Recently in Wisconsin, Fusarium head blight (FHB) has resulted in significant damage to soft red winter wheat (SRWW) and correspondingly high levels of DON in finished grain. These have resulted in significant economic losses both at harvest with a reduction in yield and at the point of sale where loads are docked or rejected. A single fungicide application alone has reduced some of the damage caused by FHB on SRWW in Wisconsin; however, integrating resistant varieties could further reduce damage. Most growers have little knowledge about which wheat cultivars offer high levels of FHB resistance and perform well in the Wisconsin environment. Furthermore, if proven to be economically viable, some growers would adopt a two-application fungicide program along with resistant cultivars to improve management. The proposed research would facilitate adoption of integrated FHB management to reduce losses from FHB in Wisconsin. It would also provide locally derived fungicide efficacy data for Wisconsin growers to make sound fungicide application decisions in an effort to reduce damage by FHB and DON.