

2015 Flax Variety Trial



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Table 2. Flax varieties, origin, year released and seed color, 2015.

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 varieties 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. Flax yields and plot characteristics are listed in Table 4. All varieties fell within the range of average flax heights (12-36 inches). Plant populations showed significant differences between flax varieties with Pembina having the highest population of 619 plants m². However those differences did not relate to yield differences when the plots were harvested on 10-Aug. Flax yields ranged from 383 to 811 lbs ac⁻¹ (Table 4 and Figure 2), with no significant difference between varieties. Yields were much lower than typical yields from the mountain West, where flax is normally grown. Yields from variety trials in North Dakota range from 1200-2100 lbs ac⁻¹. Harvesting flax can be difficult since the seed is very light and easily lost through the back of the combine. Swathing, to allow proper dry down of the crop and weeds before harvest, can reduce yield losses through the combine. The plots in this experiment were swathed to allow the crop to dry prior to harvest. Unfortunately, a predicted rain event forced a harvest before the crop was completely dry. This likely led to significant yield losses.

Figure 1. Flax plots swathed on7-Aug, Alburgh, VT.

Table 4. Plot characteristics and yield of 10 flax varieties, Alburgh, VT, 2015.

*Varieties with an asterisk are not significantly different than the top

There was no significant difference in meal characteristics among the 10 flax varieties (Table 6). All varieties had similar meal characteristics. The average crude protein of the flax meal was 36.3% and the average fat content was 14.8%.

| Variety | Crude protein | Fat |
|-------------|---------------|------|
| | % DM | % DM |
| Carter | 37.5 | 14.1 |
| Cathay | 36.7 | 14.3 |
| Gold | 36.3 | 15.4 |
| Neche | 36.0 | 16.0 |
| Nekoma | 37.4 | 12.8 |
| Omega | 35.6 | 14.8 |
| Pembina | 35.6 | 16.5 |
| Rahab | 37.4 | 12.2 |
| Webster | 34.7 | 17.4 |
| York | 36.4 | 14.4 |
| Trial mean | 36.3 | 14.8 |
| LSD (p<0.1) | NS | NS |

Table 6. Flax meal characteristics of ten varieties grown in Alburgh, VT, 2015.

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