Polysulphate

Trial

- **S** 48% SO_3 (19.2% S)
- **K** 14% K_2O (11.6% K)
- **Mg** 6% MgO (3.6% Mg)
- **Ca** 17% CaO (12.2% Ca)

Rice *(Oryza sativa)* on inceptisol

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

ICL Innovative Ag. Solutions

Polysulphate

When

- Planting date: January 2018
- Harvest: May 2018

Where

West Java province, Indonesia

Crop

Paddy rice
(*Oryza sativa* var. Sertani and Kabir)

Soil type

Inceptisol

Measurements

- Yield

Objective

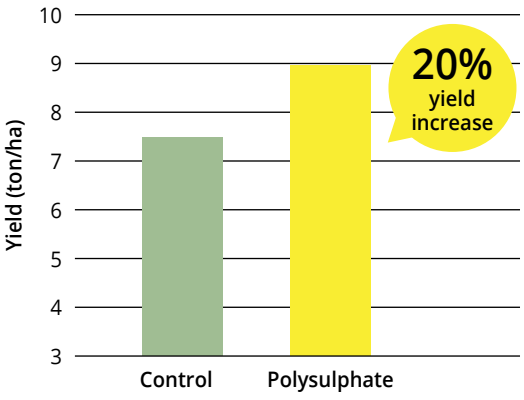
To evaluate the benefits to paddy rice crop of Polysulphate fertilizer compared to the farmer's usual fertilizer practice in West Java, Indonesia.

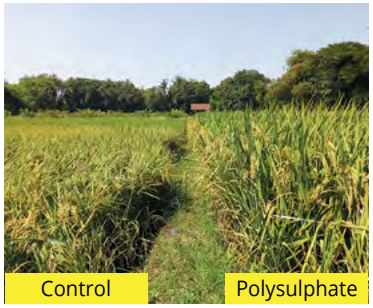
Treatments

An unreplicated field trial was carried out on two 0.8 ha plots. In the control plot, the farmer applied the usual fertilizer treatment of 250 kg/ha of urea at transplanting and 500 kg/ha of NPK (15:15:15) at 10 and 30 days after transplanting. In the Polysulphate-treated plots, 250 kg/ha of urea was applied at transplanting and 150 kg/ha of Polysulphate was applied at 20 and 35 days after transplanting.

Results

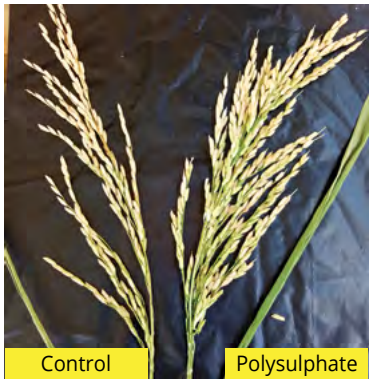
- With the Polysulphate treatment, the rice yield (9.0 t/ha) was 20% higher than the control plot (7.5 t/ha).
- The Polysulphate paddy had bigger and stronger panicles compared to the control; the grains were rounder with a more uniform shape and better filling.
- The average weight of the grains was 9% higher in the plot treated with Polysulphate.
- Regarding the plant height, the rice in the Polysulphate plot was 8-10 cm taller than the control and appeared less affected by diseases.
- Plants in the Polysulphate plot were more resistant to lodging or damage caused by wind.
- Less blast disease (*Pyricularia oryzae*) and smut were reported in the Polysulphate plot compared to the control plot.
- There was no identifiable difference in response to Polysulphate between the two rice varieties, Kabir and Sertani.





Higher rice plants in the Polysulphate plot.

9% higher grain weight in the Polysulphate treated rice compared to the control.



Better grain filling and stronger panicles with Polysulphate.

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

For more information consult www.polysulphate.com/contact for your contact in your region.

www.polysulphate.com

Polysulphate

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