## THE NEXT GENERATION OF SDS PR CTION HAS A VED.

Syngenta has launched Saltro<sup>®</sup> seed treatment, a major advancement in Sudden Death Syndrome (SDS) seed treatments.



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## Soybean Growth & Development

- Soybean performance reflects variety interacting with biotic and abiotic stresses during each season
- Root growth during early Vegetative Growth Stage is critical
- Any stress that reduces growth and development rate is critical, as early growth lost may NOT be regained later during Reproduction
- As the plant transitions from Vegetative into Reproductive (flowering/early pod development) Growth Stage the rate of Root Development necessarily slows, in relative terms, in lieu of Flower/Pod development
- Therefore, avoiding early Vegetative Growth Rate reduction should be priority

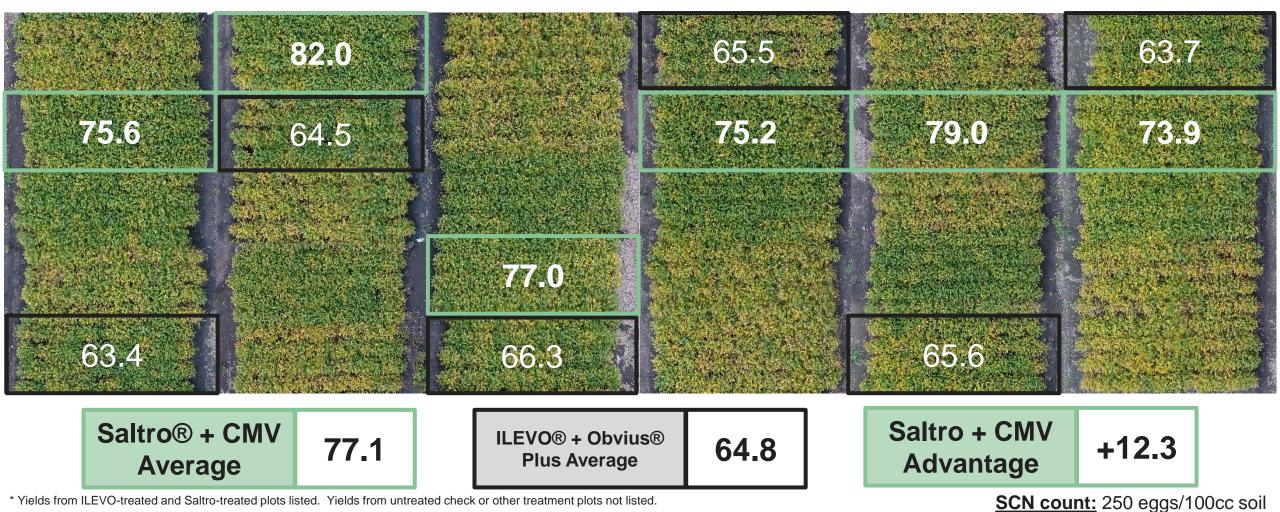
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## Saltro + CMV vs. ILEVO + Obvius Plus under heavy SDS pressure

Source: U of MN, D. Malvick, Rosemount MN, 2020



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CMV = CruiserMaxx® Vibrance®

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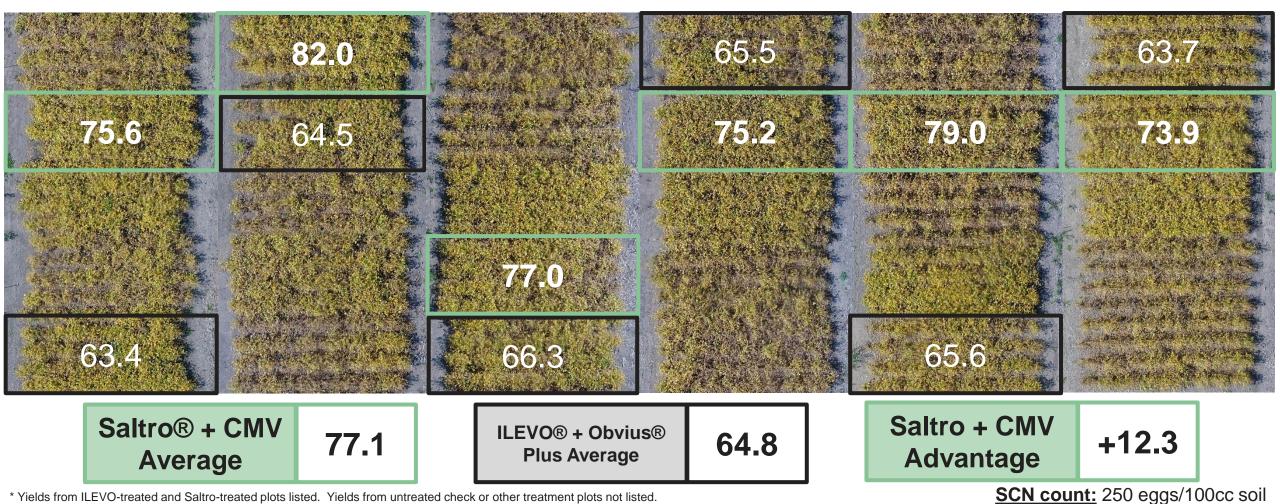


