Dry vs. Liquid Fertilizer Programs on Winter Squash

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Experiment Info:	
Planted:	6-7-2019
Harvest:	9-14-2019
Yield Goal:	10 ton
Target Fert.:	
Variety:	?
Population:	6500
Row Width:	42"
Prev. Crop:	soybean
Plot Size:	6 acres
Replications:	1

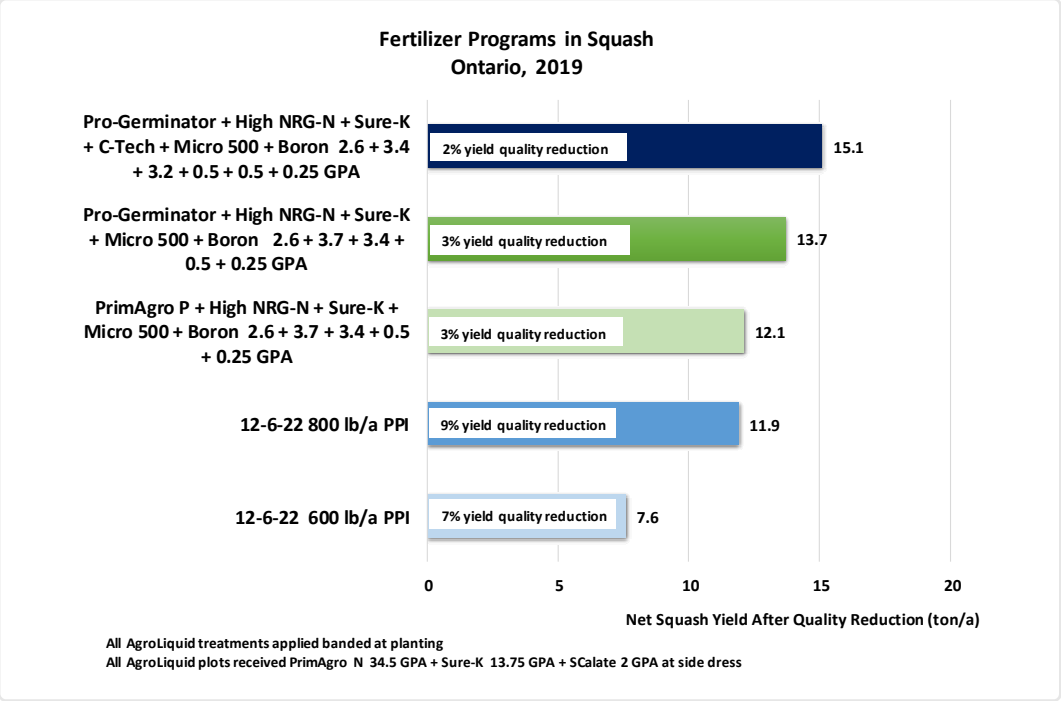
Soil Test Values (ppm):	
pH:	6.4
CEC:	5.5
%OM:	2.1
Bray P1:	110
Bicarb P:	
K:	120
S:	17
%K:	6
%Mg:	10
%Ca:	63
%H:	21
Zn:	3.5
Mn:	7
B:	0.4

Objective:

Evaluate performance of several AgroLiquid fertilizer programs vs. dry fertilizer programs on yield and quality of winter squash.

Dry Programs: 12-6-22-6S + Zn, Ca, Mg, and B applied PPI at 600 or 800 lb/acre

AgroLiquid Programs: Pro-Germinator or PrimAgro P 2.6 gal; High NRG-N 3.7 gal; Sure-K or PrimAgro K 3.4 gal; Micro 500 0.5 gal, Boron 0.25 gal applied 2X2. Additional treatment substituted 0.5 gal of C-Tech for 0.25 gal High NRG-N and 0.25 gal Sure-K. All AgroLiquid treatments included PrimAgro N 34.5 gal; Sure-K 13.75 gal; S-Calate 2 gal applied at side dress.



Conclusions:

- Squash in dry fertilizer treatments germinated and grew more quickly than squash in AgroLiquid treatments. However, later in the season squash in the dry fertilizer treatments showed more disease and exposed fruit to sun burn, increasing the number of unsaleable fruit. No disease or sun burn was observed in AgroLiquid treatments, which decreased the amount of unsaleable fruit compared to the other fertilizer programs.
- Although the 600 lb/a dry program was the least expensive it also had the lowest yield and profit margin. The treatment with C-Tech showed the highest yield and profit margin, even though it was the most expensive fertilizer program.