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Research Category: **MGMT** **Duration of Award: 1 Year**

Project Title: Effect of Fungicides on Scab and Vomitoxin in Soft Red Winter Wheat in MD.

PROJECT 2 ABSTRACT

(1 Page Limit)

The efficacy of: fungicides labeled for Fusarium head blight management; active ingredient combinations of other registered fungicides; and new experimental products to reduce Fusarium head blight (FHB) symptoms, yield losses and mycotoxin accumulation in soft red winter wheat will be tested. Additional information regarding fungicide treatment effects on other diseases as well as the effect of treatments targeting other diseases on FHB development will also be determined. In particular we will be examining the effect of fungicide treatments on deoxynivalenol (DON), a mycotoxin produced by the causal agent of FHB. High levels of DON can cause complete rejection of the harvested crop. Fungicides to date have only been moderately effective in reducing disease and mycotoxin contamination. Cultivar resistance also is only moderately effective, thus the need for continued research on both active components of management. Since the primary objective is fungicide efficacy and the disease is highly variable in nature, trials will be conducted on a relatively susceptible cultivar known to accumulate DON and plots will be artificially inoculated with a spore suspension of *Fusarium graminearum*.