

JOINTED GOATGRASS: A THREAT TO WINTER WHEAT PRODUCTION. Tony White, Extension Coordinator, National Jointed Goatgrass Research Program, Kansas State University Agricultural Research Center, Hays

Jointed goatgrass (*Aegilops cylindrica*) was introduced into the United States during the early 1900s and has spread throughout most of the winter wheat producing areas in the west. Jointed goatgrass is a devastating weed that infests over 5 million acres of winter wheat and is spreading unchecked at a rate of nearly 50,000 acres per year. Jointed goatgrass costs producers \$145 million annually due to reduced grain yields – commonly a 25% to 50% loss - and increased dockage at the grain terminal.

In 1994, the National Jointed Goatgrass Research Program initiated an integrated, multidisciplinary effort involving 11 states and over 35 state and federal scientists to battle the problem of jointed goatgrass in winter wheat. Projects focused on management practices, certain aspects of jointed goatgrass biology and ecology, and various components of transferring the information directly to producers. The goal of the program is to ensure that producers have the best and most recent information possible to successfully manage jointed goatgrass in winter wheat.

Jointed goatgrass is difficult to control in winter wheat. It typically emerges simultaneously with the wheat crop in the fall and is similar in appearance to wheat, so the problem often is not identified. Jointed goatgrass produces spikelets (sometimes called joints) that are about the same size as wheat, making them difficult to clean from wheat seed and increasing the chance that the weed seed is planted with the crop the following year.

Valuable data regarding jointed goatgrass biology and management has been gathered through this research initiative. Research indicates that interrupting the life cycle of jointed goatgrass with spring seeded crop rotations or other cultural practices may provide effective control. Long term research in many wheat producing states has discovered the Best Management Practices (BMPs) for controlling jointed goatgrass.

During the next several years, this national program will focus on technology transfer activities, conclusion of systems research projects, and new research to fill important jointed goatgrass data gaps. Greater emphasis will be on technology transfer during the last two years of the initiative, which is scheduled to conclude in 2006. Additional information regarding the management and biology of jointed goatgrass or other aspects of this initiative can be found online at www.jointedgoatgrass.org.