



# Polysulphate

Trial



## Oilseed rape (*Brassica napus*) on a sandy clay 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.

**S** 48% SO<sub>3</sub>  
(19.2% S)

**K** 14% K<sub>2</sub>O  
(11.6% K)

**Mg** 6% MgO  
(3.6% Mg)

**Ca** 17% CaO  
(12.2% Ca)





When

2018



Where

UK



Crop

Oilseed rape  
(*Brassica napus*)



Soil type

Sandy clay loam



Measurements

Yield

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](mailto:fertilizers.sales@icl-group.com)

[Twitter.com/Polysulphate](https://twitter.com/Polysulphate)

[YouTube.com/c/Polysulphate-fertilizer](https://www.youtube.com/c/Polysulphate-fertilizer)

[Facebook.com/Polysulphate](https://www.facebook.com/Polysulphate)

[www.polysulphate.com](http://www.polysulphate.com)

Polysulphate is a registered trademark of ICL.

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

## Objective

In this trial we look at autumn and spring applications of sulphate to Winter Oilseed Rape (WOSR), primarily looking at yield with different timings of sulphur. We investigate split applications of S, how this can help with establishment of the crop, and winter hardiness.

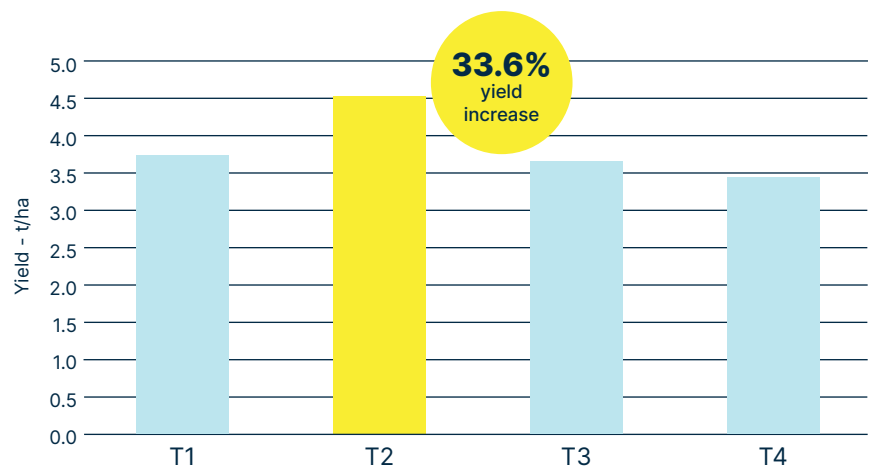
## Treatments

We looked at 3 different rates of application of Polysulphate on to WOSR. The whole field had a base fertilizer of 250 kg/ha 0-20-30. T1, T3 and T4 (farm practice) received 96 kg of SO<sub>3</sub> per ha in one single application. T2 received two applications of sulphate to the equivalent of 192 kg of SO<sub>3</sub>, split 96 kg/ha at planting and 96 kg/ha early spring. All areas received 30 kg of nitrogen per ha at planting.

T1	T2	T3	T4
Polysulphate 200 kg/ha in the autumn (at planting)	Polysulphate 200 kg/ha in the autumn (at planting)		Ammonium sulphate applied to this area
	Polysulphate 200 kg/ha in the early spring	Polysulphate 200 kg/ha in the early spring	

## Results

The application of Polysulphate increased the yield in all cases. Autumn and spring application increased the yield by an extra 1.15 t/ha over the farm practice.



## Conclusion

In these results Polysulphate increased the yield between 200 kg/ha and 1.15 t/ha (T2 gave the best results). When we look at the return after fertilizer costs have been deducted we see that T1 gave an extra £62.94/ha, T2 gave an extra £291.70/ha and T3 gave an extra £21.60/ha over the control.