

Title: Evaluation of Green & Grow Seed Treatment Rates on Canola – 2015

Objective: To evaluate different rates of Green & Grow Agriplier seed treatment on canola development and yield.

“Agriplier is derived from naturally occurring soil bacteria that produce exudates with beneficial plant growth and enhancement properties such as increased yields, early vigor, and more uniform stands”.

Results:

Agriplier treatments provided significant differences in plant population (table 2). The average number of plants per square foot was 12.7 and ranged from 9.3 for the AGR300 treatment to 17.0 plants per ft<sup>2</sup> for the AGR200 treatment. Despite the differences in plant population, Agriplier had no significant effect on yield. In addition, no differences were observed between treatments in flowering date, plant height, percent lodging, percent pod shatter, oil content, or test weight.

Table 1. Materials and Methods - Green & Grow - 2015

Seeding Date:	4/21/2015	Harvest Date:	8/10/2015
Julian Date:	111	Julian Date:	222
Seeding Rate:	10 plants/ft <sup>2</sup> 6" rows	Soil Type:	Creston SiL
Previous Crop:	Spring Wheat	Soil Test:	61-8-180-62
Tillage:	Conventional-Till	Fertilizer:	125-35-35-20
Irrigation:	None	Insecticide:	Warrior II 1.92 oz/A
Herbicide:	Stinger 8 oz/A	Fungicide:	Quadris 6 oz/A

Table 2. Agronomic data from the statewide Green and Grow seed Treatment Trial, Kalispell, MT - 2015

Treatment	PLNT sqft	FLWR Julian	HT in	LOD %	SHTTR %	YLD <sup>1</sup> bu/A	OIL <sup>1</sup> %	TWT <sup>1</sup> lb/bu	MC %
CTRL	12.3	165	43.3	5.5	0.0	65.7	48.0	52.6	7.6
AGR100	12.0	165	45.0	1.8	0.0	76.1	48.6	52.3	7.0
AGR200	17.0	165	44.3	0.8	0.0	72.8	48.2	52.3	7.3
AGR300	9.3	165	44.3	2.5	0.0	70.3	48.2	52.3	7.2
Mean	12.7	165	44.2	2.6	0.0	71.2	48.3	52.4	7.3
CV	25.2	0.2	4.5	183.7	0.0	14.5	1.8	0.4	7.9
LSD	5.1	ns	ns	ns	ns	ns	ns	ns	ns
Pr>F	0.0437	0.4363	0.6732	0.5646	1.0000	0.5662	0.8204	0.2243	0.4947

PLNT: plant, FLWR: 50% flowering, HT: height, LOD: lodging, SHTTR: shatter, MC: moisture content

<sup>1</sup> adjusted to 8% moisture.