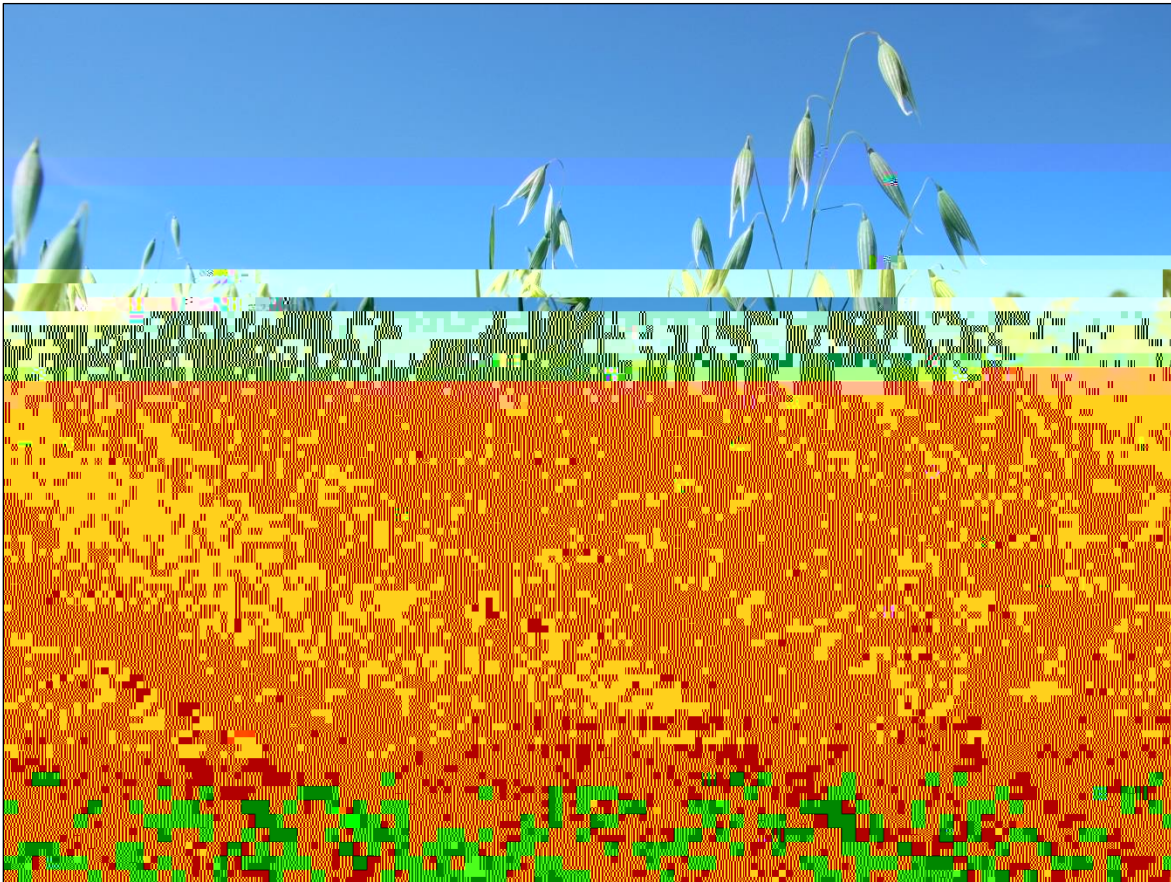


2018 Oat Variety Trial



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Oats (*Avena sativa* L.) have a long history of production in the Northeast. Although most oats are planted for a cover crop or forage, grain oats may be a potential revenue source for farmers. According to the 2007 census, about 200 acres of land in Vermont is cultivated for oat grain production, with an average yield of 1747 lbs ac⁻¹. With the exception of hull-less varieties, oats need to be de-hulled before being used for human consumption and further processing is required to make oatmeal, steel cut oats, or oat flour. Since 2009, the University of Vermont Extension Northwest Crops and Soils Program has conducted oat variety trials to provide yield comparisons in Vermont’s climate. Varietal selection is one of the most important aspects of crop production and significantly influences yield potential. It is important to remember, however, that the data presented are from replicated research trials from only one location in Vermont and represent only one season. The goal of this project was to evaluate yields and protein of seventeen oat varieties.

MATERIALS AND METHODS

In 2018, an oat variety performance trial was conducted at Borderview Research Farm in Alburgh, VT. Seventeen oat varieties were evaluated for yield and quality (Table 1).

Table 1. Seventeen oat varieties planted in Alburgh, VT, 2018.

Variety	Seed source
Keuka	Lakeview Organics
Leonard	Lakeview Organics
Jim	Welter Seed & Honey Co.
Kame	Lakeview Organics
Jerry	Welter Seed & Honey Co.
Reins	Albert Lea Seed House
Antigo	Albert Lea Seed House
Hayden	Albert Lea Seed House
Richmond	Seedway
Streaker	Albert Lea Seed House
Sumo	Albert Lea Seed House
Marin	Atlantic Maritime Heirloom Oat
Pringles Progress	Vermont Heirloom Oat
AC Gehl	Semican
Betogene	Albert Lea Seed House
Deon	Albert Lea Seed House
Shelby 427	Albert Lea Seed House

The trial was planted at Borderview Research Farm in Alburgh, VT on a Benson rocky silt loam (Table 2). The experimental design was a randomized complete block with three replications. The previous crops were summer annuals and sunflowers. The research plots were each 5’ x 20’ and the seedbed was prepared by conventional tillage methods including fall plow, disc and spike tooth harrow. The oats were planted on 5-May with 6” row spacing at a rate of 125 lbs ac⁻¹. Pre-harvest plant measurements of heights and lodging were taken to better understand how factors affect yield. Plots were harvested on 8-Aug with an Almaco SPC50 plot combine. A subsample was taken for quality testing and has yet to be

Figure 1. Yield of 17 oat varieties evaluated in Alburgh, VT, 2018.

DISCUSSION

It is important to remember that the results only represent one year of data. In the 2018 oat variety trial, the mean yield was 954 lbs ac⁻¹ lower than the mean yield in 2017, 2360 lbs ac⁻¹. The difference in yield was likely due to significant bird damage. '*Reins*' had the highest yield and low harvest moisture, though all varieties meet industry standards for test weight and moisture. The heirloom varieties, Pringle Progress and Marin performed similarly in yield but tended to be lowering yielding compared to many of the