American Society of Agronomy Update

By Mike Huck - USGA Green Section

I recently attended a few of the talks at the American Society of Agronomy meetings in Anaheim this last month and want to share some of the information presented:

**2,4-D Leaching** - Movement of 2,4-D through thatch and soil columns was studied at the University of Maryland on both zoysiagrass and bentgrass. There was a distinct difference between the two turf species regarding the amounts of herbicide retained and/or passing through the thatch and into the soil. The bentgrass thatch samples retained significantly more of the 2,4-D the portion retained by the bentgrass thatch was also more tightly bound and more difficult to extract when compared to the zoysiagrass. Apparently, not all grass varieties are equal in their ability to filter pesticides and nutrients.

**Buffer Zones and Surface Runoff** - Oklahoma State University evaluated various buffer zones lengths (distance from the treated edge of a fairway to the protected water source) and different mowing heights effect upon reducing surface runoff of pesticides. The difference in the length of the buffer zone had little effect on surface movement in a significant rainfall event because once the buffer becomes saturated and reaches field capacity infiltration is reduced and surface runoff begins. It was found that a higher cutting height (3” rough vs. fairway cut) was slightly more effective at initially reducing runoff because the taller grass slowed the lateral movement of the surface water. The real take home message here was do not make chemical or fertilizer applications when soils are already saturated.

**Removal of Perennial Ryegrass from Overseeded Bermudagrass** - North Carolina State University evaluated cultural practices to remove perennial rye from bermudagrass. (Chemical methods are to be evaluated this coming season.) They looked at various treatments of scalping, vertical mowing, and aeration side by side with an untreated control plot. Those of you who overseed probably won’t find these results very surprising. Early in the trial, ranking of the different treatments showed scalping provided the highest component of bermudagrass, then followed by light vertical mowing, aeration, and the untreated check. In the end, however, the point in time when the last of the ryegrass was gone was identical. (Even in the untreated check plot!) Bottom line, the weather ultimately controls removal of perennial rye. Foliar mowing, aeration, and the untreated check was more effective than herbicides, such as Poaannua! *Penncross and Crenshaw Bentgrass*

**Response to High Temperature and Low Aeration Stress** - The bottom line was Crenshaw showed better tolerance to high temperature stress but if either variety is under both a low oxygen condition and high temperature stress, you can expect roots and canopies to deteriorate.

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**Oops!**

In the November issue of Thru The Green, in an article entitled, “Research Update” a reference was made to a business - The Sod Farm. The business name should have read - Grass Farm. Our apologies.