

SPRING APPLICATION OF NITROGEN TO WHEAT

Surface Spray Application vs
Sub-surface Soil Band

This study was undertaken to determine if the method of N application on wheat affects the resulting yield. The methods compared were sub-surface band vs top-dress with a sprayer.

The wheat plots were planted on September 23, 2007 into Harney silt loam soil under optimum moisture conditions.

Thirty pounds of 11-52-0 was applied with the seed.

The variety POSTROCK was planted with an air seeder 1 ½" deep at the rate of 90# per acre on no-till summerfallow ground with a moisture profile of 54"

Sixty pounds of N in the form of 32% UAN was applied with a DMI applicator.



The liquid N was applied with the DMI applicator 1 ½" deep in narrow bands 15" apart.



- Sixty pounds of N in the form of UAN was applied with a Rogator sprayer using Nitro Bars with the application streams being 6" apart on center.



- The eight alternate test strips were 160 feet wide by 2640 feet long. The wheat was harvested on June 21, 2008.



- The GPS yield mapping on the combine malfunctioned necessitating the yield averages being based on the weights of
- the grain harvested The averages on the liquid top dress application was 67.3 bushels per acre. The average yield on the subsurface application was 67.6 bushels per acre.

- **CONCLUSION**
- There was no statistical difference in the
- plot yields based on the methods of N application. The study was conducted under optimum conditions from seeding through
- Harvest. Under adverse conditions, the results of this study may have been different.

- **QUESTION**
- Have any of you experienced a yield difference
- between the methods of N application to winter wheat, including 46-0-0 dry ?