

Dear Chair Putnam and members of the committee,

I am Shawn Feikema and I am writing on behalf of myself and our farm, Feikema Farms Inc./Circle F Farms, located in Luverne, MN in support of Senate File 1575. I'd like to first say thank you to Senator Kupec for bringing the bill forward and starting a solutions-based conversation.

Our family farm has been in operation since 1950, and over the years our family has tried many new technologies, kept up with the research, and implemented different growing practices to be as successful as possible. We have implemented many nutrient management strategies to reduce our costs and be more environmentally conscience. These practices have made our operation more profitable and has driven us to be better stewards of the resources we have. We also have implemented a stringent nutrient management plan to make sure that our livestock and cropping operations are working together to minimize any potential nutrient losses.

Recently, we've embraced new technologies to minimize the use of commercial fertilizers across our farm, such as microbial nitrogen-producing products. These products don't leach or volatilize, they form a symbiotic relationship with the plant and die off when the plant does. By incorporating this technology, we've been able to reduce our commercial fertilizer use by 40 pounds per acre.

This bill highlights the importance of supporting farmers in their efforts to reduce synthetic nutrients while maintaining crop yields. It encourages farmers who might still be on the fence about alternative sources of nitrogen by bridging a gap of perceived risks associated with using these types of products and lowering commercial nitrogen use.

Minnesota has a unique opportunity to lead a conversation that's gaining traction across the Midwest. Farmers in our state and region are facing increasing pressure to cut nutrient loss, and this bill offers a path forward without imposing burdensome regulations that could have negative consequences. Rather than forcing decisions, rewarding farmers for their efforts is the preferred approach, and I commend Senator Kupec for championing this thoughtful strategy.

I thank you for your time, the opportunity to submit testimony in support of Senate File 1575.

Shawn Feikema



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"Good afternoon, Chair Putnum and members of the committee. My name is Cameron Henning, and I am a commercial agronomist for Pivot Bio located in and covering southwest Minnesota. I am here today to provide a brief overview of one type of product a farmer might use to qualify for this incentive program. Ours is not the only company nor the only product that can help farmers reduce their commercial synthetic nitrogen use and replace it with a more environmentally friendly source of nitrogen. Biological products seem to be one of the most rapidly growing areas of agriculture with dozens of companies offering new products and solutions.

An example of a biological source of nitrogen would be naturally occurring microbes that take nitrogen from the air and deliver it to the plants, i.e. nitrogen fixing bacteria. For example, the product and microbes I work with go on to the seed at planting and are gene-edited to fix nitrogen on the root system of the plant around the clock providing a stable and consistent source of nitrogen. Other examples of biological sources of nitrogen that can be applied in season to the plant leaves, or biological compounds and bio-stimulants that can be applied to the soil and they ramp up the natural productivity of native soil microbes

By taking even a small portion of synthetic nitrogen out of the growing cycle means that potential source of nitrate contamination was never in the system. Just like farmers apply nitrogen annually, they can use biological sources of nitrogen such as nitrogen fixing microbes annually to meet part of their nitrogen needs.

Thank you for your time and the ability to provide some technical content to the proposed incentive program. I am available to answer any questions you might have."

Thank you,
Cameron Henning
763-213-7514

MN 1575

Tylor Johnson

Commercial Agronomist – Pivot Bio

In support of this Bill

Good afternoon, Chairman Putnum and members of the committee. I am Tylor Johnson, and I am a commercial agronomist in Minnesota covering the central and southeast portions of the state. I am here today to just provide a brief overview of one type of product a farmer might use to qualify for this incentive program. This is not the only company or the only product that can help farmers reduce their synthetic commercial nitrogen use and replace it with a more environmentally friendly source of nitrogen.

A biological source of nitrogen uses naturally occurring microbes to fix nitrogen from the air and deliver it to the plants. The microbes go on at planting and some are gene-edited to fix nitrogen on the root system of the plant around the clock. The product that I work with specifically has taken microbes that are found naturally in the soil and gene edited them to produce nitrogen specifically for the plant that they are colonized on. Our microbes form a symbiotic relationship with grass crops, the microbe feeds the plant nitrogen fixed from the atmosphere and in return the plant feeds the microbe with exudates from the roots. Once the plant has senesced, the microbes stop fixing nitrogen. Products like ours produce nitrogen for the plant without any risk of leaching, or volatilization.

By taking even a small portion of synthetic nitrogen out of the growing cycle means that potential source of nitrate contamination was never in the system. Just like farmers apply nitrogen annually, they can use biological sources of nitrogen fixing microbes annually to meet part of their nitrogen needs.