



2015 Sunflower Planting Date Trial

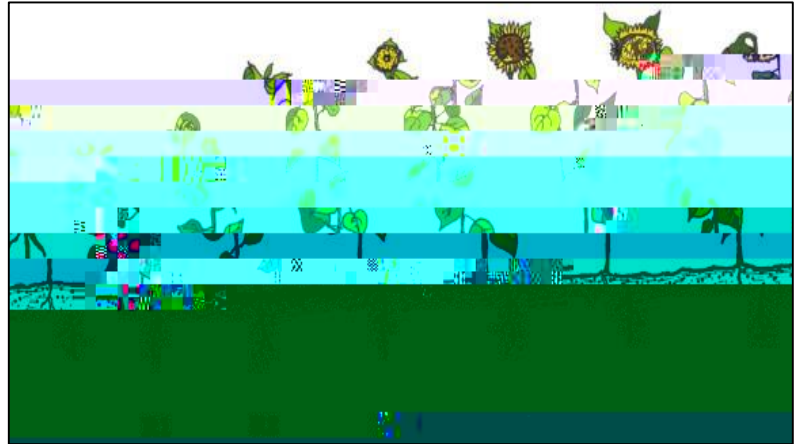


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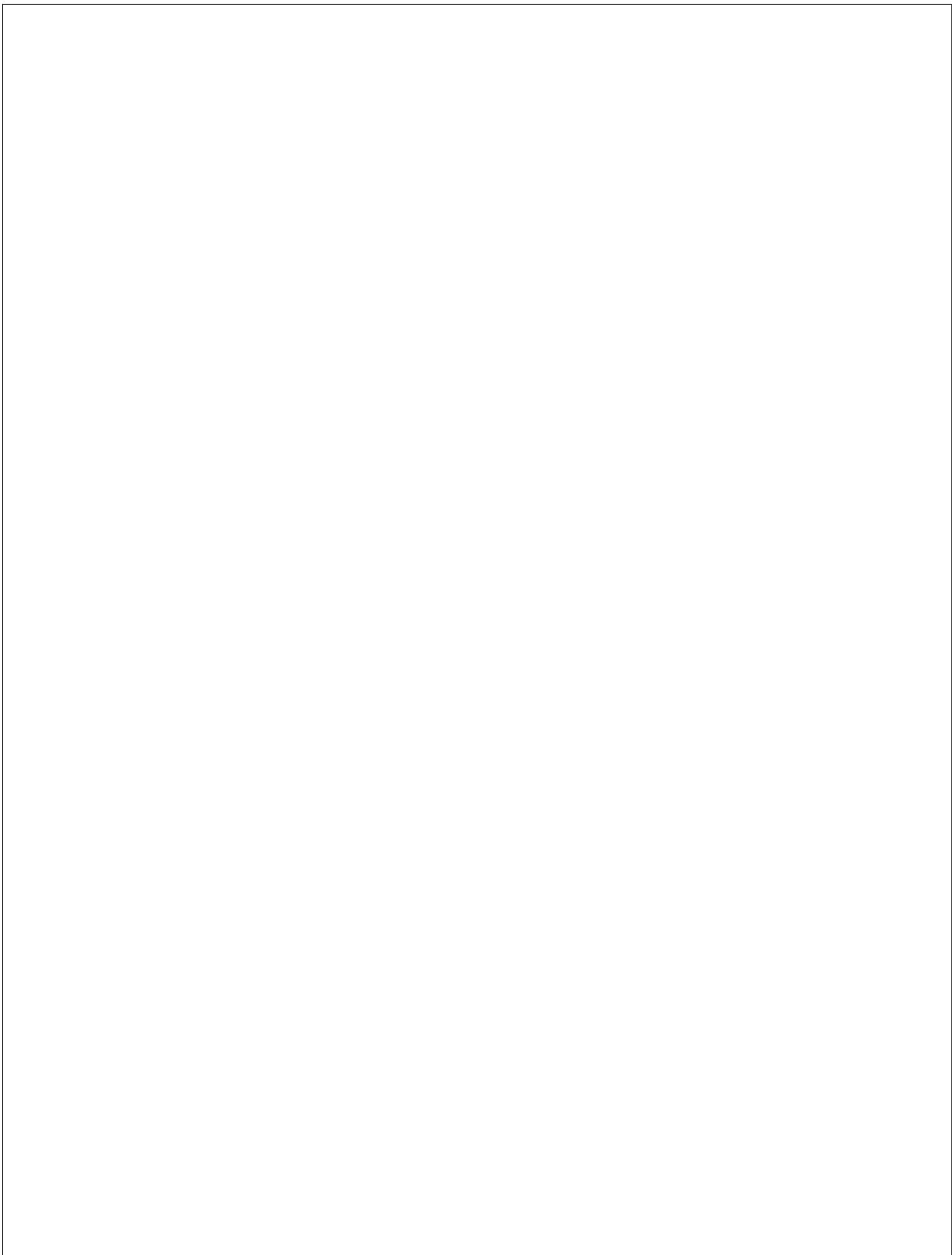
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2015 SUNFLOWER PLANTING DATE TRIAL
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Sunflowers are being grown in the Northeast for their potential to add value to a diversified operation as fuel, feed, fertilizer, and an important rotational crop. However, pest pressures1 0 0 1 330.17 659.26 Tm 644. TJETBT1 0 0 1 27



