

Title: Effect of Palisade on Lodging in Spring Wheat - 2016

Objective: To evaluate the effect of Palisade on lodging when applied at different rates and timings in spring wheat.

Materials and Methods:

Palisade was applied at 7 oz/A to Egan spring wheat at the tillering (June 1) and flag leaf (June 10) growth stages either as single or sequential applications (Table 2). Treatments were applied using a CO₂ backpack sprayer with Teejet XR11002 nozzles in 20 GPA of water and were replicated three times in a randomized complete block design.

Results:

No significant differences were observed for height, lodging, test weight, yield or grain quality.

Summary:

Palisade as single or sequential applications at tillering and/or flag leaf stage had no effect on plant height, test weight, lodging or yield.

Table 1. Materials and Methods.

Seeding Date:	4/22/2016	Harvest Date:	8/31/2016
Julian Date:	113	Julian Date:	244
Seeding Rate:	120 lb/A	Soil Type:	Creston SiL
Previous Crop:	winter wheat	Soil Test:	104-24-652-154
Tillage:	Conventional	Fertilizer:	BC: 235-40-60 DR:3-14-0
Herbicide:	Huskie 11 oz/A + Axial 16.4 oz/A + NIS 1 qt/100 gal + UAN 28% 1 qt/A		

Table 2. Effect of rate and timing of Palisade on agronomic performance of spring wheat, Kalispell, MT - 2016.

	Rate	Timing	Height (inches)		LOD	YLD ¹	PRO ²	TWT ¹	FN
			7/1	8/9	%	bu/A	%	lb/bu	sec
Check			40.9	40.9	7.7	103.3	14.9	60.6	436
Palisade 2EC	7 fl oz/a	Tillering	40.2	40.8	0.7	104.4	14.6	60.7	450
Palisade 2EC	2 fl oz/a	Tillering +							
Palisade 2EC	5 fl oz/a	Flag leaf	40.3	41.3	1.0	101.2	14.7	60.7	434
Palisade 2EC	5 fl oz/a	Tillering +							
Palisade 2EC	2 fl oz/A	Flag leaf	39.4	41.2	4.0	103.1	14.9	60.7	436
Palisade 2EC	7 fl oz/a	Flag leaf	40.3	40.8	8.3	104.2	14.9	60.6	444
Mean			40.2	41.0	4.3	103.3	14.81	60.7	440
CV			3.4	1.6	157.1	5.2	3.22	0.3	4.7
LSD			ns	ns	ns	ns	ns	ns	ns
Pr>F			0.7273	0.8082	0.5379	0.9478	0.9096	0.7925	0.8547

LOD: lodging, YLD: yield, PRO: protein, TWT: test weight, FN: falling number, ns: nonsignificant.

¹adjusted to 13% moisture.

²adjusted to 12% moisture.