TURF BUSINESS TECHNOTES -SH™

Volume III, Issue 4

Thatch Management Critical for Maintaining Ultradwarf Quality

The ultradwarfs are triploid hybrids that are low growing couchgrass cultivars adapted for putting green use. It is believed that they are somatic mutations from Tifdwarf and Tifgreen. Popular ultradwarf cultivars include Champion, MS Supreme, TifEagle, Floradwarf, and Miniverde. The prominent characteristics of the ultradwarfs are their high shoot density and adaptation to low mowing heights.

An agronomic disadvantage of the ultradwarfs is their tendency to thatch. Once a significant thatch layer develops, the quality associated with the ultradwarfs rapidly declines. In managing the thatch or organic matter accumulation, common practices that might reduce thatch in an older cultivar like Tifdwarf or Tifgreen (328) may not be appropriate for the ultradwarfs.

Nitrogen requirements for maintaining the ultradwarfs is less than that needed to maintain the older cultivars. The levels can be as little as 50 to 75% of that normally used. A suggested nitrogen application range would consist of rates of 2.5 to 3.5 g/m^2 per growing month. At these rates nitrogen does not contribute to thatch buildup.

Vertical mowing is a common practice for reducing thatch, but on the ultradwarfs frequent deep verticutting can cause a decline in the turf. Verticutting is also detrimental during times when couchgrass decline (pathogen: Gaumannomyces graminis) is active. If deep verticutting (18 to 25 mm depth) is to be done, it should be limited to once or twice a year. It usually takes at least 2 weeks for the turf to recover. A light verticutting program would be preferred.

Topdressing practices have evolved from heavy infrequent applications to light frequent applications required of the ultradwarfs. A weekly topdressing with 0.03 to 0.06 m^3/100 m^2 during active growth is a good guide for the frequency and amount of topdressing. Frequent topdressing is an important means for preventing or reducing thatch.

Traditionally 2 to 4 corings a year is a standard practice using 12 or 13 mm diameter tines on a 5 cm spacing. With the ultradwarfs more intensive coring is needed either by increasing the number of corings or narrowing the tine spacing during coring. A popular practice is to core 2 to 4 times a year using 12 or 13 mm diameter tines on a 2.5 cm spacing. The core holes should be filled with sand.

Finally, a couple of suggestions for establishing ultradwarf greens. First make sure you select the appropriate cultivar for your region. The ultradwarfs, at least in the United States, appear to vary in their performance depending on the location. Second, start a thatch management program early.

Questions?

If you have questions about the Syngenta TechNotes—SH contact Sam Hole at sam.hole@syngenta.com or visit www.greencast.com.au