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## Saltro + CMV vs. ILEVO + Obvius Plus under heavy SDS pressure

Source: U of MN, D. Malvick, Rosemount MN, 2020



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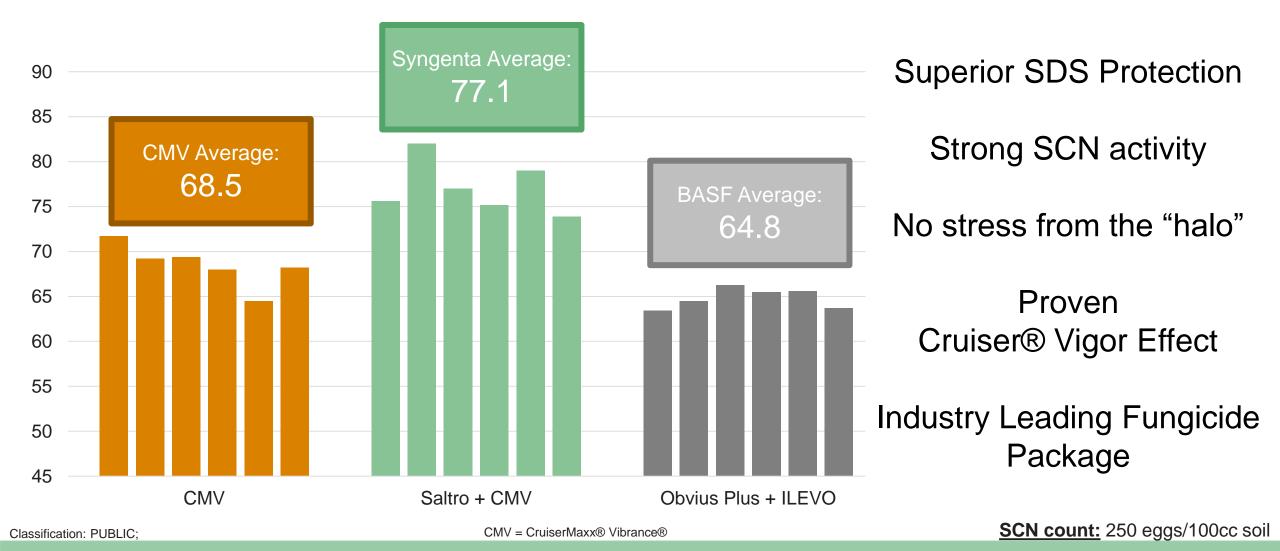


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## Syngenta vs. BASF Packages under heavy SDS pressure

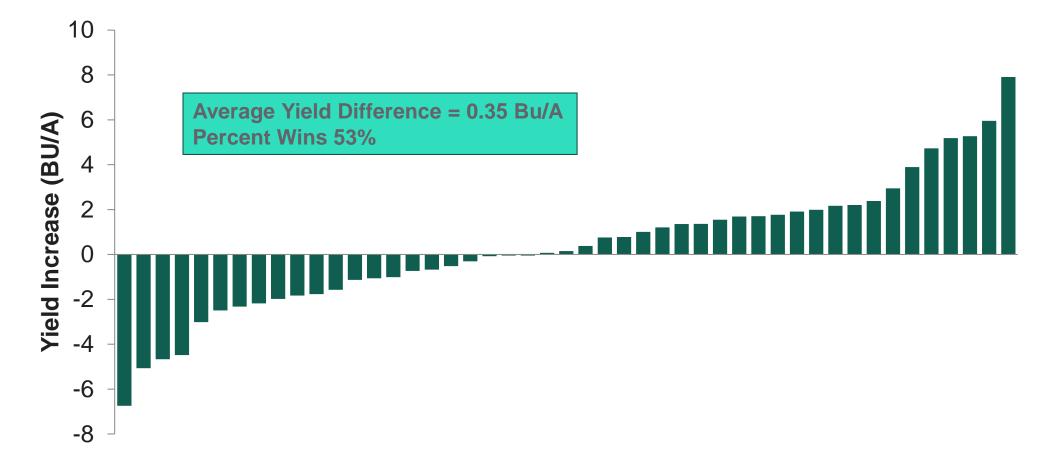
Source: U of MN, D. Malvick, Rosemount MN, 2020



