2013 Oat Variety Trial Report



Dr. Heather Darby, UVM Extension Agronomist Conner Burke, Erica Cummings, Hannah Harwood, and Susan Monahan UVM Extension Crops and Soils Technicians (802) 524-6501

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2013 OAT VARIETY TRIAL Dr. Heather Darby, University of Vermont Extension Heather.Darby[at]uvm.edu

INTRODUCTION

Oats (*Avena sativa* L.) have a long history of production in the Northeast. Although most oats are planted for a cover crop or hay, grain oats are 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 per acre. 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 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

| Table 2. Agronomic practices for the 2013 oat var | iety trial, Borderview Research Farm, Alburgh, VT. |
|---|--|
| | |

| | Borderview Research Farm Alburgh, VT |
|--------------------|--------------------------------------|
| Soil type | Benson rocky silt loam |
| Previous crop | Corn |
| Tillage operations | ' |

RESULTS

Using data from an onsite Davis Instruments Vantage Pro2 weather station at Borderview Research Farm in Alburgh, VT, weather data was summarized for the 2013 growing season (Table 3). The 2013 growing season experienced similar average temperatures compared to the 30 year average. Precipitation was higher than the 30 year average, especially for June, which saw extremely high rainfall for our area. Growing Degree Days (GDDs) were calculated at a base temperature of 32°F. From planting to harvest, there was an accumulation of 4510 GDDs. This is 18 more GDDs than the 30-year average.

| Table 3. Temperature, precipitation, and growing degree days (GDD's) for Alburgh, VT in 2013. | | | | | | | | |
|---|-------|------|------|------|--------|--|--|--|
| Alburgh, VT | April | May | June | July | August | | | |
| Average temperature (°F) | 43.6 | 59.1 | 64.0 | 71.7 | | | | |

| 108 | 0* |
|-----|-----------|
| 16 | NS |
| 111 | 14.7 |
| - | 16 111 |

Treatments shown in **bold** are top-performing. *Treatments that did not perform significantly lower than the top-performing treatment in a particular column -3()-3()11()-3()-3e.04 Tf1 0 0 1 215.33 706.54 nts sho.14 </MCID 3e.0mTm[(BT1 06(a)3()11 05t)-504 Tf1 0 0 1 21nst15.

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