

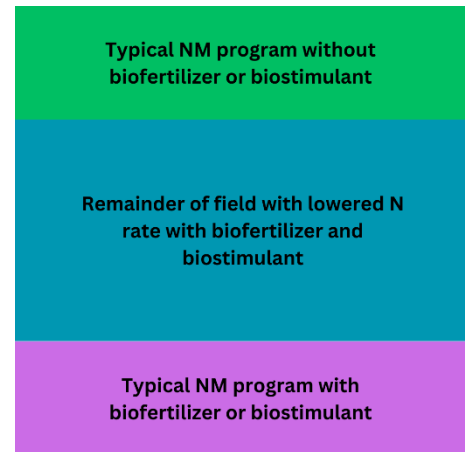
Biofertilizer or Biostimulant Cost-Share Protocol (Biologicals)

Objective:

The objective of this cost-share is to evaluate corn yield and nutrient use efficiency in response to using a biological to your current corn nitrogen management program.

Field Selection:

Any corn field in the Chesapeake Bay watershed that meets core nitrogen requirements. Each field must contain one strip with your typical nitrogen management program without biofertilizer or biostimulant, one strip with your typical nitrogen management program with biofertilizer or biostimulant, and the remainder of the field with the biological company's recommended nitrogen decrease (lowered Nitrogen rate) from your management plan. Please provide a copy of your field map, with **planned field layout**, and with GPS coordinates or a physical address of the enrolled field(s).



Harvest:

Grain weight should be measured with a weigh wagon or in a grain cart using calibrated truck scales or export of yield monitor data so long as cooperators' combine is calibrated with a weigh wagon prior to harvesting strips. The Delaware Maryland 4R Alliance and Pennsylvania 4R Alliance is available for technical support as well as your local agribusiness.

Data to be collected:

- Data
 - 2024 crop use, nutrient plan
 - Previous manure and crop history
- Grain yield
- Field map with location
- Nutrient application proof – receipts or mapping

Expectations for Cooperators:

For this protocol, all planting, application splits, and harvest will be performed by the grower and/or their custom applicator. Technical assistance is available by the 4R alliance or your local agribusiness. There is cost-share available for technical assistance to your local agribusiness. We expect the Cooperator or agribusiness partner to clearly communicate with our team about their plans.

Timeline:

Application rate and splits are to be determined by Cooperator and or agribusiness partner. Sign-up is encouraged before planting. In-season check-ins. Yield verification before or during harvest.

Cooperator Report:

Cooperators will receive a preliminary statistical analysis of all harvested trials as soon as possible and will receive a copy of the final report when completed.

Data Use:

Data collected will be aggregated prior to reporting, with no identifying information or location shared publicly. General farm location (region or area of a county) may be identified on a map, but individual field locations will not be shared.

Compensation:

Cooperators will be compensated from the Mid-Atlantic 4R Nutrient Stewardship Association for the participation. Participants will receive \$20 an acre for the three different biological strips mentioned above. Checks may take up to spring of 2025 to be mailed. We require a current W-9 to provide payment to the cooperator.

Contact:

Jenell Eck McHenry, Programs and PR Director, is the contact Delaware and Maryland Farmers. Jenell can be reached at 443-262-6969 or by email at Jenell.mdag@gmail.com. Amber Funk, Project Manager, is the contact for Pennsylvania Farmers. Amber can be reached at 484-650-7787 or by email at afunk@rosetreeconsulting.com.

Funding:

The Mid-Atlantic 4R Nutrient Stewardship Association is funding cost-share through the National Fish and Wildlife Foundation. The Pennsylvania as well as Delaware-Maryland 4R Alliance is a founding member of the Mid-Atlantic 4R Nutrient Stewardship Association. Cost-share is available to producers on a first-come first-served basis. To confirm your voucher, please complete the following document and submit to the appropriate contacts above. Applications are due no later than June 1, 2024.

Field Identification & Information *(please complete the remaining document for each field or FSA tract):*

Field Name: _____

Location Address: _____

County: _____

Crop Use: Grain Silage

Cropping and manure application history at the field/farm level:

Manure History

	2021	2022	2023
Source(s):			
Rate			

For PA only: How many years out of the past 5 years did the field receive manure? _____

Is the manure application equipment calibrated: Yes No

How do you calculate nutrient load? Manure Test Book Value

2024 Yield Goal: _____

Crop History

	2021	2022	2023
Crop			
Est. Yield			

Establishing Compliance with Core Nitrogen Requirements:

Are nitrogen fertilizer rates determined at the field level? Yes No

How are Nitrogen Fertilizer Rates Determined? _____

Plan Written/Last Updated? _____

Bioproduct using: _____

Planned Nutrient Management

List *planned* nitrogen application rates for all Nitrogen forms that will be applied:

**if manure please include source and rate*

Normal N Rate Without bioproduct	Normal N Rate With bioproduct	Reduced N Rate With bioproduct	
_____	_____	_____	Dry broadcast
_____	_____	_____	Liquid broadcast (herbicide carrier)
_____	_____	_____	Liquid in-furrow
_____	_____	_____	Liquid or dry at planting
_____	_____	_____	Dry topdress by V6
_____	_____	_____	Liquid Surface Sidedress by V6
_____	_____	_____	Liquid Injected Sidedress by V6
_____	_____	_____	Liquid Surface Sidedress past V6
_____	_____	_____	Foliar via ground or aerial app
_____	_____	_____	Fertigation
_____	_____	_____	Other: _____
_____	_____	_____	Total N Fertilizer Planned

Planned Timeline (weather dependent)

	Normal Rate	Reduced Rate	Growth Stage
Application 1:	_____	_____	_____
Application 2:	_____	_____	_____
Application 3 (if applicable):	_____	_____	_____
Application 4 (if applicable):	_____	_____	_____
Application 5 (if applicable):	_____	_____	_____
Harvest:	_____	_____	_____