

# 2013 Corn Seed Treatment Trials— Red Lake & Norman Co.

Cooperator: P. Kappes & Seeger Farm (Elliot Solheim and Agrimax)

Nearest Town: Ada and Red Lake Falls

Planting Date: May 16, 2013 both locations

Variety: Gold Country Seed

Row Width: 30"

Harvest Date: Ada Nov. 5 & Red Lake Falls Nov. 7

Experimental Design: RCB with 4 replications

### Purpose of Study:

Various companies are encouraging corn producers to purchase various seed treatments to increase their corn yields. This trial compares 4 seed treatments and 1 combinations at two locations on the same hybrid versus no seed treatment.

### Results:

There were no significant increase in corn grain yield, test weight or moisture at either location with any of the added seed treatments compared to the same hybrid planted with no seed treatment as can be seen the following table. All seed treatments were commercially applied by Agrimax to the hybrid prior to planting .

### 2013 corn seed treatment trial yield, test weight and moisture results from Ada and Red Lake Falls

Hybrid	Seed Treatment	Ada			RLF			
		RM	Moisture	TW	Yield	Moisture	TW	Yield
GCS 85-39VT3	No Seed Treatment	85	19.3	55.0	186.8	21.2	54.2	164.2
GCS 85-39VT3	Torque RTA/Jumpstart	85	18.7	54.7	173.1	19.6	55.0	154.8
GCS 85-39VT3	Stamina	85	18.9	54.9	190.9	20.3	55.3	160.2
GCS 85-39VT3	Bio-Forge	85	18.2	54.9	186.4	20.8	54.4	161.0
GCS 85-39VT3	T + S + B*	85	18.2	55.0	184.8	20.8	55.2	158.4
GCS 85-39VT3	Ascend	85	18.4	54.8	179.4	19.8	55.3	154.5
Mean			18.6	54.9	183.6	20.4	54.9	158.8
CV			2.8	1.0	7.6	4.9	1.7	3.7
LSD 0.2			NS	NS	NS	NS	NS	NS

\* Combination of Torque + Stamina + Bio-Forge

### Treatment Listed mode of action

**Torque** LCO (Lipo-chitooligosaccharide) Promoter Technology that occurs naturally that stimulates bacteria-plant interaction to enhance root and shoot growth

**Jumpstart** soil fungus *Penicillium bilaii* producing organic acids making soil phosphorus more available

**Bio-Forge** It is formulation of 2% urea nitrogen, 3% soluble potash and 2% humic acid which ensure early root development and enhances seedling emergence stress associated with cold spring soils .

**Stamina** Stamina (pyraclostrobin) fungicide seed treatment which suppress seedborne and soilborne diseases such as Fusarium seed rot and seedling blight and Rhizoctonia root rot.

**Ascend** plant growth regulators that maximizes plant growth and development through its unique concentration and ratio of gibberellins, kinetin and indole butyric acid