RESULTS

Using data from weather stations in close proximity to the trial location, temperature, precipitation, and Growing Degree Day (GDD) information is presented in Table 2. The 2011 growing season proved difficult for sunflower production. The early spring was very wet, causing delays in planting and emergence. July was drier than normal, but August brought heavy rains and tropical storm winds. There were a total of 3,452 GDDs between May and September—302 GDDs above normal.

Table 2. Select weather data for the 2011 sunflower tineweeding trial – Borderview Farm, Alburgh, VT.

South Hero, VT (Alburgh)

May

head width were not influenced by tineweeding treatments. Stalk rot caused by white mold fungi was significantly greater in the 21DAP and the combined 21 & 16 DAP treatment. Bird damage was significantly higher in the 21 DAP treatment than other treatments. Seed yield, moisture, and test weight did not vary significantly by treatment.

Table 4. Crop stand and yield data by treatment for the 2011 sunflower tineweeding trial.

* Treatments indicated with an asterisk did not perform significantly lower than the top-performing treatment in a particular column. NS – No significant difference was determined between treatments.

DISCUSSION

In 2011, tineweeding did not have a significant influence yield as compared to the control. Overall tineweeding reduced weed populations up to 50%. The trial indicated that tineweeding was more effective at controlling annual broadleaf and grass weeds compared to perennial grasses. Tineweeding is highly effective when implemented as an early season weed control (between one and two weeks after planting).