FY02 USWBSI Project Abstract

0203-ST-110 Evaluation of fungicides and biological agents for control for FHB in Virginia.

PI: Stromberg, Erik; E-mail: elstrom@vt.edu

Virginia Polytechnic Institute and State University, Dept. of Plant Pathology, Physiology, and Weed

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PROJECT ABSTRACT (1 Page Limit)

Uniform fungicide and biological control agent treatment trials for FHB will be established in spring/barley regions and in winter wheat regions of the United States, including Virginia. The establishment of a core set of treatments across a number of states allows evaluation of products and methods for consistency in performance over a wide number of environments and across grain types affected by FHB. Also, because FHB does not occur every year in every location, regardless of attempts to ensure infection through added inoculum or misting systems, having the trials across environments increases the chance of favorable disease levels for evaluation across multiple sites. One strobilurin fungicide, Quadris 2.08SC, recently (summer 1999) received federal registration, one triazole fungicide, Folicur 3.6F, was granted special exemptions for use in 1999, and another triazole, Tilt 3.6E, was granted state labels for use against FHB. Additional fungicides were included in the 2001 Uniform Trials, including Stratego 250E, a combination product of Tilt plus a strobilurin called Flint, and BAS 500, another strobilurin. Stratego 250E has just received (2001) a Federal label and a 24(c) for application at heading for wheat in Virginia. Results in Virginia where FHB occurred indicated favorable control with many of the tested products as well as the two biological agents tested in 2001. In 2002, experimental products that may soon be on the market will be tested once more across environments, to get additional information on their efficacy and performance consistency. In addition, treatments with these compounds will be applied using spray nozzles directed at an angle towards the grain heads, to substantiate that improvements in application techniques can be made across environments. In Virginia two fields will be used for the FHB control evaluations. One is a field notillage planted into maize stubble (non-irrigated) at the Eastern Virginia Agricultural Research and Education Center, Warsaw, Va and the other conventionally-tilled and seeded, inoculated at flowering, and sprinkler irrigated during anthesis at the Virginia Crop Improvement Farm, Mount Holly, Va. Having two locations will increase the chances of obtaining sufficient FHB pressure. Both of these locations will be sites for stops at the 2002 Virginia Small Grains Field Day scheduled for 23 May. Around three hundred growers, extension, and agri-business personnel are expected to attend.