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### Soybean Cyst Nematode all trials – No observable SDS foliar symptoms Yield Difference Saltro 0.075 mg vs. ILEVO 0.15 mg



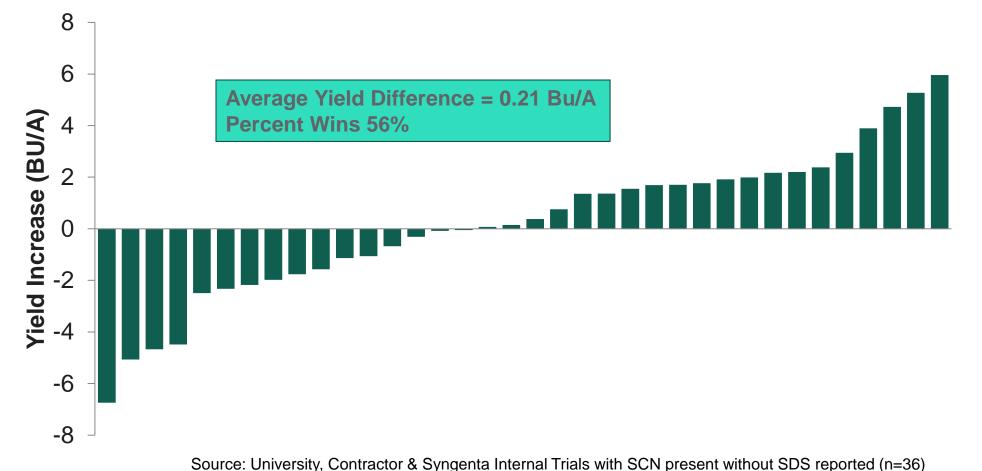
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Source: University, Contractor & Syngenta Internal Trials with SCN present without SDS reported (n=47)

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### Soybean Cyst Nematode all trials >500 SCN eggs/100 ccs soil (No observable SDS foliar symptoms) Yield Difference Saltro 0.075 mg vs. ILEVO 0.15 mg

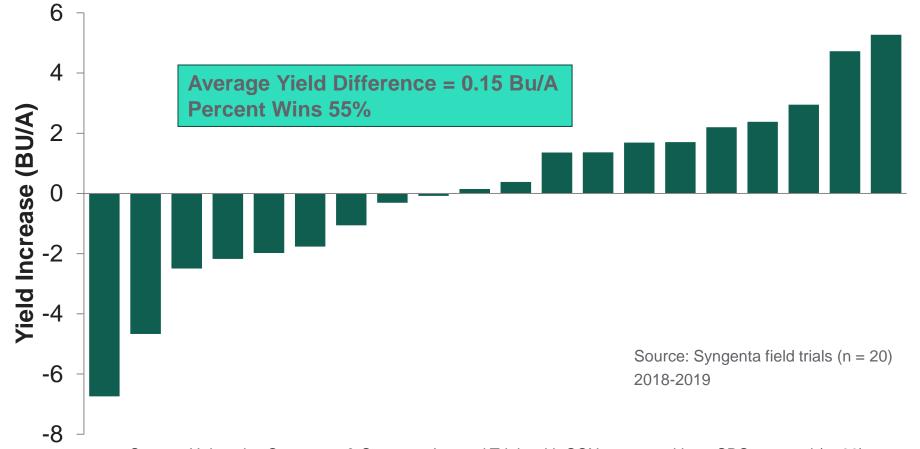


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### Soybean Cyst Nematode all trials >1000 SCN eggs/100 ccs soil (No observable SDS foliar symptoms) Yield Difference Saltro 0.075 mg vs. ILEVO 0.15 mg



