

### THREE-DIMENSIONAL VERSUS TWO-DIMENSIONAL ROOT ZONE STABILIZERS

To date there has been a lack of comparative information between the three-dimensional interlocking mesh system and the two-dimensional fiber system of root zone stabilization.

A comparative set of plots was established in 1991 in Australia by Golf Course Superintendent Steve Cole. The construction consisted of a USGA specification root zone and profile which was established to creeping bentgrass (*Agrostis stolonifera*). After five years, two assessments were made in 1996 comparing rooting and infiltration rates among the three treatments.

A golf hole cutter was used to sample a turf-core down to 8 inches (200 mm), which was then gently washed to remove the root zone mix. The two-dimensional Fibreturf treatment had no root growth past the thatch-sand interface at 50 mm. The root depth of the Fibreturf treatment was 60% less than the control treatment, which had no stabilizer incorporation. In contrast, the three-dimensional interlocking Netlon mesh treatment had a much more expensive root system, including an intertwining of the roots in and around the mesh elements that persisted after the sand was washed off. The rooting depth was comparable between this treatment and the unstabilized control treatment, and had a 2.4 fold greater rooting depth than the 2-dimensional Fibreturf.

Assessments conducted with an infiltrometer on all three treatments showed the infiltration rate of the three-dimensional, interlocking mesh treatment to average 15% higher than the untreated control. In contrast, the two-dimensional fibre treatment had a 52% reduction in the infiltration rate compared to the untreated control. During the sampling process the two-dimensional fibre treatment was very difficult to penetrate in contrast to the untreated control and the three-dimensional, interlocking mesh treatments.

### TURFGRASS INFORMATION CENTER

The Turfgrass Information Center (TIC) at Michigan State University is now on the World Wide Web:

<http://www.lib.msu.edu/tgif>

Additional online content and services will be added steadily to the TIC website, including access to the Turfgrass Information File (TGIF) itself. Some portions of the TIC site will be "public," while others including TGIF, will continue to be "private" subscriber access only.

Included in the website is information about TIC databases and services, the O.J. Noer Collection, subscriptions forms, etc.

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### CUTTING HEIGHTS AND FREEZING

The closer the mowing height the earlier a turf soil surface becomes frozen. By the same token the closer the mowing height the earlier turf soil surface thaws in the spring.