for livestock bedding and poultry litter will result in more newspaper processing facilities being put into operation at recycling centers and landfills. These facilities would have the capability to chop or shred and package newspaper for various agricultural uses.

Various size small engine- or tractor PTO-driven paper chopper/mulchers are available. These types of machines were used to chop newspaper in the study reported here.

Future Seasons

At present, recommendations follow two approaches. One method is to till or disk the mulch under in the fall to a depth of 2 to 3 inches. Plant annual rye as a cover crop. This allows the mulch to decay during the winter.

The second method is not to disturb the mulch. Early the next spring, move the mulch back 12 inches per row to allow room for planting and for the soil temperature to rise to the desired level. Once the plants are at the desired height and the soil temperature is adequate, apply the correct amount of mulch to have 4 or 5 inches around the plants.

Advantages of Using Newspaper Mulch

- Controls weeds
- Keeps pumpkins cleaner
- Improves color
- Makes shape uniform
- Adds organic matter
- Provides good yields
- Utilizes a recyclable material
- Retains moisture
- Is biodegradable

Disease Control

Some results show that there will be fewer disease problems with the use of mulch. The splashing effect of rain drops, which may carry disease organisms onto the plants, is eliminated. However, you must control diseases by preventive sprays. Use only approved fungicides on a strict schedule.

Insect Control

Check your pumpkins regularly for insect problems. Use approved insecticides only when the insects are present in large enough numbers to cause problems. One insect that can cause tremendous damage to pumpkins is the squash vine borer. This pest bores tunnels in the new pumpkins, making them useless for marketing. The squash vine borer is a soil-borne insect. Use systemic granular insecticides at the recommended rate before applying the newspaper mulch. Read the label and apply only at the recommended rate according to current label directions.

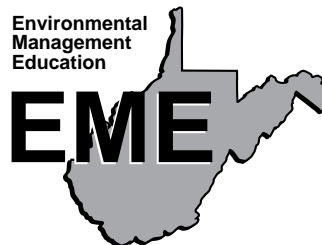
Recycling

Extension encourages recycling old newspaper and other materials for alternative uses rather than dumping them in landfills.

Extension Paper Mulch Study Group

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