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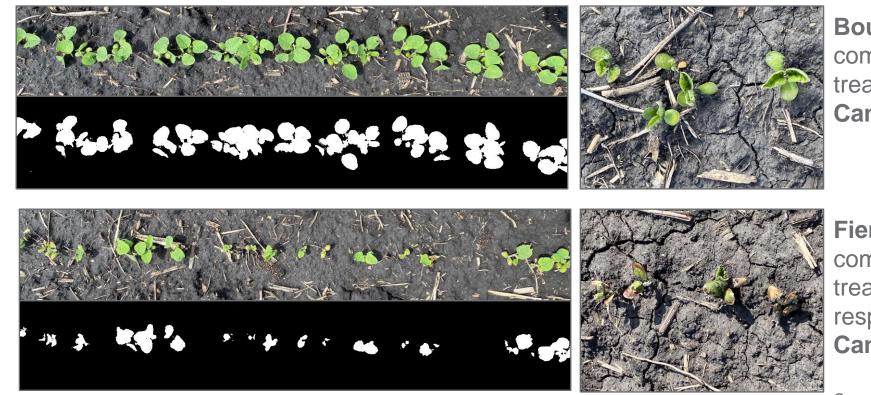
Source: University, Contractor & Syngenta Internal Trials with SCN present without SDS reported (n=20)

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#### Boundary 6.5 EC / Saltro vs. Fierce XLT / ILeVO Dixon Grow More™ Experience Site, Dixon IL





**Boundary® 6.5 EC** herbicide in combination with **Saltro**® seed treatment. No crop response. **Canopy cover = 18.4%** 

**Fierce® XLT** herbicide in combination with **Ilevo®** seed treatment. Significant crop response. **Canopy cover = 5.1%** 

Canopy cover calculated use Canopeo app.

Syngenta Trials: Dixon, IL- 5/12/21, 5/19/21 KRS 06/21

Product performance assumes disease presence. All photos are either the property of Syngenta or are used with permission. Performance assessments are based upon results or analysis of public information, field observations and/or internal Syngenta evaluations. Trials reflect treatment rates commonly recommended in the marketplace.

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## Who is paying BOUNTY for dead nematodes?

- No one pays for dead nematodes
- Larger root system provides greater yield stability across environments
- Protecting root systems is therefore **PRIORITY** for Seedcare solution
- Larger Root = Larger Yield Potential!

## **Right?**



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## Size Does Matter! (not how many nematodes you kill)

- 34 DAP
- Which row of soybean root masses do you prefer?





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- Why?
- Does the size of early root mass influence later season root mass?

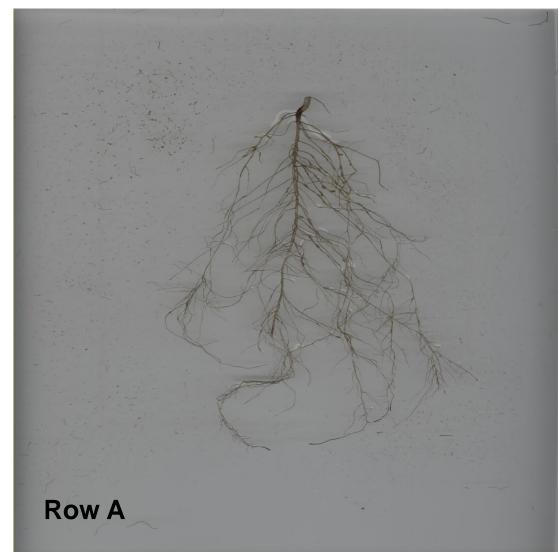
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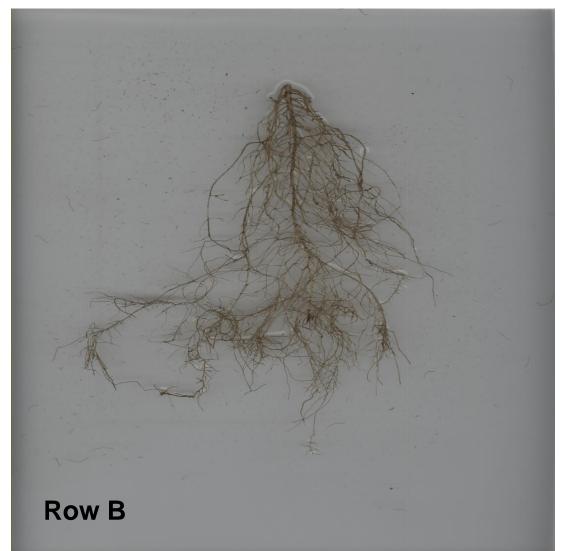
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### Size Does Matter! (not how many nematodes you kill)





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## How should you evaluate nematicide performance? (other than final seed yield)

#### **Cysts per Gram of Root**

- Measure root mass
- Count soybean cysts present

#### <u>Trt 1</u>

- Root mass = 3.24 grams
- Cyst count = 33
- Cysts/gram of root 10.2

#### <u>Trt 2</u>

- Root mass = 1.42 grams
- Cyst count = 18.3
- Cysts/gram of root 12.9

# Ultimately, you want the largest, healthiest ROOT MASS!! – RIGHT???

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Non-infected roots (left) vs SCN infected roots (right) Image: Syngenta



## Nematodes x Fungi take things from bad to worse....

- We know Nematodes are bad...
- We know Fungi are bad...
- Nematodes x Fungi take things from bad to worse....

