

Nonchemical Weed Control for Homeowners

Mississippians take pride in the appearance of their lawns and landscapes. Weeds, however, can detract from that appearance and cause hardship and frustration for homeowners.

A weed is any plant growing where it isn't wanted, but usually these are the plants that emerge naturally following soil disturbance. There are broadleaf weeds, grassy weeds, summer weeds, winter weeds, perennial weeds, annual weeds, nutgrass or cocogross, bermudagrass, and crabgrass.

Some weeds are more than just a nuisance; they can cause real damage to human health and safety. Weeds such as common ragweed release pollen that irritates allergies. Poison ivy and poison oak, both of which grow in Mississippi, cause skin irritation either through direct contact with the plant or indirectly through clothing or pets that have come in contact with the plants. Lawn burweed is an obscure, delicate plant that produces spiny seed capsules in early summer, and sandbur, which is highly visible, produces spiny seed structures all summer long. Both of these weeds can be very dangerous to bare feet.

Sometimes the amount of work required to minimize weed growth in the landscape and to maintain beauty and order around the home seems overwhelming. Really, weed control should be considered weed management. Homeowners, like farmers, should use a combination of practices that minimize weed growth. For example, whether garden, lawn, or landscape, you should follow practices that encourage the growth of desirable plants while discouraging weed growth.

Adaptation

Adaptation is the first aspect to consider when you select landscape plants. Select ornamentals and shrubs that are adapted to the Midsouth to plant in your landscape. Plants native to the Arctic tundra or the Southwest probably will not thrive in Mississippi.

Light

A common problem that contributes to weed growth in the landscape is too much or too little sunlight. If there is too little sunlight (or too much shade) on the lawn, the turf canopy thins, creating spaces for weeds to emerge and grow. Lack of sunlight can also make ornamentals and turf susceptible to attack by diseases, insects, or nematodes.

Make sure there is adequate sunlight for turf and shrub development. This can mean pruning or removing trees to increase sunlight penetration. The reverse of this can also occur with ornamental plants that thrive in low sunlight. Many ornamentals have foliage that will burn if exposed to too much sunlight. Burning also weakens the plant and creates a more suitable host for insect or disease attack.

As you design your landscape, take into account the light requirements of the ornamentals and turf in your lawn. Give sunlight where it is needed, and give shade to those areas that need shade.

Soils

pH

Soil pH is not something you can see or touch, yet it has a tremendous impact on the growth and development of shrubs, flowers, and weeds. Many weeds are better adapted to grow in soils with a wide range of pH values, while other more desirable plants brought into that site may not be as adapted to survive at that pH.

Fertilizers

Proper use of fertilizers during transplanting is important to avoid burning transplant roots and causing stress during establishment. After transplanting, fertilize ornamentals according to soil test recommendations to ensure optimal flower growth and development.

Drainage

Lack of water drainage in landscape beds can cause root rot and lead to overall decline of ornamentals. Certain weeds, such as sedges (nutsedge or cocogross), rushes,

pennywort, and torpedograss proliferate in water-logged soils. Install a tiled drain or reshape the soil surface to promote water movement away from the bed. This will reduce the suitability of that site for weeds that thrive in water-logged soils.

Mulch

One of the best weed-management practices to use in the landscape is mulching. There are many materials that can be used to mulch ornamental beds:

- heavy landscape mesh fabric
- black, white, or clear plastic
- bark mulch, pine straw, leaves, newspaper, rocks, and similar materials.

Often the most effective approach is to use a combination of mulches, such as plastic covered with rock, covered with bark mulch. You can also use pine or small-grain (wheat, oat, or other) straw to create a layered weed barrier. The mulch serves two purposes: it is a physical barrier to the emerging seedling, and it prevents sunlight from reaching the soil surface. Blocking sunlight is important because some weed seeds will not germinate without stimulation from sunlight. Also, sunlight is critical for the new weed seedling to begin photosynthesis for growth and development.

Be careful, however, that the mulch you use does not contain large quantities of weed seed. Small grain straw, for example, may contain weed seed; if you use old hay for mulch, it is almost guaranteed to contain large quantities of weed seed.

Synthetic mulches are also available. Black or colored polyethylene sheeting can be used as a weed barrier, but it requires putting irrigation lines under the

sheeting, since rainfall will not penetrate this barrier. Woven synthetic landscape fabrics are also available. These fabrics eliminate the need to place irrigation lines under the fabric, but they are less effective in eliminating sunlight.

Hand Removal

Many weeds in flower beds can easily be removed by hand. Most people benefit from some exercise, and bending to pull weeds can be healthy exercise. It will also enhance the beauty of your landscape. When used as a supplement to the practices discussed above, hand removal weekly or every other week will provide that manicured appearance to your property. When pulling weeds by hand, be sure to remove the roots. Most perennial weeds and many annual weeds will regrow if you don't remove roots from the soil.

Herbicides

Herbicides are highly effective for controlling weeds in your lawn and ornamental beds. This publication is not intended to recommend products available for use in the home landscape. Herbicides will control many of the weeds that occur around your home, and they can eliminate many hours of hand removal. Before purchasing a herbicide, take time to read the label. Make sure the product is labeled for application to the flowers, shrubs, vines, and other plants in your landscape. Before using any herbicide, read and follow all herbicide label instructions. Instructions on the label are provided to ensure safety to the user, site of application, treated plants, and environment.

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By John D. Byrd Jr., PhD, Extension/Research Professor, Plant and Soil Sciences.