SuperScience

THE GREENS THEME

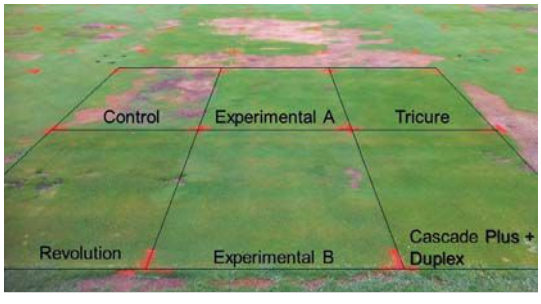
//WET WORKS

WETTING AGENT PROGRAM AND IRRIGATION EFFECTS ON PUTTING GREEN PERFORMANCE

Ethan Charles

Golf course superintendents often use wetting agents and weather station data to conserve water. Irrigating based on evapotranspiration (ET) losses will help ensure an appropriate amount of water is available to maintain visual turf quality while keeping the putting surface firm for desired ball roll and shot holding characteristics. The objective of this research is to evaluate the effectiveness of commonly used wetting agents while irrigating at various levels of replacement ET on a sand-based creeping bentgrass (*Agrostis stolonifera*) putting green.

Irrigation treatments were applied at 50 percent, 75 percent, 100 percent and 125 percent ET replacement combined with six wetting agent treatments applied to each irrigation regime. Turf quality and color declined significantly when irrigation was applied at less than 75 percent ET. Among irrigation treatments, plots irrigated at 50 percent ET had more localized dry spots (LDS) than any other plots. Similarly, the untreated control plots had more LDS than all wetting agent treatments, regardless of the irrigation level.



Irrigation at 75 percent ET replacement with application of six different wetting agents. Photo taken in Fayetteville, Ark. during July.

Volumetric soil moisture evaluations at various depths indicated that the use of wetting agents did not affect the overall volumetric water content average, but improved uniformity of rootzone moisture across all irrigation levels. Wetting agent treatment did not have a significant effect on surface hardness when sufficient irrigation was applied, but decreased hardness at the 50 percent ET irrigation level. There were no effects of irrigation or wetting agent on golf ball roll distance. A favorable playing surface is attainable using less water when wetting agents are applied.

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PHOTO BY: ETHAN CHARLES

NEWS UPDATES

VALENT AND NUFARM ANNOUNCE PARTNERSHIP

Valent U.S.A. Corp. has entered into an agreement with Nufarm Americas that appoints Nufarm as the exclusive distributor of its branded professional products for professional turf, ornamental and aquatic uses in the United States.

The partnership expands the portfolios of the two companies into one broad portfolio that will be sold by Nufarm in the U.S. In 2012, Nufarm acquired Cleary Chemical Co. and its line of fungicides.

"Valent still owns the registrations, still owns the trademarks. The arrangement is a sales agreement with Nufarm," Scott Todd, national business manager for Valent Professional Products, told *Golfdom* during the Golf Industry Show. "We don't see any short-term changes in branding/packaging."

The partnership will be led by a team of top talent from both Nufarm and Valent, as the sales and technical teams of both companies join forces.

"People can do the math — taking No. 5 and No. 7 and putting them together makes us a top-tier player," Todd said. "Whether that's No. 1, 2 or 3 I don't know. I'll let the numbers speak for themselves."

The partnership became effective as of Feb. 16th, 2014.

"OF THE NUMEROUS SAMPLES WE RECEIVE EACH YEAR, AT LEAST 30 TO 50 PERCENT OF THEM ARE DIAGNOSED WITH AN ABIOTIC PROBLEM."

Jim Kerns, Ph.D.
(see full story on page 30)