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Project Title: Field Evaluations of Chemical Controls for Fusarium Head Blight in Michigan.

PROJECT 1 ABSTRACT

(1 Page Limit)

The investigations proposed in this study will address the question of which products or experimental chemicals will provide the best control of Fusarium head blight (FHB) across a range of environments in Michigan. Fungicide trials will be established on soft white winter wheat at four plot locations (located in three different counties) in Michigan. Establishing multiple locations increases the geographical area in which data is collected, provides greater opportunities for successful inoculation, and reduces the risk of missing an entire field seasons worth of data collection due to localized unfavorable weather conditions or unsuccessful inoculation. Trials will include the uniform fungicide treatments designated by the Chemical and Biological control group, to be studied in multiple states where wheat and barley are grown in the United States. Evaluation of a core set of treatments across multiple locations enables comparisons of product performance under a wide range of environments, using a number of different grain types and cultivars. Funds provided through the US wheat and barley scab initiative will be used to leverage additional monies from agrochemical companies to expand testing to fungicides beyond those in the uniform fungicide trials, and may allow the evaluation of several different application timings appropriate to different chemistries.

The proposed research will allow: testing of products that may be registered in the near future; provide supporting documentation for the continuation of Section 18 registration or for the registration of new products; and provide additional testing sites in important wheat producing areas in Michigan. Test results will provide information to producers locally and nationwide on what products are providing the greatest disease control and improvement in yield and quality. The identification of products that offer control of wide range of diseases in addition to scab, is important. Greater study is needed to assure producers of the efficacy of these new fungicide treatments against multiple diseases and against all the risks of scab, including mycotoxins.

Although Folicur 3.6 has been registered under a section 18 emergency exemption in Michigan as a single treatment applied up until flowering, and Tilt and Propimax EC (Propiconizole) are currently labeled under a section 24C special local needs exemption in Michigan for suppression of FHB, products that may prove more efficacious need to undergo successful evaluation under Michigan conditions to provide additional options for producers.