## SYNERGY!!

• Nematodes provide an avenue for fungi, molds and bacteria to enter the root system....

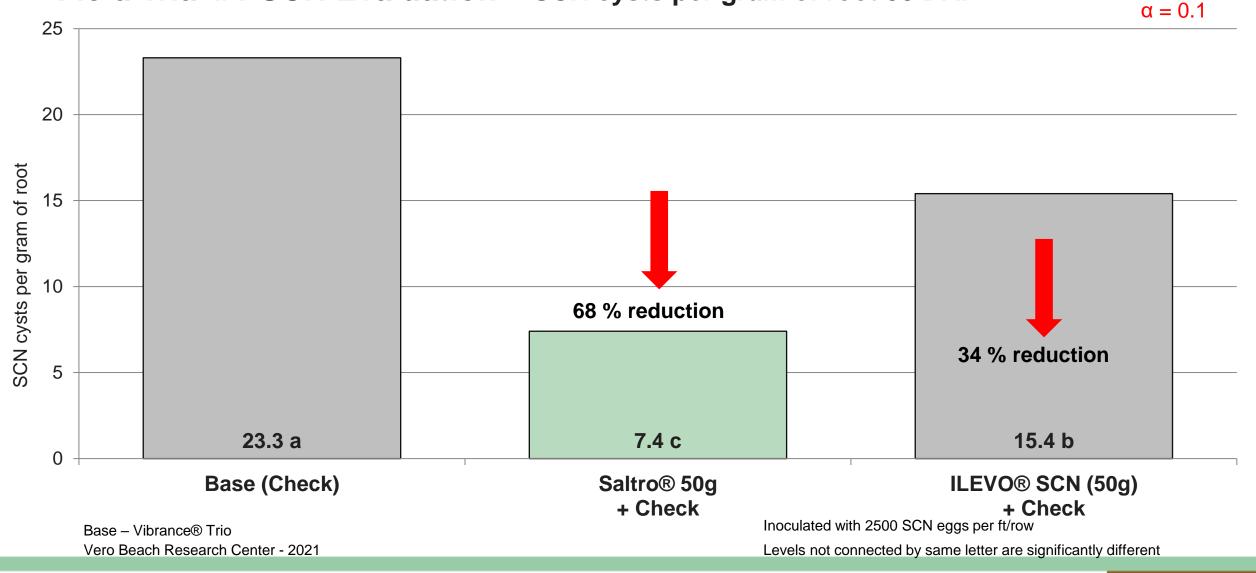
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### Field Trial #1 SCN Evaluation – SCN cysts per gram of root 38 DAP

