Suggested Management for TifSport Bermudagrass

TifSport continues to perform well and is the high quality 'grass of choice' for many golf courses, athletic fields and landscaping uses. It has improved density (holds the ball up better and competes better with weeds), greener color, and improved winter-hardiness. TifSport is also produced under strict Certification Standards which guarantees the consumer that each time the grass is purchased, it will be the same grass (and not mixtures of different types that can produce an undesirable and unsightly turf). A couple of recent observations by TifSport users will be addressed below.

TifSport was bred, evaluated, developed and released by USDA-ARS in cooperation with the University of Georgia at the Coastal Plain Experiment Station in Tifton, GA. It was evaluated in 11 environments from Florida to Nebraska from 1983 to1997. The data collected from these sites showed that TifSport produces a premium quality grass surface, equal to and superior to Tifway, that meets the highest golfing and athletic field standards. High quality, uniform overseeded putting surfaces are routinely obtained. Like most bermudagrasses, TifSport requires 8-10 hours of sunlight to produce healthy turf.

Several morphological characteristics give TifSport its unique advantages:
… Closer mowing heights—to ¼ inch
… Rhizomatous and stoloniferous growth habits
… Excellence cold tolerance
… Superior color under cool conditions
… Finer leaf texture than Tifway
… Superior turf density
… Superior sod strength
… Excellence traffic tolerance
… Dark green color
… Pest resistance
… Upright leaf orientation

I. General Considerations:

In many ways management of TifSport is similar to Tifway. Off types have not been a problem on TifSport, a seed and pollen sterile triploid interspecific hybrid. However, regular roguing of all bermudagrass areas is important to maintain genetic purity. It is especially important to rogue foreign contaminants before overseeding. TifSport is recommended for golf courses, athletic fields and high-end commercial and residential lawns.

II. Establishment: (From Sprigs or Sod).

1. Land preparation: The surface should be as smooth and firm as possible. A mechanical sand rake or comparable machine combined with wetting of the surface is suggested to compact the

sprigbed. The sprigbed should be fumigated at a rate of 400 to 500 lbs methyl bromide/acre (450 to 550 kgs /hectare) or otherwise treated to eliminate contaminating seeds and vegetative plant parts. Nematodes need to be controlled. Good root zone moisture should be established before planting.

3. Planting: TifSport can be planted as sod or sprigs. Sod will provide an instantly beautiful fairway, lawn, athletic field or landscape area. Sod can be installed during most months of the year. It is important to irrigate the sod as it is laid down. It is best to plant sprigs(stolons) from May thru June at 150 to 250 US bushels/acre. Sprigs should be cut into the surface, preferably in two directions, and the surface firmed with a roller. Thin areas should be re-sprigged as needed. Use only freshly harvested sprigs. Sprigs should be planted within 48 hours of harvest. Bulk loads of sprigs should be unloaded on a paved or concrete surface to avoid contamination from local grasses. Increase sprig rate as the growing season shortens.

4. Water requirements: Water the surface before laying sod or spreading the sprigs to cool the surface. Irrigate immediately after cutting in the sprigs or as you are laying the sod. Any drying of sprigs or sod will reduce survivability and increase grow-in-time. If topdressing is used, apply cool, moist sand. If dry sand is used, water as the sand is applied, especially during mid-day when temperatures are very hot. Keep the soil moist but not saturated until sprigs and sod are rooted.

A. *Preplant and Grow-in suggestions:*

Suggested Irrigation and Fertilization Schedules for Sprigged Areas

A. Irrigation the First Week:
   a . Hourly at 5 minutes per station during daylight hours depending on system output. Irrigate to maintain high soil surface moisture.
   b. Once during the night for thirty to forty minutes per station (this can be risky in case a head sticks and washes out a planted area).
   c. In the event that the area should become excessively wet, reduce the nighttime irrigation; however, do not skip any of the daytime cycles. Daytime cycles may be shortened but must be made. Hand water any hot spots due to lack of coverage.

B. Irrigation the second week (same as original)

C. Irrigation the Third and Fourth Weeks:
   a. Two to four cycles daily at ten to twenty minutes per station depending on temperatures.
   b. Once nightly at thirty to forty minutes per station.
   c. In the event that the area should become excessively wet, reduce the nighttime irrigation; however, do not ship any of the daytime cycles. Daytime cycles may be shortened but must be made.

D. Irrigation the Fifth and Sixth Weeks:

a. One to two cycles per day at twenty to thirty minutes per station depending on temperatures.
b. In the event the area should become excessively wet, reduce irrigation time length.
c. After the sixth week, you may resume your normal irrigation schedule (two-three times per week, deep watering).

E. Fertilization Schedule:
   a. Apply Dolomitic limestone per soil test recommendation to the area to be sprigged.
   b. Apply fertilizer with Ronstar at the time of sprigging (Ronstar @ 2.0 lbs. a.i. per acre).
   c. Apply 19-19-19 at 100 to 200 lbs/Acre on weeks 1, 3, 5, 7, 9 and 11 after planting. Be sure to include a micro-nutrient package.
   d. Apply ammonium nitrate or ammonium sulfate at 100 to 200 lbs/Acre on weeks 2, 4, 6, 8, 10, and 12 after planting. It may be helpful to split the application during each week.
   e. Resume normal fertilization plan on week 14.
   f. Normal Fertilization plan: example: apply 24-6-12 with 50% Nutralene @ 125 lbs/acre every 3 to 4 weeks during the growing season to maintain desired color and turf quality. A nitrogen to potassium ratio of 1:1 or 1:2 can be helpful. Follow soil test recommendations.

