Project Abstract

Project Title:	**Integrated Management of FHB and DON in Barley in New England**	
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There is a rapid expansion of the northeast malting industry barley acreage is rapidly increasing. Hence integrated management strategies are essential for reducing yield and quality losses from Fusarium head blight (FHB).

The overall goal of the proposed project is to develop region specific integrated management strategies that allow farmers to produce high yield and quality malt barley while minimizing the incidence and severity of Fusarium head blight and associated mycotoxins.

1) Evaluate the integrated effects of fungicide treatment and genetic resistance on FHB and DON in all major grain classes, with emphasis on new combination fungicides, Prosaro Pro® and Sphaerex®.
2) Compare the efficacy of Prosaro Pro and Sphaerex to that of Prosaro®, Caramba®, and Miravis Ace®.

Researchers will be able to identify cultivars, fungicides, and fungicide application times that allow for high yield and quality barley.

Farmers will be able to deploy scientifically validated management strategies verified through the USWBSI Coordinated Projects.

Farmers will be able to improve farm viability by implementation of integrated strategies that allow for the more stable production of high yield and quality barley.

In this funding cycle, we propose integrated management (IM) and uniform fungicide (UFT) trials in barley that would allow us to evaluate new combinations of AIs either as pre- or tank-mixtures or as sequentially applied treatments. The PI has extensive experience with grain crops and disease management and has participated in previous integrated studies. All projects and reporting were completed within the timeline. The PI has all materials, equipment, and facilities to carry out the experiments within the allotted timeframe.