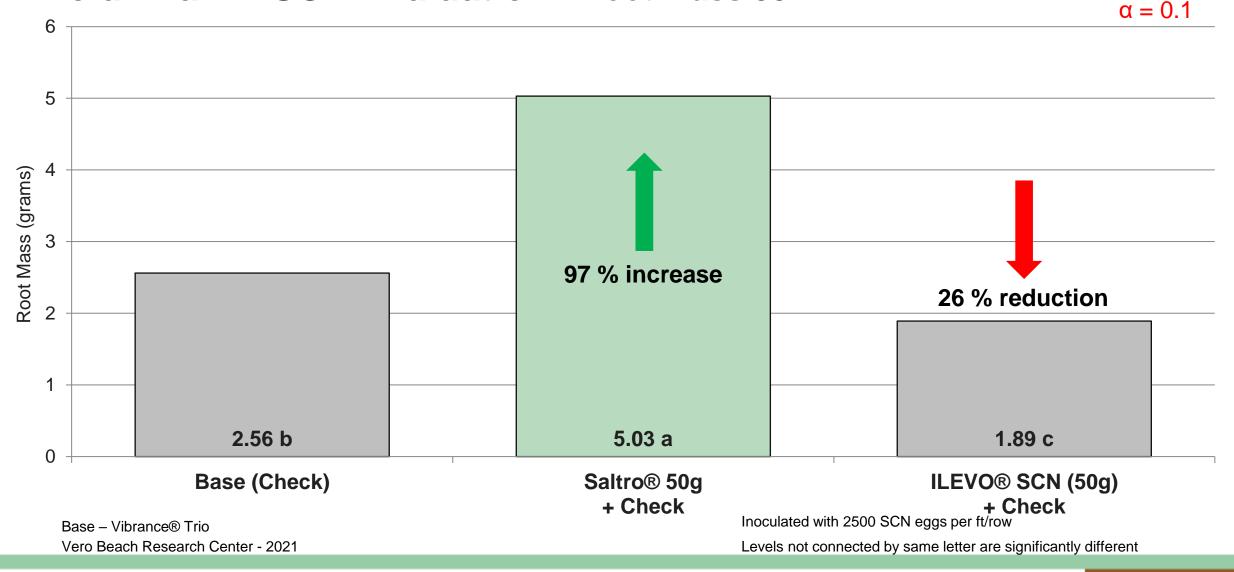


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## Field Trial #1 SCN Evaluation – root mass 38 DAP

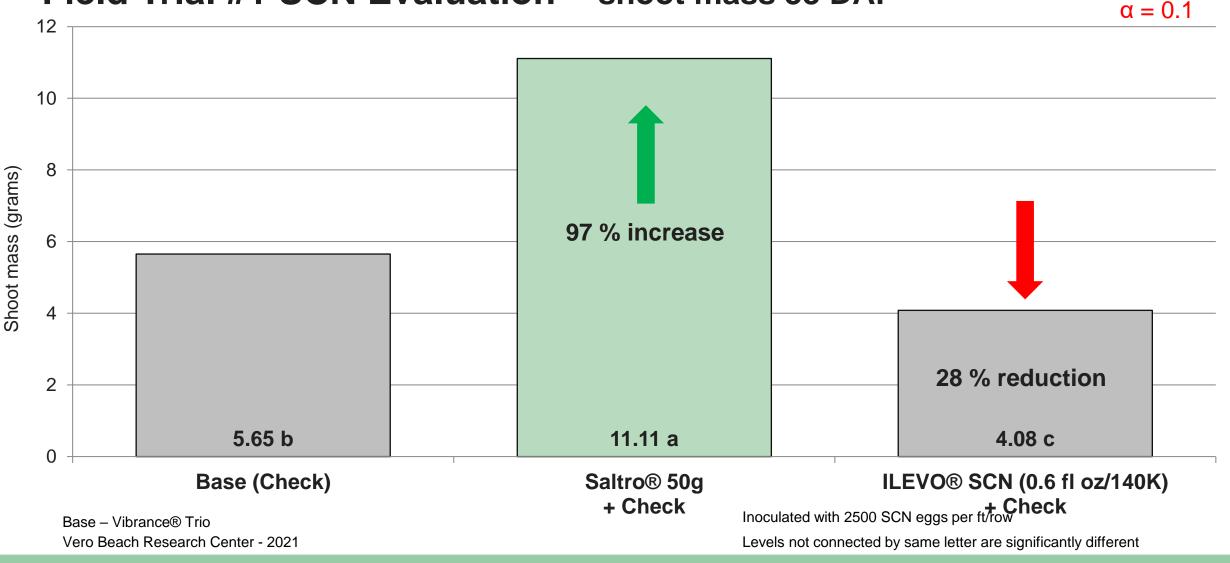


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## Field Trial #1 SCN Evaluation – shoot mass 38 DAP

