

2023 Fall Annual Forages Trial

2023 FALL ANNUAL FORAGES TRIAL
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In the Northeast, cool season perennial grasses dominate pastures and hay meadows that dairy farmers rely on. Extending the grazing season later into the fall can help avoid feeding the stored forages necessary to sustain the herd through the winter months when no pasture will be available. For farms purchasing large portions of their herd's stored forage needs, this can be an effective strategy for increasing the operation's profitability. Depending on the species utilized they may also be harvested for stored feed

and an approximate 1 lb subsample was collected and dried to determine dry matter content and calculate dry matter yield. The samples were then ground using a Wiley mill to a 2 mm particle size and then to 1 mm using a laboratory cyclone mill from the UDY Corporation.

Table 2. Treatment information, 2023.

Variety/Species	Pea inclusion %	Nitrogen applied lbs ac ⁻¹
Sumo grain oat	0	0
	0	50
	25	0
	50	0
Everleaf 126 forage oat	0	0
	0	50
	25	0
	50	0
	0	0

Surge triticale

Impact of nitrogen treatment

Dry matter yields did not differ statistically across the nitrogen/pea inclusion treatments (Table 6). This means that dry matter yields were not substantially increased or decreased when peas were included up to 50% of the seeding rate. In addition, when no peas were included, the addition of 50 lbs of nitrogen did not increase yields compared to the treatment with no peas and no nitrogen added. There were, however, some differences in average quality parameters. Crude protein was similar in all treatments except 7% higher in the treatment receiving additional nitrogen.

When dry matter yield and quality were considered together, nitrogen treatments only differed in protein yield with the 0% pea + 50# N treatment producing 80-119 lbs protein more than the other treatments (Table 7). The treatment including the fertilizer application costs approximately \$30.50 more per acre than the same treatment without the fertilizer. This additional \$30.50 per acre yielded an additional 80 lbs of protein per acre. If you also consider the difference in seed costs between forage and grain varieties, it is likely that the grain oats with no additional fertilizer provide the most economical annual forage at this time of the year. Table 8 summarizes the dry matter and quality component yields per acre for all treatments.

Table 8. Dry matter and quality component yields for all treatments, 2023.

Species/variety	Nitrogen treatment	Dry matter yield	Protein	WSC	30-hr digestible
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