Suggested Irrigation and Fertilization Schedules for Sodded Areas

The schedule for irrigating sod is similar to that of sprigs, except:

1. Thoroughly saturate sod immediately after installation

2. Water 4 times per day for 20 to 30 minutes per station during daylight hours and one time at night for the first week until sod is rooted. Three times per day and once at night for the second week.

3. Hand water any hot spots due to lack of coverage.

4. Fertility recommendations during establishment: Chemical soil analysis including pH should be performed and root zone fertility adjusted according to test recommendations before planting. After establishment, soil should be routinely tested to check P and K status, especially on high sand surfaces.

1. Apply dolomite or lime according to soil tests- soil pH from 6.5 to 7.5 is optimum.
2. Apply fertilizer with Ronstar (if available) at the time of sprigging (Ronstar @ 2.0 lbs. a.i. per acre).
3. Apply 19-19-19 at 100 to 200 lbs/Acre on weeks 1, 3, 5, 7, 9 and 11 after planting sprigs. If sod is laid apply a preplant with milorganite or equivalent and fertilize as needed once

the sod has rooted. Other similar formulations can be used, but make sure they include a micro-nutrient package.

4. Apply ammonium nitrate or ammonium sulfate at 100 to 200 lbs/Acre on weeks 2, 4, 6, 8, 10, and 12 after sodding. Resume normal fertilization plan on week 14 for sprigs and on week 3 for sod.

III. Maintenance

A. Fertilization: Follow soil test recommendations. Suggest applying a complete fertilizer such as 10-10-10 to give 20 to 40 lbs N per acre or about 0.5 to 1.0 lb N/1000 sq. ft. every four weeks to maintain desired quality and color. Sand based fields will require higher fertilization rates depending on soil texture, rainfall, traffic, etc. Maintain N:P:K ratio of at least 1:1:1

B. Mowing: Begin mowing when the sprigs or sod begins(has rooted and cannot be pulled –out by hand, usually by the end of week 2 for sod and weeks 3-4 or sprigs) growing such that only small amounts of leaf tissue are removed during any one mowing. TifSport performs best when mowed at 0.5 to 1.0 inch on fairways, tees and athletic fields. Lawns, landscape areas, and roughs can be mowed up to 1.5 inches. TifSport needs to be mowed at least weekly or more often to prevent scalping.

C. Seed heads: Like most bermudagrasses, TifSport produces seed heads(but no pollen or seed) mainly in late spring and early summer. Research has shown that labeled rates of Primo reduces seed head production.

D. Plant growth regulators: Research has shown that TifSport plots treated with Primo, at the label rate, during months of rapid growth, maintained higher turf quality, better colour, and higher shoot density than TifSport not treated with Primo.

E. Pest management requirements: Army worms, cutworms and sod webworms are normally the only insect pest you need to be concerned with during grow-in. Inspect the turf closely on a daily basis for worm activity. Watch for birds feeding as an indicator. Unchecked feeding on new leaf tissue can damage and even kill sprigs and at the least will slow progress.

Similar to Tifway, Apply fungicides curatively for any diseases noted. Control thatch to help produce a healthy plant.

F. Improving winter hardiness: A number of small things can add up to improved winter hardiness.

1**.** Gradually raise the mowing height in the fall so that by the time night-time temperatures reach the low 50ºF (10ºC), the height is 0.188 inch or higher.

2**.** Maintain high levels of K (up to 1N:2K) throughout the year, with special emphasis during late summer and fall.

General Comments

1. Puffiness of grass in the 'surrounds' or 'fringes' of greens. Infrequent mowing contributes to this characteristic. TifSport performs best at mowing heights from ½ to 1 (and maybe slightly higher in some situations) inch mowing heights. In bermudagrass, the top 4 leaves are usually green. Leaves below the 4th leaf begin to die. If you let TifSport get too tall, the bottom leaves are dead, but the top shoots continue to produce leaves. The top leaves are pushing against each other to produce the puffy appearance and the lack of support on the stems (dead leaves below the green leaves) cause the plant to kind of 'collapse', again contributing to the 'swirled' and puffiness condition. Increased fertilization around the greens area probably contributes to the situation. **Solution**: Regular mowing (at least weekly) at 1 ¼ inches or less. This management should be started at the beginning of the season. If you already have the situation, either 'wait it out' or 'bit the bullet' and scalp to the right height when grass is rapidly growing to get quick recovery. Fertilizing with nitrogen a few days before scalping may shorten the undesirable scalped turf.

2. Ball sinks into the grass and it is difficult to hit out of it. This problem is somewhat related to the problem above. TifSport is a high quality triploid turf bermudagrass that tolerates close mowing to ½ inch or less because of it's finess (thin leaves and stems) and density. Thin stems are usually not as strong as thick stems, therefore on taller mowed grass(above 1 inch) the ball will sink in TifSport. However, on close mowed grass (less than 1 inch), the ball sits higher (as grass is mowed closer) because of the grass density. **Solution:** Improve the density of the grass with increased nitrogen, lower mowing height, and/or Primo. One should be aware that increasing nitrogen can increase thatch and may require more aeration.