

PI: Martin A. Draper

PI's E-mail: draper.martin@ces.sdstate.edu

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Research Area: CBC

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Project Title: Aerial Fungicide Application Studies for the Control of Fusarium Head Blight.

PROJECT 2 ABSTRACT

(1 Page Limit)

Fusarium head blight is a serious problem in wheat and barley producing areas of the northern US. Due to the high density of wheat and barley acres to be treated and the relatively short window of opportunity for successful treatment, many producers turn to aerial application to get the job done quickly. The triazole fungicide Folicur (tebuconazole) has been shown to offer the best efficacy of all tested fungicides available in the US. Folicur has been granted special exemptions for use in recent years and the triazole fungicide Tilt (propiconazole) has been granted state labels for use against FHB in several states, but not South Dakota. The prospect for full labeling of any triazole fungicides by EPA appears to be in doubt, which makes the identification of new fungicide chemistries and modes of action is all the more critical. It is accepted that coverage on cereal grain heads by aerial application is less than what may occur with optimized ground application. Nonetheless, all acres will never be treated by ground, simply due to the time requirement. This study will document the coverage efficiency and control potential of current methods and identify ways to improve upon that performance.

Nozzle configurations will be pattern tested on model cereal heads and the configurations providing the best coverage will be tested in grower's fields. Identifying the optimum configuration for aerial applicators offers the promise of better product performance for producers who choose to use aerial application.