

Water Quality Enhancement Activity – WQL07 – Split nitrogen applications, 50% after crop emergence or pasture green up



Enhancement Description

Apply no more than 50% of total crop nitrogen needs within 30 days prior to planting or in the case of pasture or hay after green up of the dormant grasses. Apply the remaining 50% or more of the total nitrogen needs after crop emergence or pasture green up.

Land Use Applicability
Cropland and pastureland.

Benefits

Timing of nitrogen application can be used to ensure adequate amounts of N are available during critical growth stages. Application rates can also be adjusted based on crop forage conditions to refine yield goals. Split application of 50% or more of the total N needs allows for more efficient plant uptake and increases nutrient utilization, resulting in a reduction in the potential loss of N through leaching and other nitrogen-based compounds like the greenhouse gas nitrous oxide to the environment.

Criteria

Implementation of this enhancement requires:

1. Regardless of form or application method (fertilizer, manure or any other organic by-products), apply no more than 50% of crop N needs within 30 days prior to planting and 50% or more of the N needs after crop emergence or in the case of pasture or hay after green up of the dormant grasses.
2. Post emergence N application rates can be reduced based on crop scouting reports that would suggest lower yield potential. Scouting reports need to be provided.
3. Producer must have annual manure analysis (if organic nutrient sources are used)
4. Nutrient application rates must be within the “Land Grant University (LGU) recommendations based on soil testing and established yield goals and considering all nutrient sources.
5. Soil surface disturbance must be minimized.



United States Department of Agriculture
Natural Resources Conservation Service

2011 Ranking Period 1

Documentation Requirements for Split Nitrogen Applications

1. Written documentation for each treatment area (field) and year of this enhancement describing these items:
 - a. Acres
 - b. Planned crop
 - c. Planting date and crop planted
 - d. Dates of crop emergence
 - e. Annual manure analysis results (if organic nutrient sources are used)
 - f. Crop yields (both yield goals and measured yield)
 - g. Nutrient application rates/amounts and application dates for each treatment area
2. A map showing where the activities are applied.

**ALABAMA SUPPLEMENT TO ENHANCEMENT WQL07 SPLIT NITROGEN APPLICATION,
50% AFTER CROP EMERGENCE OR PASTURE GREEN UP**

The application of nitrogen closer to plant uptake and use can reduce the potential loss of nitrogen. This enhancement can be applied to both cropland and pasture land. It requires that no more than 50% of the total crop nitrogen need regardless of form is applied within 30 days prior to planting (cropland) or green up (pasture land). The remaining 50% or more must be applied after crop emergence or pasture green up. All nitrogen rates must be within the Alabama recommendations and based on established yield goals. If manure is used as the source of nitrogen the manure must be analysis annually. Refer to the national enhancement and Alabama fertilizer recommendations for more information.

Documentation Requirements:

1. For each year of this enhancement, written documentation describing the crop planted, planting date, crop emergence date, crop yield (yield goals and measured yield) and fertilizer application rate and dates.
2. A map showing fields where the enhancement is applied.

References:

ALABAMA Soil Testing and Fertilizer Recommendations:

<http://www.ag.auburn.edu/agrn/croprecs/NutrientRecsIndex.html>

ALABAMA SUPPLEMENTAL INFORMATION FOR THIS ENHANCEMENT

WQL07 - Split Nitrogen Applications, 50% After Crop Emergence

Documentation Form

Producer Name:			Date:	
Tract Number(s):			County:	
Field Number(s):				
Planned Crop:				
Yield Goal:				
Acres:				
Actual Crop:				
Planting Date:				
Crop Emergence Date:				
Fertilizer Applied for each treatment area:				
Application Rate(s):	N:			
	P2O5:			
	K2O:			
Application Dates:				
Measured Yield:				

The submitted documents accurately represent the implementation of this enhancement.

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