



PALISADE IN PERENNIAL RYEGRASS

OVERVIEW

An analysis across several trials conducted by Pratum Research to assess the effect of Palisade applied to perennial ryegrass.

- Trials conducted over several years
- Evaluating the effect of 1.5 vs. 3.0 pt/a of Palisade
- Over 120 pairs of plots which matched except for the Palisade rate

SUMMARY

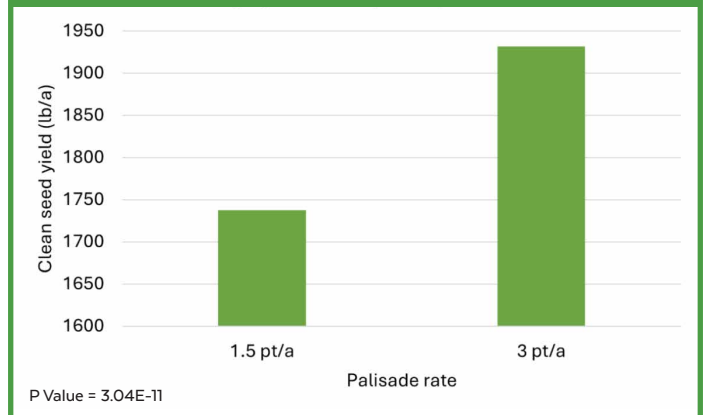
These trials were variety trials and nutrient management trials conducted over several years that contained over 120 pairs of plots which matched except for the Palisade rate. These pairs were subjected to a paired t-test to assess the difference between Palisade applied at 1.5 and 3.0 pt/a. On average, plots treated with 3.0 pt/a yielded 194 lb/a more clean seed than plots treated with 1.5 pt/a (Table).

UNTREATED (LEFT) VS TREATED* (RIGHT)



*Treated with 3.0 pt/a of Palisade

YIELD BY PALISADE RATE



Applying Palisade has become a standard practice on most Willamette Valley grass seed farms. Palisade (trinexapac-ethyl) is a plant growth regulator registered for use in grasses grown for seed. Palisade works by inhibiting the enzyme (3β-hydroxylase), that converts GA20 to GA1. GA1 drives stem elongation in plants. With reduced GA1, grass seed plants grow with shorter stems and tighter seed heads (see photo). This reduces lodging, partitions more plant resources toward seed production, and improves pollen movement in the canopy. The results of this analysis indicate that greater seed yield may be achieved if rates are increased from 1.5 to 3.0 pt/a.