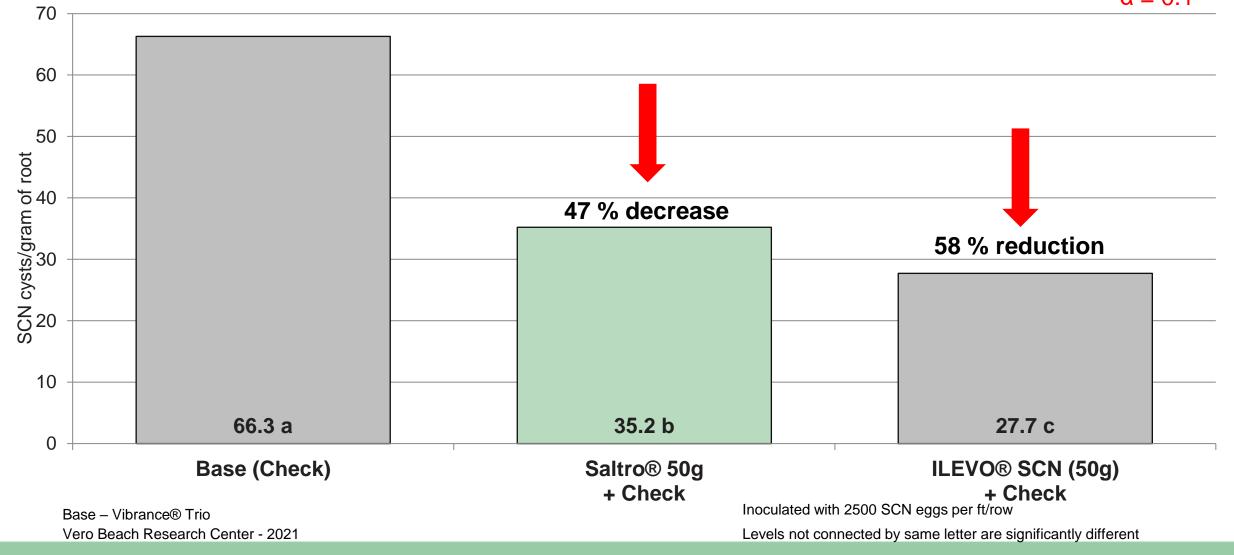


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#### Field Trial #2 SCN Evaluation – SCN cysts per gram of root 38 DAP $\alpha = 0.1$



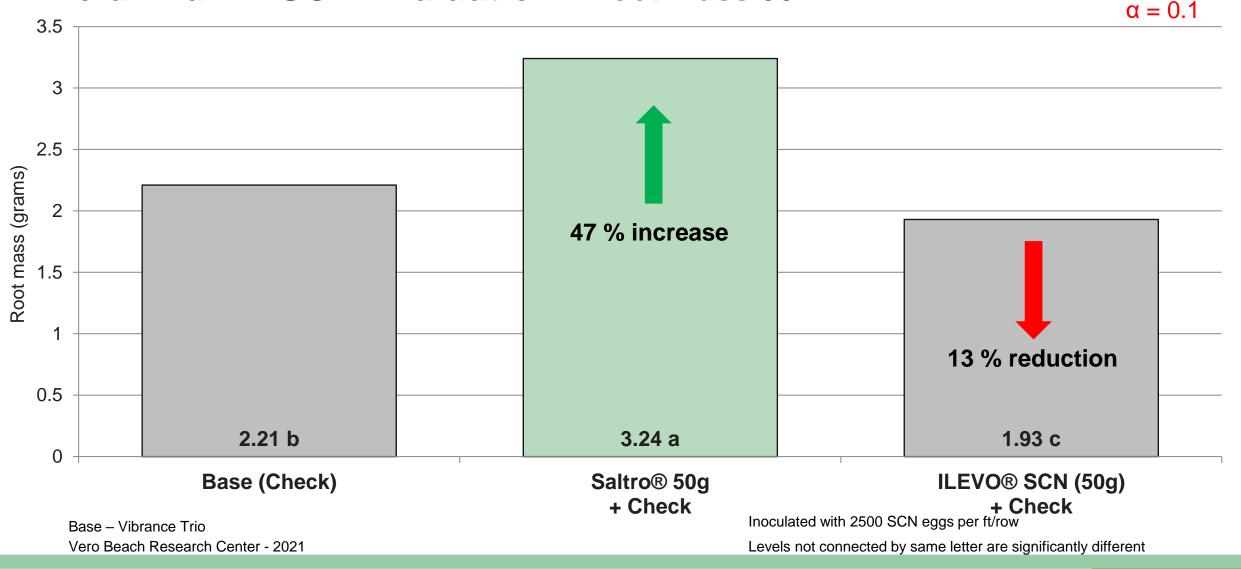
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## Field Trial #2 SCN Evaluation – root mass 38 DAP

