Got Weeds?

Suppress with geotextiles, mulch

It's almost mind numbing to try and list all the landscape mulches and fabrics that can help controls weeds.

When it comes to mulches, consider bark, sphagnum peat moss, muck peat, compost, pine needles, gravel, plastic, and even rubber. When it comes to landscape fabrics (also called geotextiles), there are TRM (turf reinforcement mats), BFMs (bonded fiber matrices) in woven, non-woven and spun-bound needle-punched types. And, of course, there are polypropylene and solid polyethylene plastics (also known as "black plastic garbage bags.")

Before choosing what geotextile/mulch combination to use, evaluate the site. Certain combinations will not let anything grow up from the soil, while other combinations will allow turf and ornamentals to grow through. So pick and choose your combinations. For instance, a rock mulch above a landscape fabric can provide greater weed control than organic mulch above a landscape fabric.

PROFILE PRODUCTS

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And don't expect one product to control all weeds. It's been proven that fabric control annual weeds better than perennials, and that the best fabrics for suppressing weeds have the smallest-sized pores. Landscape fabrics that are thin, lightweight or have an open mesh allow greater weed penetration than more closely woven or non-woven fabrics.

In the rare case of particular weeds actually growing under or through the fabric and/or mulch, a herbicide application may be necessary.

Fabrics, plastics

Woven fabrics are much stronger and durable, while non-wovens have greater water-flow characteristics for use primarily where more water filtration is needed.

Woven needle-punched fabrics are a hybrid between woven and non-woven fabric. The needle punching increases water flow and makes the bottom side virtually opaque. The additional cap or layer of fuzz prevents sunlight from penetrating, thus preventing seed germination.

In any application where the fabric will function as a filter (under pavers, behind retaining walls, or drainage applications) or any application where it's buried under sub-soils and aggregate (for stabilization and to reduce road rutting), non-wovens should be used because of their high porosity rates.

In applications where weed control is an important factor, woven needle-punched or woven fabrics should be used because of their limited porosity and opaqueness. Black plastic (solid polyethylene) seems to be a simpler solution to unwanted weed growth, especially where it will be covered with an inorganic mulch and you don't want anything to grow. But plastic also restricts air and water movement, thereby keeping roots too wet, paving the way for root-rot diseases. Also, ants are attracted to soil that's protected from rain.

For these reasons, opt for landscape fabrics rather than plastics whenever possible. Their permeability allows the proper balance of air, water, and nutrients into the soil. Research shows that woven polyprolene (the heavier the better) is best for stopping weeds and promoting growth.

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Fabrics should not, however, be used in annual flowerbeds and bulb plantings, or in areas where they would inhibit the rooting and spread of groundcovers. They are used mainly for long-term weed control for woody ornamental trees and shrubs.

Mulches

Don't expect mulches used alone to suppress weeds. The technique simply doesn't work. Mulches must be placed on top of a fabric or plastic sheet.

Besides protecting plants and preventing weeds, other side benefits of mulch are that it conserves soil moisture, stabilizes soil temperature, reduces heaving, and reduces soil erosion on slopes. When done properly, it also looks pretty good in residential and commercial landscapes, especially with some of the wood-mulch colorants available on the market today.

Spring is the best time to mulch, after the soil warms and begins to dry, but more mulch is often needed in the fall. The recommended mulching depth is 2 to 2.5 inches. A mulch that is put on too thick may result in waterlogged soil or wet tree bark, conditions that favor disease development. Heavy mulch can also be a place for rodents to nest, which can further damage plants.

The most popular organic mulching materials include sphagnum peat moss, muck peat, pine needles, shredded cones, straw, tree bark, wood chips, and waste wood.

Shredded recycled tire rubber is a possible inorganic mulching material. It's available in several colors for use in parks, schools, etc. Other inorganic mulches include paper fiber, stone, chips, pebbles and gravel, which are used as mulch for color and texture changes, particularly near public entrances to buildings, along sidewalks and in shopping areas.

Animal manures also make effective mulches, though they sometimes carry undesirable weed seeds. Composted grass clippings, leaf mold, and used mushroom composts are also used as mulch, along with composted municipal sludge and food-industry waste like cottonseed, buckwheat, peanut hulls, cocoa-bean, and other materials. ■

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