

Nitrogen Leaching Study & Nutrients Bring Value to Growing Conservation

By Jamie Fisher

More than 30 farmers, ag businesses, and community members attended the Calumet County Ag Stewardship Alliance (CCASA) soil health field day in late August. The attendees learned more about UW Discovery Farms research with pan lysimeters and the value of nutrients from farmer-led group members. CCASA member, Jim Casper, hosted the event.

UW Discovery Farms, Lindsey Hartfield and Adam Wunderlin, presented the nitrogen leaching study with pan lysimeters. The five-year project has two lysimeters per site and four total sites in the field. The lysimeters measure nitrate levels in ground water, concentration of nitrates in an area, volume of water, and nitrogen loss. The goal is to perform three different treatments, pulling samples every two weeks to once a month depending on weather events. It's been a dry season in the Calumet area bringing limited movement of moisture and nutrients in the soil profile. More results are expected later in the season and early spring.

CCASA member, Kurt Schneider, shared his experience with biological additives. This is River's Edge Dairy's second year of using a Pivot Bio additive. The farm's goal is to cut back on commercial nitrogen applications. The biological additive microbes fix to the corn root and supply nitrogen during critical growth stages. Kurt said he has seen 3-9% more weight in the stalk providing more tonnage of corn silage. He shared the handling care of biologicals requires providing a 24 hour window to get the product into the soil along with taking temperature sensitivity into factor. 'Do your homework and do test strips,' Kurt said 'it's (biological additive) spoon feeding the plant'.

The conversation continued with representatives from UW Discovery Farms talking about nitrogen use efficiency. Nitrogen differs from field to field and within a field. Farmers are under pressure to optimize nitrogen and it's important to take management strategies such as crop rotation, application timing, nitrogen rates into factor when evaluating farm nutrient management plans.

The event closed with CCASA, Natural Resources Conservation Service (NRCS) and Calumet County Land & Water Conservation Department (LWCD) announcing cost share program opportunities.