Bermudagrass Care Requires Many Inputs

Standard management practices of irrigation, vertical mowing, and fertilization must be carefully programmed with chemical weed control to maintain weed-free, high quality bermudagrass, as shown by results of research done at the University of California, Riverside.

"If the interrelationships and timing of these practices are not considered," says W. W. Wright, research associate, "the results may be undesirable with respect to weed control and turf appearance."

Wright reported on the effects of cultural and chemical renovation of weed-infested bermudagrass turf during the American Society of Agronomy.

He conducted the research in cooperation with Dr. V. B. Youngner, professor of agronomy, UCR, and Dr. V. A. Gibeault, agricultural extension environmental horticulturist at the Riverside campus. The study was partially supported by a grant-in-aid from the U.S. Golf Association-Greens Section.

"In a randomized split, split plot experiment," Wright said, "irrigation, vertical mowing, nitrogen fertilization, and chemical weed control were evaluated for the renovation of a weed-infested common bermudagrass turf. These factors were considered from the viewpoint of long-term effects and maintenance of an improved condition once it was attained."

The researcher reported that the following results were observed after two and one-half years of regular treatment: over all the cultural practices, the highest quality turf was obtained with the use of the herbicide Kerb, although certain broad-leaf weeds were not controlled. Both fall and spring vertical mowing increased weed populations despite herbicide applications. For this reason vertical mowing, unless done for reseeding or thatch removal purposes, is a questionable practice. Fall vertical-mown plots contained considerably more weeds than spring vertical-mown plots. Soluble and slow-release fertilizers gave comparable turf quality. The frequency of irrigation influences the performance of chemicals and the effects of other cultural practices.