

FOLLOW-UP: NUTRIENT APPLICATION UPDATES

Request for comment

AgWG

October 18, 2018

North Eastern Coordinating Committee on Soil Testing (NECC-1812) Annual Meeting

- Researchers from NY, PA, DE, MD, and WV (VA is not in our group)
 - also included researchers from NJ, CT, and ME (VT and NH had no one present).
- There are similar groups in the Southern and North Central regions



- Bottom Line:

There needs to be some way to relay the uncertainty related to our N recommendations.

N Application Base Rate for Corn

- The 1.2 lb/bu expected yield number reflects a physiological need for corn.
 - That value is the base rate for NY
- Base rate is 1 lb/bu for other states in the Bay Watershed.
 - *This rate should be adjusted to account for other N sources*
 - soil N mineralization
 - manure and legume credits
 - cash crop or cover crop residues
 - irrigation water N

- Bottom Line:

Better accounting for other N sources rather than change base rate.

NY's Adaptive Management Approach

- Allows for N recs *above* what Cornell recommends for:
 - Farms under NRCS Code 590 (Nutrient Management)
 - Farms receiving assistance from NY.
(*Predominantly CAFOs*)
- Requires more detailed record keeping
- Additional management requirements to justify rates:
 - Example: Corn Stalk Nitrate Test (CNST)
 - manage N to get CNST within optimum range.
- **Bottom Line:**

NY approach a good idea to move farmers towards better job N management.

CNST survey on Delmarva

- Greg Binford (UD)
 - Survey of 953 fields between 2009 and 2011 suggested
 - 50% of fields had *too much* N
 - 23% had too little

...73% of fields had could be better managing N

- Bottom Line:

There is room for improvement in N management.

NECC-1812 Outcomes

- Agreed to work together on N recommendation issues.
- Future research would likely involve standard protocols and minimum data sets.
- DE/MD/PA submitting a 4R Nutrient Research Fund pre-proposal
 - improving crediting for soil N and residues at the field scale and for precision applications.
 - This work could benefit from matching funds

Thoughts/Suggestions?

Information in these slides from personal communication with:

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