

Corn Testing Report



RESEARCH COOPERATOR

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TRIAL OBJECTIVE

To test the effectiveness of AG FORCE I (Kan Grow- Plant Preparation) on corn plants and soil health.

CERTIFICATIONS

Kan Grow products are:
 » EPA Listed
 » NSF Certified



EXPERIMENTAL – TRIAL SETUP

Seed Type:	Corn
Location:	Growth Chambers at the University of Saskatchewan
Experimental Design:	5 treatments (control, low, medium, high and 1 US Gal/acre) with 4 repetitions (pots) per treatment.
Planting Details:	Seeds were planted on June 2nd 2015 38mm (1.5 inches) deep.
Treatment(s):	Applied in two separate applications. First application occurred 2 days prior to planting. The second application occurred three weeks after planting.
Harvest	8 weeks of growth time

EXPERIMENTAL – DESIGN

- 1) 1 : 10,000 dilution of AG-Force I (0 oz per acre) - 0 ml/pot (control)
- 2) 1 : 10,000 dilution of AG-Force I (8 oz per acre) - 10.35 ml/pot 1st application (low)
- 3) 1 : 10,000 dilution of AG-Force I (8 oz per acre) - 10.35 ml/pot 2nd application (low)
- 4) 1 : 10,000 dilution of AG-Force I (16 oz per acre) - 20.7 ml/pot 1st application (Medium)
- 5) 1 : 10,000 dilution of AG-Force I (16 oz per acre) - 20.7 ml/pot 2nd application (Medium)
- 6) 1 : 10,000 dilutions of AG-Force I (32 oz per acre) - 41.3 ml/pot 1st application (High)
- 7) 1 : 10,000 dilution of AG-Force I (32 oz per acre) - 41.3 ml/pot 2nd application (High)
- 8) 1 : 10,000 dilution of AG-Force I (64 oz per acre) - 82.65 ml/pot 1st application (1 US gal)
- 9) 1 : 10,000 dilution of AG-Force I (64 oz per acre) - 82.65 ml/pot 2nd application (1 US gal)

SEEDING RATE	Plants per acre	Plants/pot	Seeds/pot
Corn	25,000	2.62	3

RESULTS

Plant biomass results indicated 36%, 8%, 46%, and 16% greater average plant biomass than the average control biomass for the Low, Medium, High and 1USgal/acre application rates, respectively. Similarly, the average root biomass for all application rates was greater than the average root biomass for the control with increases of 42%, 36%, 81% and 40% in average root biomass for the Low, Medium, High and 1USgal/acre application rates, respectively.

Nutrient analysis of the plant and root material from the corn trials indicated greater phosphorus and potassium in the plant biomass as compared to the roots but elevated calcium, iron, sodium and sulfur levels in the root biomass as compared to the plant biomass for all application rates.

