



Beaverton Fertilizer Nitrogen+ Trial 2020

Table 1. Forage Yield and Quality With and Without Bone Meal, Feather Meal, and K+SOP

	No Fertilizer ± SD	With Fertilizer ± SD	P-Value
Total Dry Weight (lbs./acre)	5450 ± 217	8742 ± 581	0.019 *
Crude Protein (%)	6.67 ± 0.45	6.77 ± 0.25	0.667
Acid Detergent Fiber (%ADF)	36.2 ± 0.79	37.87 ± 0.78	0.129
Neutral Detergent Fiber (%NDF)	57.73 ± 0.8	59.47 ± 0.91	0.176
Relative Feed Value (RFV)	97.67 ± 2.08	93 ± 2.65	0.184
Total Digestible Nutrients (TDN)	60 ± 0.89	58.2 ± 0.82	0.122
Digestible Protein (%)	2.27 ± 0.45	2.37 ± 0.25	0.667
Digestible Dry Matter (%DDM)	60.7 ± 0.62	59.43 ± 0.61	0.123
Dry Matter Intake (DMI)	2.1 ± 0	2.03 ± 0.06	0.184
Digestible Energy (MCAL/kg)	2.64 ± 0.04	2.57 ± 0.04	0.148
Metabolizable Energy (MCAL/kg)	2.22 ± 0.04	2.14 ± 0.04	0.12
Net Energy Lact. (MCAL/kg)	1.35 ± 0.02	1.31 ± 0.02	0.148
Net Energy Maint. (MCAL/kg)	1.8 ± 0.04	1.73 ± 0.04	0.136
Net Energy Gain (MCAL/kg)	1.11 ± 0.03	1.05 ± 0.03	0.122
Phosphorous (%)	0.1 ± 0	0.16 ± 0.02	0.042 *
Potassium (%)	1.16 ± 0.17	1.35 ± 0.08	0.298
Calcium (%)	0.42 ± 0.03	0.42 ± 0.06	1
Magnesium (%)	0.21 ± 0.01	0.2 ± 0.01	0.225

Mean plus or minus standard deviation (SD)

*p-value <0.05, **p-value<0.01, ***p-value<-.001

Trial Methods

5/19/18 & 5/23/18 - Applied organic fertilizer 117lbs. N, 130 lbs. P, 330 lbs. K per acre as K+SOP (0-0-50) @ 660 lbs./acre, Bone meal (4-13-0) @1000 lbs./acre, Feather Meal (11-0-0) @700 lbs./acre

7/3/18 - Sampled forage yield and quality

July 2018 - Hayed

6/20/19 - Sampled forage yield and quality

6/21/19 - Hayed

6/19/20 - Sampled forage yield and quality
Mid July 2020 - Hayed

For more information, please contact Brook Brouwer at brook.brouwer@wsu.edu

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Citation

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