



2009 CSREES National Water Conference; St. Louis, MO

Corn-Applied Fungicides in Nebraska Streams

Jason R. Vogel*, Mark W. Sandstrom, Scott H. Jackson
US Geological Survey; *jrvogel@usgs.gov

Abstract:

In the past, fungicide applications on hybrid corn were generally regarded as uneconomical. Recently, the higher price of corn combined with increased corn-following-corn planting practices and associated increased disease risk, have made fungicide applications on corn more common. However, there is currently a lack of data regarding the occurrence of fungicides in streams, especially in areas where it is applied primarily to corn. As the use of fungicides in corn-producing areas continues to increase, baseline data on the presence of fungicides in streams will be important for documenting changes in the occurrence of these compounds, and potential aquatic and human-health effects of the fungicides in the environment. The U.S. Geological Survey completed a study between May and September 2008 to determine the occurrence of fungicides in surface-water samples from six streams in corn-producing watersheds in Nebraska. The samples collected during this study were analyzed for the fungicides azoxystrobin, boscalid, chlorothalonil, cyproconazole, metconazole, myclobutanil, cis-propiconazole, trans-propiconazole, pyraclostrobin, tebuconazole, tetraconazole, and trifloxystrobin.

Impact Statement:

This project resulted in collection of data regarding newer-formulation corn-applied fungicide occurrence in streams. This project was funded through a public-private agreement between the U.S. Geological Survey and BASF Corporation, and leveraged resources of the USGS National Water-Quality Assessment Program. The data gathered by this project can be used by producers and regulators as baseline data on the presence of fungicides in streams, and will be important for documenting changes in the occurrence of these compounds and potential aquatic and human-health effects of the fungicides in the environment.

Category: Watershed Assessment and Restoration

Type of Presentation: Poster Presentation