Variations in yield and quality can occur because of variations in genetics, soil, weather, and other growing conditions. Statistical analysis makes it possible to determine whether a difference among treatments is real or whether it might have occurred due to other variations in the field. At the bottom of each table a LSD value is presented for each variable (i.e. yield). Least Significant Differences (LSDs) at the 0.10 level of significance are shown. Where the difference between two treatments within a column is equal to or greater than the LSD value at the bottom of the column, the difference is significant. In the following example, hybrid C is significantly different from hybrid A but not from hybrid B. The difference between C and B is equal to 1.5, which is less than the LSD value of 2.0. This means that these hybrids did not differ in yield. The difference between C and A is equal to 3.0, which is greater than the LSD value of 2.0. This means that the yields of these hybrids were significantly different from one another. The asterisk indicates that hybrid B was not significantly lower than the top yielding h



Figures 4-6 (left to right). Phomopsis symptoms rated 1-3 for severity and extent of lesions on stem.

Planting date had a statistically significant impact on seed and oil yields, oil content and seed damage (Table 4). Seed yield was highest is the fifth planting date with 848 lbs ac⁻¹ which, with an oil content of 22.2%, translated into 26 gallons of oil ac⁻¹. The fourth planting date had a slightly lower seed yield of 597 lbs ac⁻¹ but had a higher oil content of 25.3% and yielded 21 gallons of oil ac⁻¹.

Table 4. Seed and oil yield by planting date, Alburgh, VT, 2015.

Planting date	Test weight	Pressing moisture	Seed damage	Seed yield	Oil content	Oil yield	
	lbs bu ⁻¹	%	%	lbs ac ⁻¹	%	lbs ac ⁻¹	gal ac ⁻¹
15-May	26.0	4.20b	14.8b	168c	21.0c	29d	4d
22-May	24.0	4.20b	13.1ab	228c			

Figure 8. Sunflower seed damage.

Photo credit: sunflowernsa.com

Impacts of Variety

Plant stand characteristics were statistically impacted by variety (Table 5). Although the variety Cobalt II had lower populations and shorter plants than the variety Torino, Cobalt II was the top performer in terms of all other plant stand characteristics. Most notable were the differences in bird damage and Phomopsis incidence. Cobalt II is an early maturing, short stature sunflower variety while Torino is a medium

Table 6. Seed and oil yield, 2015.

Variety Test weight Pressing moisture Seed damage