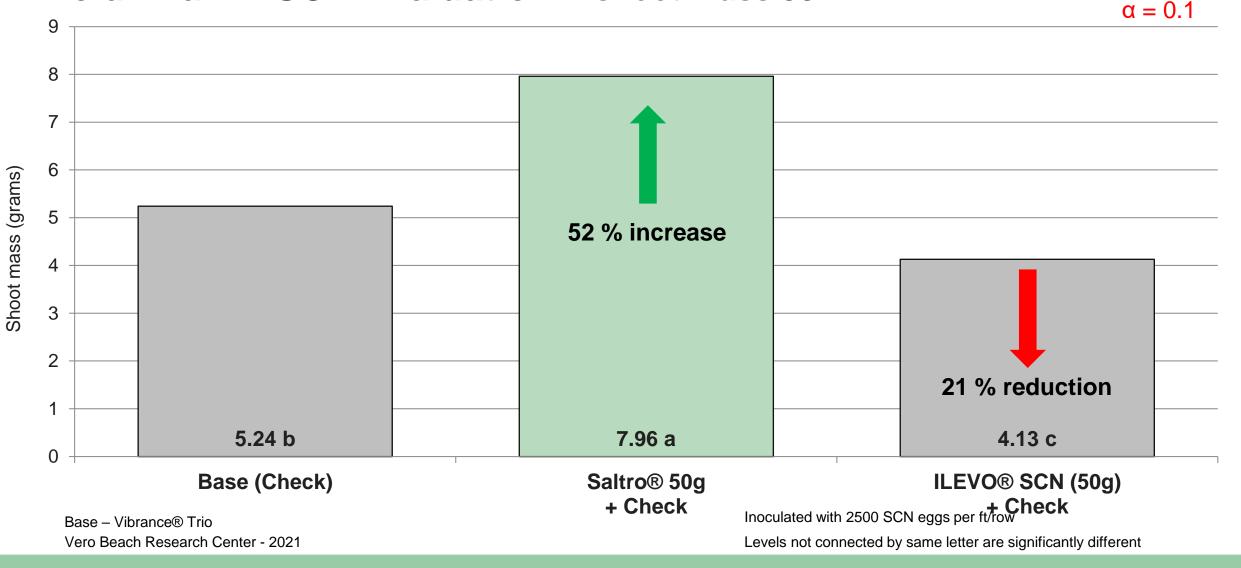


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## Field Trial #2 SCN Evaluation – shoot mass 38 DAP



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## More Yield is the Better Deal

- More Root Mass
- More Shoot Mass
- More Yield Potential

## More VALUE from Syngenta Seedcare!!

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## Saltro is Safer than ILEVO (on Rhizobia inoculant, too)!

- Based on 3<sup>rd</sup> Party research, Saltro® is proven safer on seed-applied Rhizobia inoculant viability life
- Apply up to 3X earlier than ILEVO® with same effectiveness
- Especially important for upstream conditioning and application ease and inventory management flexibility
- Additional confidence to begin treating soybean early with no loss in Rhizobia inoculant viability

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SOYBEAN			
TagTeam® LCO XC	Planting Window		
	Sequential	Simultaneous	Tank Mix
Acceleron <sup>®</sup> Seed Applied Solutions BASIC	120 days	120 days	Not Recommende
Acceleron® Seed Applied Solutions BASIC + Poncho®/VOTiVO®	120 days	120 days	Not Recommende
Acceleron <sup>®</sup> Seed Applied Solutions STANDARD	120 days	120 days	Not Recommende
ApronMaxx <sup>®</sup> RTA <sup>®</sup>	20 days	20 days	Not Recommende
Clariva® Complete Beans	90 days	90 days	Not Recommende
Clariva® Elite Beans	Not Tested	120 days	Not Tested
Clariva® Elite Beans + Saltro®	Not Tested	120 days	Not Tested
Clariva® Elite Beans + Mertect® 340-F	Not Tested	120 days	Not Tested
CruiserMaxx <sup>®</sup> Advanced with Vibrance <sup>®</sup>	120 days	120 days	Not Recommende
CruiserMaxy® Vibrance <sup>®</sup> Reans	120 days	120 days	Not Recommende
CruiserMaxx <sup>®</sup> Vibrance <sup>®</sup> Beans + Saltro <sup>®</sup>	Not Tested	120 days	Not Tested
EverGol <sup>®</sup> Energy	120 days	120 days	Not Recommende
EverGol®Energy + Stress Shield	120 days	120 days	Not Recommende
ILeVO <sup>®</sup>	40 days	40 days	Not Recommende
Inovate®	Not Tested	120 days	Not Recommende
Poncho <sup>®</sup> / VOTiVO <sup>®</sup>	Not Tested	120 days	Not Recommende
PPST 2030	Not Tested	120 days	Not Recommende
Seed Shield <sup>®</sup> Beans	120 days	120 days	Not Recommende
Seed Shield® Max Beans	Not Tested	120 days	Not Tested
Vibrance® Trio	Not Tested	120 days	Not Tested
Bare seed	120 days		

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Superior SDS Protection Clear SCN Activity No Halo Effect Better on the Broad Acre



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