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# Organic Gardening

and Farming



# Organic Gardening and Farming

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Better Gardening and farming . . . naturally

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A practical gardener, John Krill uses whatever organic materials are available for mulches and composting. He saves valuable space and works for top results by practicing companion planting.

## Which Mulches Are Best — and Why

An experienced gardener reviews the materials that perform best as mulch — and reveals how they do it.

**JOHN KRILL**

**N**EXT to the legendary green thumb, mulch is the organic gardener's greatest friend.

The kind of mulch to use is limited only by your knowledge of plant requirements and imagination. Compositions of mulches have direct effects on the plants to which they are applied. There are mulch materials which play multipurpose roles. They are at the one and same time providers of slow release food, they add humus to the soil, they keep weeds under control, and finally serve to keep winter freezes and thaws from heaving plants out of the ground.

My two sons maintain a small orna-

mental nursery, sales from which provide them with spending money. Rhododendrons and azaleas are among their favorites. Having enthusiastically visited commercial nurseries where clean cultivation was practiced, they decided that was the method they would use. They put in long and hot hours keeping the soil loose and free of weeds. Results were far from spectacular.

Clean cultivation, they belatedly discovered, cut many of the close-to-the-surface feeder roots. These plants are notoriously shallow rooted, and there was no way to avoid bruising or cutting off numerous roots. As a result,

plant development was mediocre indeed. Seeing what a thick layer of mulch was doing for magnolias, spreading junipers, Japanese red maples, spruces and hypericums, the two boys decided "to heck with the undeniably neat and attractive appearance of cleanly cultivated nursery rows," they were going to mulch.

Over the years they learned about mulch and its relationship with plants. They used hay from our field for their first mulch. It did a fine job in eliminating weeds, conserving moisture and preventing compacting of the soil. But hay and straw and other grassy mulches did not last long, and there had to be periodic replenishments. However, the rhododendrons and azaleas flourished since there no longer was any root-damaging cultivation along with its inescapable loss of soil moisture.

Rhododendrons, mountain laurels and azaleas, along with blueberries, will flourish in acid soils. We had the problem of converting certain areas of the nursery to conform to this major soil requirement. This was done by digging a generous-sized hole and filling it with leaf mold and soil taken from a nearby woods dominated almost exclusively by white and black oaks. The acid-loving plants were set in these holes.

Examination over several seasons showed that the roots confined themselves very closely to the area occupied by the soil from the woods. The roots turned back where the acid soil met the alkaline soil of the rest of the nursery. Efforts were then made to expand the acidity to a

— Old newspapers make a limited mulch supply go quite a long way.

greater range around the plants. Leaves were spread thickly in the rows and between the plants in the fall. Oak leaves proved best, though leaves of other varieties are also helpful.

The leaves matted and sealed in moisture. They kept thaws from heaving fall-planted stock. Most of all, they gave to the soil the desired acidity and nourishment needed by ericaceous plants. Leaves decay quickly, giving their benefits at a faster rate than more slowly decomposing mulches.

But for all-around desirability it is hard to beat wood chips, which have excellent moisture retention qualities, are easy and clean to handle, prevent soil compaction, and last much longer than the majority of other mulches. Pine needles are valuable for evergreens and ericaceous plants. But in our area they are hard to come by. When we do get them, we spread them thickly around the base of each plant, no farther out than the spread of the branches. Then wood chips are spread over the pine needles to hasten decomposition for the requirements of the plants. This combination system works very well where materials are limited.

Last summer marked the eighth year in which I used with satisfying results the sometimes mountainous accumulations of old newspapers and magazines. They were spread out in



the vegetable garden and nursery. A layer of hay, straw, corn cobs or wood chips over the paper improved the appearance and kept the wind from blowing them away. One warning: when using paper be sure to do so only after a heavy rain. Paper has a deadly efficiency in preventing the growth of weeds. But it is sufficiently dense to keep rain from readily penetrating past it into the soil beneath.

Covered newspapers and magazines have excellent moisture-retaining qualities. My vegetables and ornamentals grew well. Being of organic composition, paper eventually — though not quickly — decays and adds humus to the soil. I have done the same with strips of old carpeting and felt carpet pads. Turned back-side-up, carpet strips have a strawy appearance that contrasts well in vegetable rows. The felt pad strips are brown and match the soil. I let melons grow on the clean surfaces afforded by these materials. If desired, a layer of hay or straw will hide them, while the thickness of the rug and pad composition effectively seals off weed growth.

