



2015 Forage Brassica Variety Trial

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2015

Table 2. Agronomic and trial information for the 2015 forage brassica variety trial.

| Location | Borderview Research Farm-Alburgh, VT |
|--------------------|---|
| Soil type | Benson silt loam |
| Previous crop | Spring barley |
| Tillage operations | Moldboard plow, disking, drag harrow |
| Plot size (ft.) | 5 x 20 |
| Replicates | 4 |
| Planting date | 17-Aug |
| Seeding rate | 6 lbs ac ⁻¹ |
| Harvest date | 8-Oct |

Height and vigor were assessed on 8-Oct. Three heights were measured per plot and then averaged. Vigor was based on a visual rating with a 0–5 scale, where 5 represents excellent stand density and 0 represents no stand. All plots were hand harvested on 8-Oct to determine dry matter yields. A 0.25 m² quadrat was harvested per plot. Dried vegetation was ground with a Wiley laboratory mill. The coarsely-ground plot samples were brought to the lab where they were reground using a cyclone sample mill (1mm screen) from the UDY Corporation. A subsample of each was retained and analyzed at the University of Vermont’s Testing Laboratory in Burlington, VT. Plot subsamples were analyzed for crude protein (CP), acid detergent fiber (ADF), neutral detergent fiber (NDF) and 30-hour digestible NDF (NDFD). The CP content of forages is determined by measuring the amount of nitrogen and multiplying by 6.25. The bulky characteristics of forage come from fiber. High fiber is negatively associated with forage feed(f)-3(ni)6(t)-44forage feed(r)

performer in a particular column are indicated with an asterisk. In the following example, treatment A is significantly different from treatment C, but not from treatment B. The difference between A and B is equal to 400, which is less than the LSD value of 500. This means that these treatments did not differ in yield. The difference between A and C is equal to 650, which is greater than the LSD value of 500. This means that the yields of these treatments were significantly different from one another.

RESULTS

Weather data collected with an onsite Davis Instruments Vantage Pro2 Weather Station at Borderview Research Farm in Alburgh, VT, are summarized for the 2015 forage brassica growing season (Table 3). August and September were warmer than the historical average (1981-2010), while October was slightly cooler. The warm

Figure 2. Average yield and crude protein concentrations for 12 forage brassica varieties, Alburgh, VT, 2015. Treatments with the same letter did not differ significantly from one another (p=0.10).

Brassica varieties differed significantly in forage quality characteristics and yield (Table 4, Figure 2).
The average yield for the brassica trial was 1421

Table 4. Yield, dry matter content and forage quality characteristics for twelve forage brassica varieties, Alburgh, VT, 2015.

| Variety | Plant height | Harvest dry matter | Dry matter yield | Forage quality characteristics | | | |
|---------|--------------|--------------------|------------------|--------------------------------|-------------|-------------|--------------|
| | | | | CP % of | ADF % of | NDF % of | NDFD % of |

