

Report on the CBC Application Technology Workshop
February 18-20, 2002
Minneapolis, MN

An application technology workshop, organized by the Chemical and Biological Control Committee, was held February 18-20 in Minneapolis. Participants included agricultural engineers, plant pathologists, CBC members, and Louis Arnold, a wheat and barley grower from North Dakota who articulated a grower's perspective on fungicide applications for managing head blight. Previous work has shown that typical application techniques deposit only a small portion of the spray volume on heads of wheat and barley and that efficacy against head blight was proportional to the amount of fungicide deposited on heads. The goal of the workshop was to foster synergy among agricultural engineers and plant pathologists that would lead to the development of techniques that deposited higher proportions of spray volume on heads and more effective control of head blight. Researchers interested in ground application technology agreed to evaluate several variables using commercial and experimental sprayers in large replicated field plots at several locations. Research on aerial application should benefit from the involvement of the USDA, ARS Aerial Application Team from College Station, TX. The Team has state-of-the-art equipment for applying and measuring the deposition of pesticides and will conduct field experiments in Texas during 2003 and then move its equipment and personnel to an area prone to head blight epidemics during 2004. Ground and aerial application research will include fluorescent dyes to determine the deposition on heads of wheat and barley so that useful data can be obtained even in the absence of disease.