

Topdressing Wheat with 28% UAN and a Nitrogen Stabilizer

Choosing the Right Field

- 100% optimum N rate applied pre-plant
- Preferably planted with a variety that has low to average protein
- Plots typically run the full length of the field and must be wide enough to allow for at least one full combine pass through the plot that avoids sprayer tracks (usually 100-140 ft). Harvesting with a guidance system is also easier with wider plots.
 - If sprayer tracks cannot be avoided, then each strip should include sprayer tracks. The important thing is that all blocks are treated the same.

Data the Research Coordinator Will Collect

- Precipitation
- Growth stage at timing of topdress application
- Phytotoxicity or leaf burning ratings (if any)
- NDVI
- Yield, moisture, test weight, protein

Topdress Application

- The field will need a N-rich strip that receives at least a 2x rate of N to aid in-season imagery analysis.
- Preferably at apply at least four replications of each treatment, topdressed UAN vs no topdressed UAN at the boot stage
 - After jointing, if rain is forecasted and you need to topdress before the boot stage, stream UAN with the added N stabilizer and note the growth stage of the wheat
- Tank must be cleaned out thoroughly and calibrated to deliver the correct rate of UAN + stabilizer
 - The N stabilizer (Limus) will last about 12 days before losing effectiveness
- Try not to apply the nitrogen in windy conditions; overlapping applications could cause leaf burn
- The best application time is in the evening when the air is cool and the leaves are dry
 - This will minimize the potential for leaf burning
- If you think you will need to harvest the sprayer tracks within each topdressed plot, you will need to drive through the controls plots with the booms off so that each plot is treated the same
- Please notify the Research Coordinator before the application so that the plots can be flagged during the application.

Application Rates

- 10 gallons of 28% UAN, does not need to be mixed with water (2.98 units N per gal)
- 1.5 quarts of Limus per 2,000 lbs of UAN (1 gal UAN = 10.66 lbs)

Limus Example: 120 foot sprayer, 4 treated plots = ~ 26 acres

26 acres x 10 gal UAN = 260 gal UAN x 10.66 lbs UAN/gal = 2771.6 lbs UAN,

2771.6 lbs UAN /2000 lbs UAN x 1.5qts Limus x 32oz/qt = 66.5oz or 2qts 2.5ozs Limus applied

- One 2.5 gal container of Limus treats 1,250 gallons of 28% UAN or 125 acres

Harvest

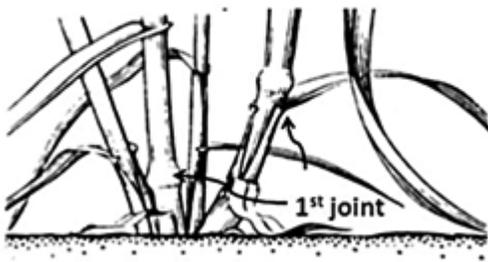
MN Wheat will be there with one weigh wagon. You will have to unload the combine into the weigh wagon or into a grain cart and then into the wagon. We will take a grain sample from the wagon

Call us anytime to discuss further: Thank you - Lauren, 218-556-3174; Melissa, 952-738-2000

Growth Stages

This is a fairly tight window for application

1st joint (or node)



http://msue.anr.msu.edu/news/wheat_growth_and_development_reaching_first_joint_stage

Jointing – first node is Feekes growth stage 6. Feekes 7 is pictured below (second node).



<http://www.ag.ndsu.nodak.edu/cropdisease/wheat/images/leaf5.jpg>



Boot - application is best if the head is still in the sheath and no awns or just a few are sticking out. The flag leaf is the last leaf to unfold as shown in this picture.