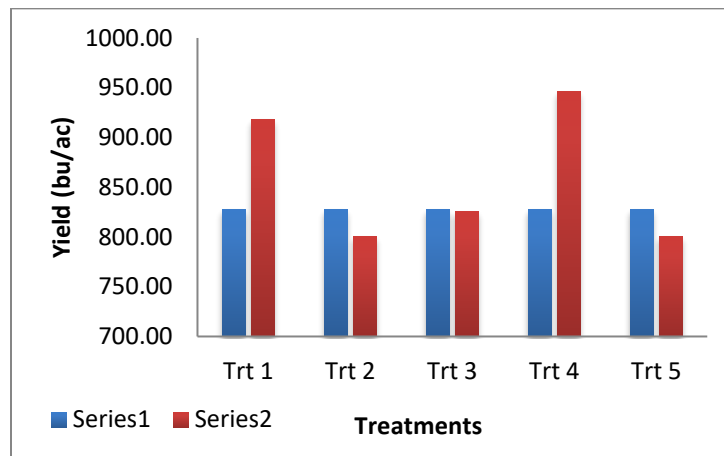


# Hemp Genetics International PGE Tech Treatment

**Project duration** May 2018 – August 2018  
**Objectives** To evaluate PGETech as a seed foliar fertility treatment  
**Collaborators** Jeff Kostiuk

## Results

Figure 1: Yield Comparison by Treatment



*Series 1 represents the control treatment*

## Background

PGE Tech works in the production of plant products with mineral based micronutrient plant growth enhancers. Their products are made from natural ingredients, are "eco-friendly" and require no special equipment or protective clothing to use. This trial looked at growing of hemp with the use PGE Tech either as a seed treatment or as a spray or both.

## Materials & Methods

**Experimental Design** Random Complete Block Design  
**Entries** 6 treatments x 4 replications  
**Seeding** May 28  
**Harvest** Aug 22

Table 1: PGR Application Timing

Treatment	PGE Seed Treatment	PGE Spray	Fertilizer
Control	Bare seed	None	None
1	Bare Seed	Sprayed	70% of target fertility

2	Bare seed	None	None
3	Bare seed	None	100% target fertility
4	Seed treated	None	None
5	Seed treated	Sprayed	100% target fertility

**Data collected**                      **Date collected**

Emergence	Jun 4-8
Plant Counts	Jun 11
Flowering	Jul 18-20
Disease rating	Aug 3
Height	Aug 2
Lodging	Aug 22
Yield	Sept 3
Moisture	Sept 3

**Agronomic info**

Previous year's crop	Oat barley silage
Soil Type	Erickson Loam Clay
Landscape	Rolling with trees to the east
Seedbed preparation	No-till due to moisture concerns; direct-seeded into stubble

Table 2: Spring 2018 Soil Test

	Available	Needed
N	54 lb/ac	76 lb/ac
P	13 ppm	10 lb/ac
K	228 ppm	0 lb/ac
S	118 lb/ac	0 lb/ac

Table 3: 100% Target Added N and P Fertilizer

Blend	Blend (actual lbs/ac)	Actual lbs N	Actual lbs P
46-0-0	160.62	76	0
11-52-0-0	19.23	2.12	10
Total	-	78.12	10

*N side-banded; P Banded with seed*

Table 4: Herbicide Application

Crop stage	Date	Product	Rate
Pre-emerge	May 19	Heat	28.4g/ac
		Round-up	0.67L/ac
In-crop	June 20	Brotex 240	0.5 L/ac
		Centurion	0.15 L/ac

