



ALFALFA



PowerCoat™ Application in Alfalfa

April, 2024

OBJECTIVE

Evaluate the effects of PowerCoat™ impregnated onto phosphate fertilizer on the yield and quality of Alfalfa.

OVERVIEW

- Some applied fertilizer and other soil nutrients are unavailable to the plant during nutrient uptake due to complex physical and chemical interactions.
- Select soil microbes can influence these interactions to increase plant nutrient availability and improve nutrient uptake and utilization, resulting in increased plant biomass, improved vigor and higher quality of yield.
- PowerCoat contains multiple bacterial species that are specifically selected and formulated to promote plant nutrient availability.

TRIAL DETAILS

Locations and Crop Management

Crop: ALFALFA (*Medicago sativa*)

Year: 2023

Number of Trials: 4

Location: California, Kansas, Wisconsin

Data Source: Field Studies were conducted by third-party, independent researchers.

Treatments:

1. Conventional Phosphate Fertilizer
2. Conventional Phosphate Fertilizer impregnated with PowerCoat

Cultivars: Dairyland Magnum 8, Dairyland Hybriforce 2600 and Ameristand 835

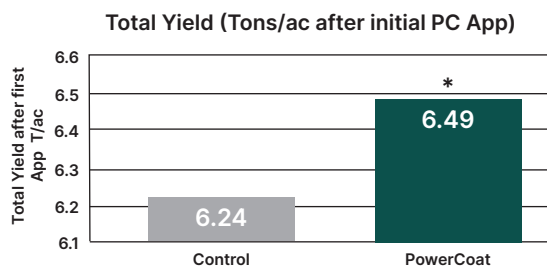
Cropping Conditions: Trial conformed to local cropping practices. Three trials had conventional tillage and one trial was No-Till.

Application Rate: 5 fl oz/ac

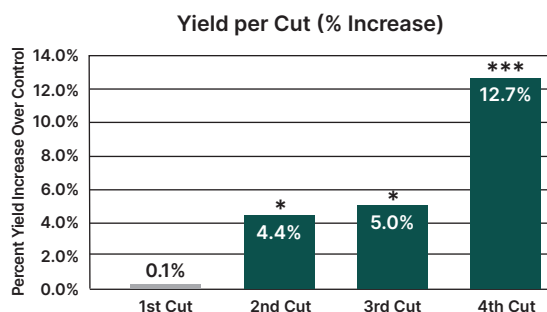
Application Method: Broadcast across field.

Application Timing: Two applications applied around the first and third alfalfa cuts.

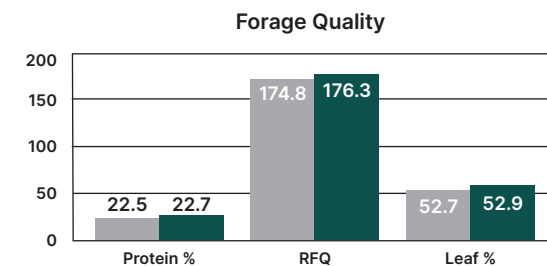
RESULTS



Combined yield from 2nd, 3rd and 4th Cuts. *Significant difference p<0.1



*Significant difference p<0.1, ***Significant difference p<0.01



RFQ is an index rankings of relative forage quality
Leaf % = % of feed made up of leaves rather than stems

SUMMARY

- The addition of PowerCoat to phosphate fertilizer significantly increased alfalfa yield compared to alfalfa treated only with the phosphate fertilizer.
- The effectiveness of PowerCoat increased over time with the yield benefit increasing in later cuts.

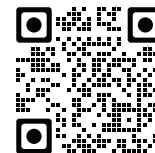
0.25

T/ac INCREASE IN TOTAL YIELD AFTER 1ST POWERCOAT APPLICATION

267

LBS/ac INCREASE IN YIELD PER CUT AFTER FIRST POWERCOAT APPLICATION

For the most up to date data in your region, scan this QR code.



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Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

For more information, go to croppnutrition.com