



Polysulphate  
Trial

**Potato**  
(*Solanum tuberosum* cv.  
*Russet Burbank*) on sandy  
loam soil

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

<b>S</b>	48% SO <sub>3</sub> (19.2% S)
<b>K</b>	14% K <sub>2</sub> O (11.6% K)
<b>Mg</b>	6% MgO (3.6% Mg)
<b>Ca</b>	17% CaO (12.2% Ca)



### When

- Planting:  
May 15, 2018
- Harvest:  
October 4, 2018



### Where

Wisconsin, USA



### Crop

Potato  
(*Solanum tuberosum*)  
cv. Russet Burbank



### Soil type

Acidic, loamy sand soil



### Measurements

- Yield
- Quality



## Objective

To evaluate Polysulphate as a substitute potassium, calcium, and sulphur from muriate of potash and gypsum in conventional practice, for potato 'Russet Burbank' grown in central Wisconsin.

## Treatments

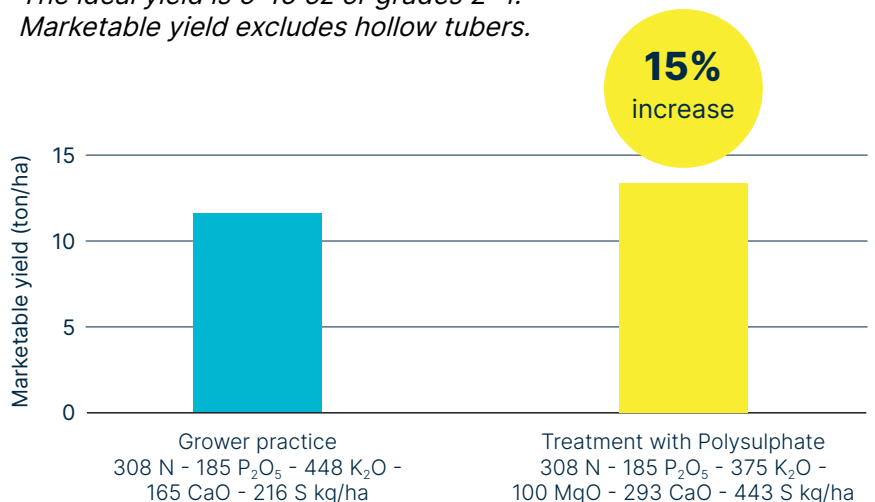
Grower practice consists of 37 kg N/ha applied at planting as DAP. At emergence and active growth, 85 and 190 kg N/ha was applied, respectively as ammonium sulphate and ammonium nitrate. Phosphorus, derived from DAP, was applied at 185 kg P<sub>2</sub>O<sub>5</sub>/ha at planting. Potassium was applied pre-plant at 310 kg K<sub>2</sub>O/ha as MOP, and at 135 kg K<sub>2</sub>O/ha as SOP at planting. In addition, at pre-plant gypsum was applied at 560 kg/ha.

The Polysulphate treatment was a duplicate of the grower practice without the pre-plant MOP and gypsum. Instead, Polysulphate was applied at 1,680 kg/ha at pre-plant.

## Results

- Polysulphate fertilization increased the marketable ideal\* yield by 1.79 ton/ha over conventional grower practice.
- Marketable yield increased by 15% with the addition of Polysulphate.

\* The ideal yield is 6-16 oz or grades 2-4.  
Marketable yield excludes hollow tubers.



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

**Polysulphate**

- ✉ fertilizers.sales@icl-group.com
- in icl-growingsolutions
- @iclgrowingsolutions
- @ICLGrowingSolutions

<http://icl-growingsolutions.com>  
Polysulphate is a registered trademark of ICL.

For more information consult  
<http://icl-growingsolutions.com/contact-office/> for your contact in your region.