

Recycling Newspaper for Mulch in Home Gardens



West Virginia University extension faculty have done extensive research in using old newspaper as a mulch in vegetable production. Shredded and chopped newspaper was found to be the best forms of paper to use for mulch. 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.

Where Chopped and Shredded Newspaper Can be Used as a Mulch

Use newspaper mulch on crops not being grown for early production. Newspaper mulch will work well on any crop growing over 5 inches in height.

When to Apply the Mulch

Soil temperature is the major factor to take into consideration as you decide when to apply the mulch. It should be applied after the soil temperature has reached a minimum of 73 degrees F. Newspaper mulch will lower the soil temperature slightly. Also, the mulch acts as an insulating material, which does not allow the soil to warm after it is applied. Most plants grow well if the soil temperature is above 70 degrees F.

The second factor to consider is plant height. All plants should be at least 5 inches tall. This allows for easy application. Also, by the time plants are 5 inches tall, the soil should be fairly warm.

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. Apply before the final tilling if possible.

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 will 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 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 of chopping or shredding and packaging newspaper for various agricultural uses.

Various size small engine- or tractor PTO-driven paper chopper/mulchers are available. But it seems more practical for home gardeners to buy chopped or shredded packaged newspaper mulch.

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 fruit cleaner
- Improves color
- Adds organic matter
- Provides good yields
- Utilizes a recyclable material
- Retains moisture
- Provides cooler soils for desired crops
- 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 vegetables regularly for insect problems. Use approved insecticides only when the insects are present in large enough numbers to cause problems. Read the label and apply only at the recommended rate according to current label directions.

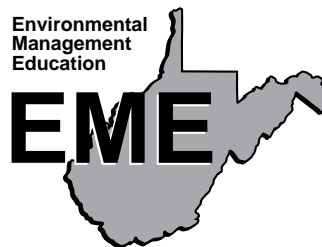
Recycling

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

Extension Paper Mulch Study Group

John Baniecki, Tom Basden, Mary Beth Bennett, Steve Bonanno, Ed Collins, Dave Davis, Ron Helmondollar, Edgar Hooper, Peter Jensen, John Jett, Mike Kubina, John McCutcheon, Dale Monks, Suzanne Poland, Juanita Popenoe, Edsel Redden, Ancil Schmidt, John Scott Jr., Howard Scott, Art Selders, Ed Smolder, Rodney Wallbrown, Craig Yohn.

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