



Deficit irrigation of seashore paspalum and bermudagrass for golf course turf

Research at the University of Arizona has shown that seashore paspalum remained unstressed longer than bermudagrass during drought cycles.

However, planting seashore paspalum is unlikely to result in water savings unless irrigation practices are changed to take advantage of its tolerance of dry soil conditions. The objectives of this research are to determine the responses of seashore paspalum and bermudagrass cultivars to deficit

irrigation and to determine the minimum fraction of reference evapotranspiration (ET) necessary to maintain these grasses in acceptable fairway condition. The research will be conducted in Tucson. Popular cultivars of seashore paspalum and bermudagrass will be maintained as a fairway and irrigated at 25% to 100% of reference ET. The research will identify the minimum amount of water needed to provide acceptable fairway-quality seashore paspalum and bermudagrass fairways in the desert Southwest. This project is part of the GCSAA National Research Program. The Environmental Institute for Golf is providing funding. — James Walworth, Ph.D. (walworth@ag.arizona.edu), University of Arizona

Wetting agent effects on root-zone moisture distribution in greens

Many superintendents state that some wetting agents move water rapidly through the root zone while others retain water near the surface, but few data substantiate such claims. The objective of this research is to determine how several commonly used wetting agents affect moisture distribution when applied to a sand-based putting green under wet, moderate and dry irrigation regimes. In research at the University of Arkansas, five wetting agents will be applied to a high-quality putting green built to USGA recommendations. Volumetric water content will be measured



Photo by D. Karcher

at several depths below the soil surface to determine moisture distribution. The results will provide superintendents with a better understanding of how wetting agents affect root-zone moisture distribution under various irrigation regimes. This project is part of the GCSAA Research Program and is funded by the Mark Kizziar Research Grant through The Environmental Institute for Golf. — Doug Karcher, Ph.D. (karcher@uark.edu), University of Arkansas



Photo by D. Kopec



GCSAA Chapter Cooperative Research for 2009

Now is the time to start thinking about your research needs for 2009. While 2009 seems far off, the problems you faced this winter and spring and are facing now are fresh in your mind. Discuss research needs with chapter members by listing the problems you face routinely and determining the percentage of golf courses in your area affected by each problem and the severity of each problem. Use this information to prioritize your research needs. Once you know the top two or three research needs, contact a turfgrass scientist in your state or region. Work with the scientist to describe the general solution being sought and potential treatments to solve the problem. The formal request for proposals for new research to begin in 2009 will be available in August 2008. — Clark Throssell, Ph.D. (cthrossell@gcsaa.org), director of research, GCSAA

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