



Foliar Fertilizer Effect on Grass + Alfalfa Forage Yield

Butler, PA

Experiment Info	
Planted:	5/8/2019
Harvested:	6/12/2022
Yield Goal:	
Variety:	
Pop.:	
Row Width:	7"
Prev. Crop:	
Plot Size:	2 acres
Reps:	1

Soil Test (ppm)	
pH:	6.2
CEC:	9.8
%OM:	4.2
Bray P1:	80
Bicarb P:	
K:	115
S:	7
%K:	3.0
%Mg:	15.9
%Ca:	68.8
%H:	12.5
Zn:	1.6
Mn:	7
B:	0.2

Objective:

- Evaluate the effect of foliar applied fertilizer on yield and forage quality of a grass + alfalfa mixed forage stand.
- Control treatment was 300 lb/acre dry potash 0-0-60 broadcast after first harvest.
- AgroLiquid treatment was 300 lb/acre dry potash 0-0-60 broadcast after first harvest followed by fertiRain applied foliar at 3 gallons/acre on the same day. A second application of fertiRain at 3 gallons/acre was made after second harvest.
- Plots were harvested, and forage samples from each plot were analyzed for forage quality parameters. That information was used to estimate milk production per ton of forage and milk production per acre, using the "Milk 2006" model developed by the Univ. of Wisconsin.

Parameter	AgroLiquid	Control treatment
2nd Harvest		
Crude Protein	18.95	1755.00
ADF	32.35	33.50
aNDF	54.95	56.15
RFQ	157	154
NDFD 48hr	37.75	38.60
Milk/ton	3011	2983
Tons/acre dry	0.37	0.31
Milk/acre	1122	982

AgroLiquid Treatment:	300 lb/a Dry Potash after 1st harvest fertiRain 3 gal/acre after 1st and 2nd harvest
Control Treatment:	300 lb/a Dry Potash after 1st harvest

Conclusions:

- The trial area was very dry and warm during the growing season. A third harvest was not conducted because of poor growing conditions in this trial.
- Forage yield in the AgroLiquid treatment was somewhat higher than the yield in the control. This result is similar to the same trial conducted in 2021 at the Butler, PA location.
- Forage quality was similar for both the control and AgroLiquid treatments. The similar quality higher forage yield provided a higher estimated milk production in the AgroLiquid treatment compared to the control. This result is also similar to the same trial conducted in 2021 at the Butler, PA Location.