Around the bases of established fruit trees, I have a mulch of ordinary stones such as are encountered in the course of working a garden. What better way to get rid of them than to put them to this most useful purpose? They keep mice from burrowing



A permanent stone mulch around trees discourages mice and weeds and helps hold moisture. The stones also act as temperature regulators.

around the roots. They keep moisture from evaporating from the area they cover. Rains and snows leach minerals slowly from them to return it to the earth about the roots. They are permanent and rustically attractive to the eye.

When planning to set out fruit or ornamental trees in the next year, place a heaping mound of any mulch such as hay, straw or any grassy weeds on each proposed planting site. By the time you are ready to set out the trees, the mulch will have completely killed all growing things under it. In decaying, the mulch will have enriched the soil. Trees planted in such spots respond with vigorous growth.



An easy way to prepare heavy, sodded ground for next year is to cover the area thickly with an organic mulch. Vegetation under it will decay, leaving bare soil in the spring.

Is there a plot of heavily grassed or weedy ground which you would like to turn into a garden? Past experience has shown that it is hard and long work to convert such a piece into a well tilled garden. Let mulch make it easy for you. Cover the area heavily with mulch and let it remain until the next planting season. Then remove what is left of the mulch. You will find that all weedy and grassy growths have been completely destroyed and

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that only a rich, bare soil remains. If mulching material is scarce, use plastic, tarpaper or newspapers. Spread over the desired area. Cover this with as much organic mulch in the form of hay, straw, grass clippings or leaves as is available. Remove next season for working the resulting bare soil.

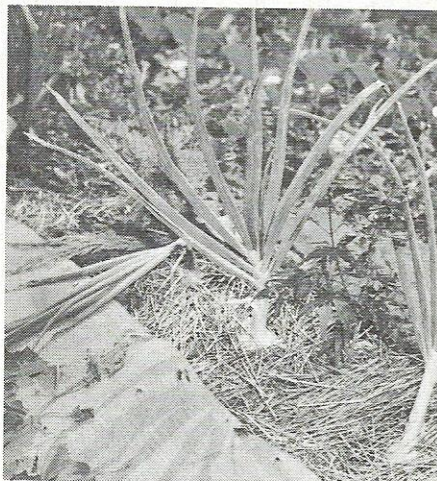
I like a mulch of hay, grass clippings or weeds for tomatoes. A fluctuating moisture content is the main reason for the unsightly blossom end rot and cracking of tomatoes. A loose mulch permits unrestrained entry to rain, and warm air to circulate through it to charge the earth with warmth.

Often it is possible to obtain large amounts of cattle manure. Many gardeners are reluctant to accept such a windfall because they feel manure must be worked into the ground. They may be unwilling to compost it because of lack of space due to already completed compost piles.

Well, use it for mulch. Spread in the garden rows and between plants. Messy to walk or work around, you say? True, if you leave it that way. Get a few bales of spoiled hay or straw and cover the spread manure with it. Exposed fully to the elements in this fashion there is no objectionable odor. Breakdown is quick and complete. The top layer of hay or straw makes for clean footing and speeds decomposition. Manure used in this way enriches the soil with nitrogen as well.

But no matter what organic materials you use for a mulch, the soil and the plants growing in it will benefit. This is true of shredded corncobs, hulls, leaves and everything else. Sawdust should not be ignored because of unfounded fears that it is detrimental to plants and that it causes soil acidity. Sawdust is low in plant food value, but it makes excellent humus. It has the disadvantage of keeping rains of short duration from passing through it. Once saturated however, sawdust releases water readily.

While sawdust uses nitrogen from the soil, an occasional top-dressing of cottonseed meal or manure will restore the nitrogen balance. Sawdust works very well as a mulch for strawberries, blueberries, mountain laurel, azaleas, rhododendrons and heathers.



The author favors hay as a mulch, but likes to combine it with other materials such as newspapers, burlap and discarded carpeting.

Hay is my universal mulch choice of a substance that will richly feed a plant or tree, as well as protect it from weeds and moisture fluctuation. A substantial hay mulch will enrich the soil with a reserve of quickly available nutrients that will remain for several years. Fruit trees and berry bushes show remarkable vigor and fruit size where hay is used to mulch them.

In the vegetable garden the benefits of a hay mulch cannot be denied. Vegetables feed greedily on the nutrients released and drink steadily of the moisture that the hay prevents from evaporating.

For a good all-purpose mulch, I choose hay. For a long-lasting mulch for ornamentals, I like wood chips above all others. Both are very common and easily obtainable in most areas. But whatever organic material is used, it will prove extremely helpful. Be wise — let mulch take the hard work out of gardening.