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HYDROMULCHING — A METHOD OF LAWN ESTABLISHMENT

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Hydromulching (or hydroseeding) is one method used to establish lawns where a mixture of water, seed, fertilizer and a fiber mulch are applied over a prepared seedbed. If the lawn is to be established with sprigs, such as one of the "Tif" bermudagrasses, then apply the mixture of fertilizer, water and mulch over the sprigs, which have been uniformly spread over the prepared soil.

Advantages and Disadvantages

The period from the time a lawn is seeded or sprigged until it is fully established is critical. Until the grass has developed a strong root system, the lawn is susceptible to erosion and drying out. One heavy rain can literally wash seed or sprigs and soil down the drain. The fiber mulch reduces erosion and conserves moisture during this period.

Once the mulch has been wetted after the seed or sprigs are in place, it must remain moist until the grass plants have established root systems. If allowed to dry during this period, some of the young grass plants will die and may need to be replanted. Mulch maintains moisture in the seedbed. While mulch does not eliminate the need for light applications of water, the frequency of watering is reduced by mulch.

The major disadvantage of hydromulching is the cost. It is more expensive than seeding or sprigging the lawn yourself, but less costly than sod. Most reputable

hydromulchers have guarantees to periodically check a lawn during establishment.

Best Time to Hydromulch Lawns

For bermudagrass lawns late spring and early summer are considered ideal for hydromulching. For lawns seeded or sprigged in summer, watering is more critical.

Also, bermudagrass must become fully established before the first freeze in the late fall. Therefore, lawns planted before mid-August in the northern parts of the state and mid-September in the southern sections of the state have better chances of being successful. The best time to successfully establish tall fescue is in the early fall. It must be fully established before being subjected to cold winter temperatures or hot summer temperatures.

Other grasses including bluegrass, centipede, St. Augustine and zoysia can be established by hydromulching. Centipede and St. Augustinegrass seed are available, but expensive. Do not confuse carpetgrass seed with St. Augustine; carpetgrass produces a low quality turf. Also, zoysia lawns should be established from sprigs rather than seed. The seeded types of zoysia are coarsely textured, open types not suited for high quality lawns. Bluegrass lawns should be limited to the Texas Panhandle.

Temporary lawns consisting primarily of annual ryegrass can also be hydromulched. Ryegrass is usually planted in the fall when it is too late to plant other permanent grasses. These lawns must be replanted in the spring with a permanent turf.

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Steps for Successful Hydromulching

Frequently the questions are asked, "which hydromulcher is best?" or "how can I tell which one will do a good job?" Ask for references and check them out. Talk to the people who have dealt with your prospective hydromulcher. Look at some of the lawns he has planted recently. You might also ask the Better Business Bureau if anyone has complained about his services.

Another way to check out a hydromulcher is to review the methods and materials he intends to use in establishing your lawn. Steps for successful hydromulching should include:

Control of undesirable vegetation. Many annual weeds are killed when the soil is rototilled, but perennials such as Dallisgrass and nutgrass are not. Chemicals are available to control perennial weeds before the soil is tilled.

Removal of debris. Remove any rock, wood or other construction debris from the seedbed, which is more than 1 inch in size.

Addition of soil amendments and fertilizers. The next step is to apply a fertilizer uniformly over the soil. Use a 12-12-12 at the rate of 20 pounds per 1,000 square feet or its equivalent. If a soil test indicates that your soil is high in sodium, add gypsum at a rate of 100 pounds per 1,000 square feet.

Tilling the soil. Till the soil to a depth of about 4 inches if the existing soil is hard and compacted. A loose seedbed helps the turfgrass plant establish a deep root system. Another important reason for tilling is to incorporate phosphorus into the rootzone for use by new seedlings. Many hydromulchers apply fertilizer on the soil surface after the soil has been tilled. It is better, however, to apply phosphorus before the soil is tilled.

Final soil preparation. Rake and grade the soil to break up clods and smooth the surface. The final grading should allow for drainage away from the house and should avoid low areas that collect and hold water.

Application of seed or sprigs and mulch. The recommended seeding rate of hulled bermudagrass is 1

pound per 1,000 square feet and for tall fescue from 8 to 10 pounds per 1,000 square feet. St. Augustine and centipede may be planted at ½ to ½ pounds per 1,000 square feet. The suggested application rate for "Tif" sprigs is 8 to 10 bushels per 1,000 square feet. The bluegrass seeding rate is 2 pounds per 1,000 square feet. Higher rates may result in establishing a high population of weak plants and a problem lawn.

The usual rate for fiber mulch application is 50 pounds per 1,000 square feet. Uniformly apply the mixture of seed and mulch over the soil. The experience and skill of the person applying this mixture is very important. If a hydromulch machine contains any common bermudagrass seed, do not use it to apply mulch over "Tif" sprigs. It is not a good idea to hydromulch when the soil is wet because the person applying the material may need to walk on and/or drag a hose across the soil, thus damaging the final contour of the lawn. Mulch does not stick to wet soil but may bounce when applied under pressure and splatter buildings or shrubs.

Watering. After the lawn has been hydromulched, begin a proper watering program. Keep the seedbed moist but not wet. On hot, dry days this may mean a light application of water several times a day. If the lawn is allowed to dry, there is a good chance the planting will fail. As the new turfgrass plants develop, reduce the frequency of watering and increase the amount of water applied at each watering until the plants are established. More hydromulched lawns are probably lost because they were allowed to dry out or because they were kept too wet during this establishment period than for any other reasons.

Mowing. Soon after the first new plants appear, it will be time for the first mowing. The suggested mowing heights for common bermudagrass are $1\frac{1}{2}$ inches; for "Tif" bermudagrass 1 inch; and for tall fescue, centipede and St. Augustine 2 inches. Mow these grasses when their height is no more than one-third greater than the mowing height. In other words, mow a common bermudagrass lawn when it is about 2 inches tall, a "Tif" lawn when it is about $1\frac{1}{2}$ inches tall and the other grasses when they are about 3 inches tall.

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