

2011 VERMONT WINTER WHEAT HARVEST DATE TRIAL

In New England, frequent rainfall and prolonged high humidity are common during the period of wheat ripening. Due to these fluctuating temperatures and moisture conditions, the quality of the wheat can decline

Table 2. General plot management for trial.

Location	Borderview Farm Alburgh, VT
Soil type	Benson rocky silt loam
Previous crop	

RESULTS

Seasonal precipitation and temperature recorded at a weather station in close proximity to Alburgh are shown in Table 3. As seen in Table 3, March, April and May were cooler and wetter than average years. As a result, early spring growth was delayed. From planting to harvest, there was an accumulation of 6787 Growing Degree Days (GDD), 635 GDDs higher than the 30-year average.

Table 3. Temperature and precipitation summary for Alburgh, VT, 2010-2011

South Hero (Alburgh)

2010

The interactions between harvest date and variety were also considered however, there were no significant differences in yield, test weight, crude protein, falling number, or DON. This suggests that varieties performed the same regardless of harvest date.

DISCUSSION

Many farmers prefer to leave wheat in the field until proper storage moisture is reached. This has many benefits to the farmer including reduced drying costs and storage issues. However, often during the wheat dry down period (July) there are periods of wet and humid weather that can cause the wheat quality to decline in the field. Few farmers have started to harvest as early as the combine can harvest the grain to make sure high quality parameters of bakers are being met. Our research was designed to evaluate yield and quality declines as wheat harvest is delayed. Weather conditions during July and early August were dry and warm. Therefore falling numbers declined over time but not below acceptable levels. Yields declined as well and were most likely due to shattering losses during the dry weather. More research across variable temperature and precipitation schemes needs to be conducted to further determine the impact of harvest date on wheat yield and quality.

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