



# Foliar Fertilizer Effect on Orchardgrass Yield and Quality

Butler, PA

Experiment Info	
Planted:	5/10/201
Harvested:	6/12/202
Yield Goal:	
Variety:	
Pop.:	
Row Width:	7"
Prev. Crop:	
Plot Size:	2 acres
Reps:	1

Soil Test (ppm)	
pH:	5.9
CEC:	9.8
%OM:	3.8
Bray P1:	9
Bicarb P:	
K:	57
S:	7
%K:	1.5
%Mg:	16
%Ca:	64.6
%H:	17.9
Zn:	2.0
Mn:	18
B:	0.4

## Objective:

?Evaluate the effect of foliar applied fertilizer on yield and forage quality of orchardgrass.

AgroLiquid has conducted many trials on the effect of fertilizer programs on alfalfa, but little research has been conducted on grass forages.

?Control treatment was 300 lb/acre dry potash 0-0-60 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 per acre was made after second harvest.

?Plots were harvested and dry matter yield was determined. Forage samples were analyzed for forage quality parameters and that information was used to estimate milk production per ton of forage and milk production per acre.

Parameter	AgroLiquid	Control treatment
2nd Harvest		
Crude Protein	20.00	19.35
ADF	32.45	34.50
aNDF	54.05	57.40
RFQ	142	137
NDFD 48hr	33.90	37.55
Milk/ton	2877	2701
Tons/acre dry	0.37	0.27
Milk/acre	1058	726
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 field experienced extremely dry, warm conditions during the growing season, and there was not enough growth to support a third harvest.

?Forage yield in the AgroLiquid treated plot was higher than the yield in the control plot.

?Forage quality was similar for both the control and AgroLiquid treatments. Similar quality and higher forage yield provided a higher estimated milk production per acre than the control treatment.

?This was the second year for this trial at the Butler, PA location. Results are similar for both 2021 and 2022. This trial demonstrates the value of a foliar crop nutrition program in a grass forage production system for yield improvement and milk production.