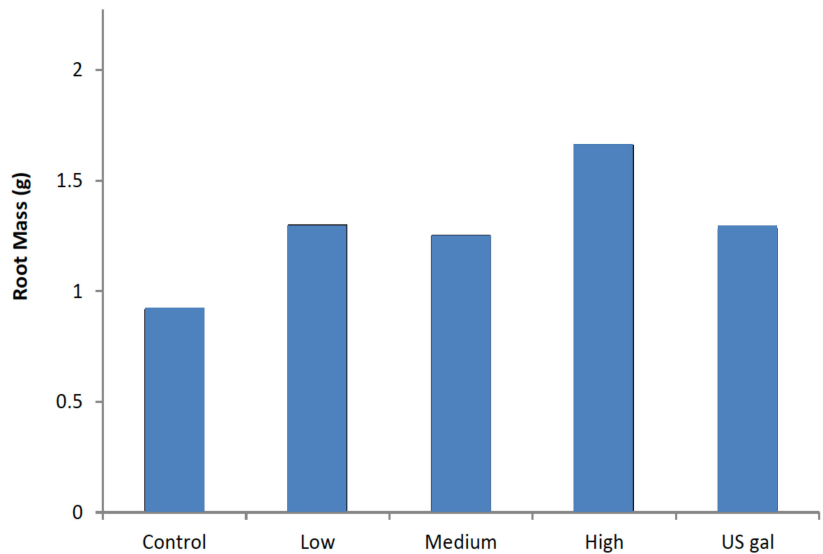
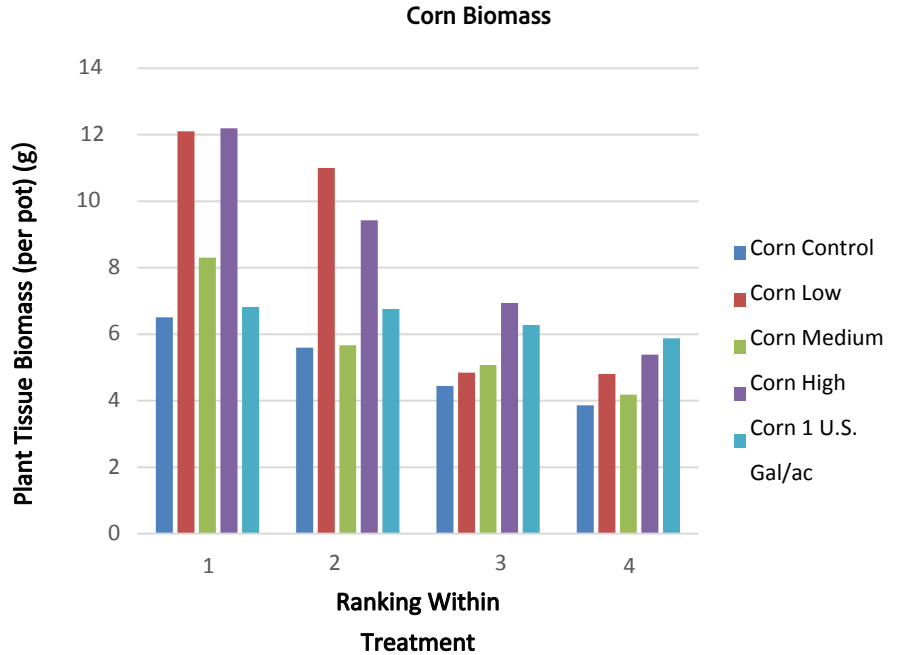
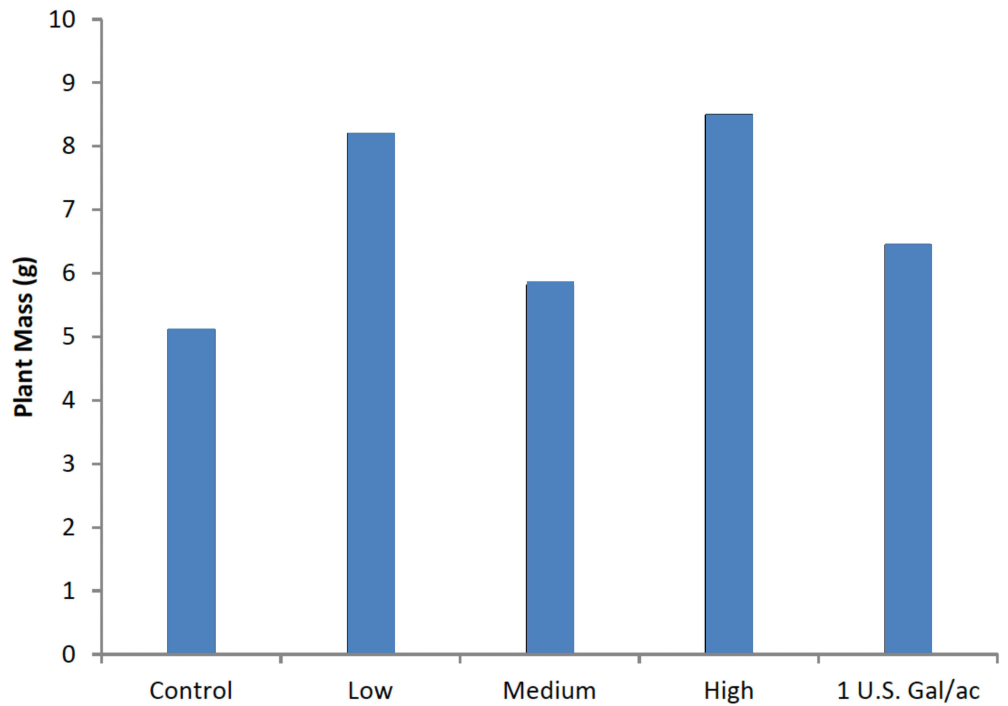


Figure 16 – Corn root biomass weight averaged over four replicates

Corn plant Biomass Weight Averaged



Corns plant and Root Analysis

