Managing Fusarium Head Blight in Barley with Cultivar Resistance, Fungicide Chemistry and Sequential Applications

ABSTRACT
Fungicide application to control Fusarium head blight (FHB) can effect wheat and barley yield and substantially reduce deoxynivalenol accumulation (DON) in both barley and wheat seed. Studies conducted in 2007-2009 at Langdon and Osnabrock North Dakota on 6-row spring barley showed that sequential fungicide applications at Feekes growth stage (GS) 10.5 and 10.53 reduced DON on the main stem and boot GS tillers and subsequently the whole plot compared to the untreated. Sequential fungicide treatments were applied to improve on the approximately 60% DON reduction previously reported from single fungicide applications at GS 10.5. In some locations single treatment with prothioconazole was more effective in reducing DON than tebuconazole. Tebuconazole usually was as effective in reducing DON as prothioconazole when used as the first sequential application, but not always. The studies show that the boot growth stage tillers can contribute large concentrations of DON to the overall plot and will warrant treatment in so...