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### ***Fall Anhydrous Ammonia Applications***

Corn fertility programs for 2022 have been shaping up to be a challenge all fall. With an inch and a half (give or take) of moisture received across much of the area over the last week, our fall application window shrunk just a little further. Anhydrous ammonia has long been a popular N option for area producers. When priced in comparison to other N sources, it will likely stay that way, even as increased fertility costs across the board require us to make sure we are making applications as efficient as possible. The following are three ‘tips’ to ensure you do so:

Start by understanding the role of temperature in the application process. Fifty-degree soil temperatures (at a four-inch depth) are the general recommendation when it comes to ‘opening’ the fall application window. The reason: ammonia – a N form with less potential for loss in soils – converts to nitrate (greater loss potential) whenever temperatures are above freezing, with the conversion rate decreasing when temperatures drop *consistently* below 50 degrees. Additionally, be sure soil temperatures are not only below the 50-degree threshold, but trending downward to best maintain anhydrous in the ammonia form. A great resource for soil temperatures can be found at: <https://mesonet.k-state.edu/agriculture/soiltemp/>.

Second, consider a nitrification inhibitor. There are a number available, all designed to slow the microorganism activity that converts ammonia to nitrate-N, to reduce fall applied anhydrous losses. They won’t last indefinitely, and length of effectiveness can vary with soil temperature. If conditions for N loss aren’t favorable, you may see no benefit to them at all, but they do deserve a second look if you are applying in to conditions where N loss could occur.

When you’re finally ready to run, be sure you are getting a good seal of the application slot. If you can smell ammonia, N is being lost. It’s difficult to tell how much might be being lost, but the longer you can still smell ammonia in the field, the greater the potential for loss.

For more fall application information, check out our KSU Agronomy eUpdate at: [https://eupdate.agronomy.ksu.edu/article\\_new/considerations-for-fall-applications-of-anhydrous-ammonia-467-1](https://eupdate.agronomy.ksu.edu/article_new/considerations-for-fall-applications-of-anhydrous-ammonia-467-1).

### ***Cool Season Turfgrass Nitrogen Applications***

November is here and that means time for the last nitrogen application of the season for our cool season turfgrass stands. Grass growth has obviously slowed, but photosynthesis has not. November applications increase the rate of photosynthesis, increasing energy storage in crowns and roots that can help with earlier spring green up. In addition, fall applications enhance root growth over the excessive shoot growth often seen with early spring applications while improving winter hardiness, root growth and even shoot density.

Plan to apply a pound to a pound and a half of actual nitrogen (urea or ammonium sulfate sources are good options) per 1,000 square feet of lawn area. If a soil test warrants it, fall is a great time for phosphorous applications as well.

If application calculations are giving you fits, we can help guide you through calculations to aid in economical and environmentally friendly applications. For a helpful video, go to: <https://kansashealthyyards.org/component/allvideoshare/video/fertilize-for-a-healthy-lawn?Itemid=101> and check out the many *Kansas Healthy Yards* program resources.

Cindy Williams  
Food, Nutrition, Health & Safety  
Meadowlark Extension

### **Pesky Pantry Pests**

Pantry pests can invade food storage spaces and cause havoc. Many of these pests enjoy grain-based products. Here are the common insects seen in home pantries:

- \*Booklice (Psocids)—Found in stored cereals and grains.
- \*Carpet Beetles---Found in cereals, flours, and baking mixes.
- \*Cigarette Beetles---Found in dried herbs, spices, cereals, flours, dried fruits, seeds, dried dish and meats.
- \*Clothes Moths---Found in some beverages.
- \*Drugstore Beetle---Found in pet food, seeds, flours, mixes, and spices, It is said they “eat any except cast iron!”
- \*Flour Beetle---Any grain product, flour, kernel or cereal.
- \*Indian meal Moth---Found in cereals, stored grains, dried fruits, chocolate, and nuts.
- \*Saw-Toothed Grain Beetle---Found in foods of vegetable origin, grain products, nuts, candies, dried milk, and dried fruits.

### **Preventing Pantry Pests**

Keeping storage areas clean and dry are the first line of defense against pests invading your food. Periodically clean storage areas to remove spilled food and damaged packages of food. A vacuum cleaner can easily remove spills from cracks and crevices. Eliminate hiding places by sealing cracks and crevices with putty or caulk.

If packages are damaged, inspect for insect presence or damage. If the food is still good, re-package in a sealable sturdy container. Cold-treat flours, cake mixes, and spices at 0°F for 3-7 days, making sure that the cold penetrates the materials. Heat-treat beans, nuts, and whole grains by spreading them in a shallow pan and placing them in a 150°F oven for 15-20 minutes.

Nancy Nelson  
District Agent  
Family Life

### **When Selecting Holiday Toys, is Simpler Better?**

As the number of weeks to Christmas slowly creeps into the single digits, many parents are already getting a pretty good idea of this year's hottest toys.

Children may be asking for the flashiest and brightest – and by association, often the most expensive toys, but K-State Research and Extension child development specialist Bradford Wiles says those may not always be the best choice for their long-term growth.

“The thing about toys is they are a means for learning,” Wiles said. “As young children, we need to manipulate things and figure out how things work, which are all concepts that many of us take for granted. We need to feel the friction and pliability of toys, be able to bend and even break or lose toys to learn what disappointment feels like.

“The idea is that children use toys to further their cognitive development, to understand more about their world through these things that are accessible enough for them to manipulate.”

The hottest toys of the season might help accomplish those developmental goals, Wiles said, but simpler, less expensive options are also good choices.

“One thing I like about the very simple toys is that they encourage imaginative play, whereas when you have the toys with the imaginary components already built in – siren, jet noises, car noises – what you find is that children aren't making those noises on their own. They are letting the toy do it, Wiles said.

“Part of learning and developing our minds is attempting to make these noises, attempting to understand how to mimic noises and learning how our vocal chords work and our mouths work. There comes a point when we start to deprive children of experiences that we know are beneficial because we are over-compensating for that with the gifts we are giving.”

To illustrate his point, Wiles pointed to a simple kitchen toy set, which allows the child to imitate what the adults are doing in the family kitchen. “It's a way for children to do some observational learning and apply it using a model of something that exists in the real world,” he said.

Regardless of the toy given, Wiles said “there is no substitute for human, facial interaction.”

“If you want toys to help your child meet their potential, play with them,” he said. “Talk about what you're doing with them; engage with them. Toys, like books, are a means to engagement.