



# Polysulphate<sup>®</sup>

## Trial

## Potato

*(Solanum tuberosum)*  
on loamy fine sand

Polysulphate fertilizer is a soluble, easily-absorbed, cost-effective answer to crop nutrition, containing four key plant nutrients: sulfur, potassium, magnesium and calcium.

<b>S</b>	19.2% S
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<b>K</b>	14% K <sub>2</sub> O
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<b>Mg</b>	3.6% Mg
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<b>Ca</b>	12.2% Ca
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## When

Planting Date:  
February 22, 2021  
Harvest Date:  
June 29, 2021



## Where

Vandermeere,  
North Carolina, USA  
(Mid-Michigan  
Agronomy)



## Crop

Potato  
(*Solanum tuberosum*)



## Soil type

Stockade loamy fine  
sand



## Measurements

Tuber yield & quality

Mined in the UK, ICL is the first – and only – producer in the world to mine polyhalite, marketed as Polysulphate.

**Polysulphate**

Twitter.com/FertilizerpluS  
YouTube.com/c/Polysulphate-fertilizer  
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[www.polysulphate.com/us](http://www.polysulphate.com/us)

Polysulphate is a registered trademark of ICL.

For more information consult  
[www.polysulphate.com/us/contact/](http://www.polysulphate.com/us/contact/)  
for your contact in your region.

## Objective

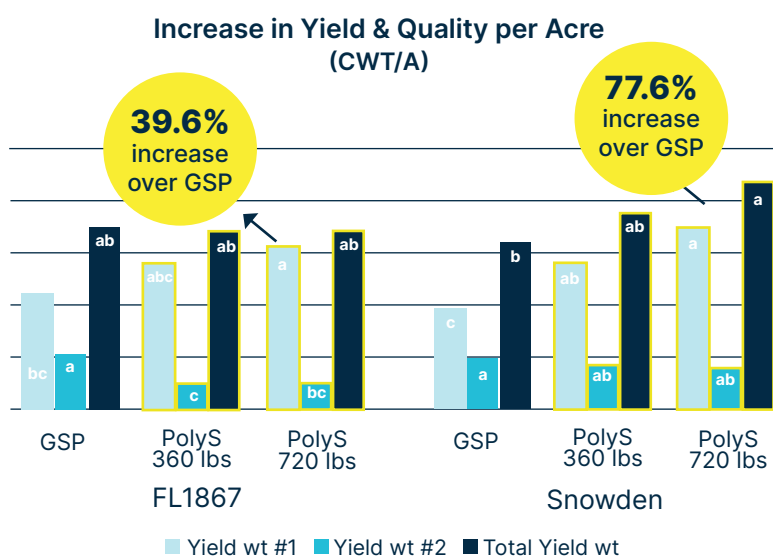
Evaluate the yield and quality from Polysulphate fertilizer on Snowden and FL1867 chipping potatoes when applied at planting on a loamy fine sand.

## Treatments

Grower standard practice (GSP) consisted of 10 gallons of 10-34-0 + 360 lbs of pelletized Gypsum (Pel Gyp) in-furrow at planting and MOP applied preplant. The Polysulphate treatment consisted of the GSP with either 360 or 720 lbs/a of Polysulphate with the amount of  $\text{CaSO}_4$  and MOP being adjusted to match total applied  $\text{K}_2\text{O}$  across all treatments. Treatments were evaluated in a randomized complete block design with six replications.

## Results

- Polysulphate showed a significant increase (39.6% for FL1867, 77.6% for Snowden) in higher quality #1 potatoes (at 720 lbs/a)
- Compared to GSP, Polysulphate resulted in improved total yields by 36.3% for Snowden's (720 lbs/a)
- Lower quality #2 potatoes were cut in half for FL1867 with Polysulphate (360 and 720 lbs/acre) compared to GSP



\*Different letters in bars indicate significant differences ( $\alpha=0.10$ )

## Conclusion

- Compared to GSP, in-furrow Polysulphate applications, at planting, increases quality and yield on FL1867 and Snowden chipping potatoes
- Balanced nutrient management by specific potato variety is critical to maximizing yield and profitability