



POLY4

An Anglo American PLC Product

K₂O
14%

S
19%

MgO
6%

CaO
17%



Tomato

Growing Tomato in Brazil with POLY4.

Trial focus

Evaluate the yield response of tomato to NPK and POLY4 + MOP programmes.

Overview

- São Paulo state is the second largest tomato producer in Brazil.
- Tomato has a high nutrient requirement, particularly to grow large and high-quality fruits.
- POLY4 is an excellent addition to a tomato fertiliser programme to produce optimal yield and quality, because it provides four essential nutrients – potassium, sulphate-sulphur, calcium and magnesium – in one product.
- In particular, calcium helps reinforce cell walls, improve fruit firmness and can decrease the incidence of blossom end rot and lost crop.

Crops:

Tomato

Years:

2015–2017

Locations:

5 trial sites in São Paulo, Brazil.

Data source:

University of São Paulo, Brazil



4.4 t/ha

POLY4 yield advantage
over NPK

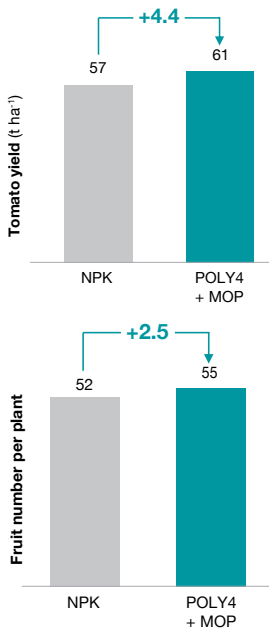
Treatments applied

- All crops received locally standard NPK application, or a mixture of MOP and POLY4 (POLY4 programme).
- POLY4 application rate was 215 kg POLY4 ha⁻¹ which supplies 30 kg K₂O ha⁻¹, 41 kg S ha⁻¹, 37 kg CaO ha⁻¹, and 13 kg MgO ha⁻¹.

Example nutrient application rates (kg ha⁻¹)

	K ₂ O	S	MgO	CaO
NPK	250	0	0	0
POLY4 + MOP	250	41	13	36

Results



Conclusion

- POLY4 programmes increased tomato yield over standard NPK programmes by a median 4.4 t ha⁻¹.
- POLY4 yield outperformed NPK yield per over 3 t ha⁻¹ in 4 trials.
- Tomato plants grown with POLY4 had a median of three more tomatoes.
- The results show that the balanced nutrition of K, S, Mg and Ca provided to crops by POLY4 helped to produce more fruits per plant and consistently improved the yield.
- The prolonged release of POLY4, low CI content and low salt index promotes better and more efficient absorption of the nutrients by the tomato.



Notes: median N rate was 300 kg ha⁻¹, median P₂O₅ rate was 500 kg ha⁻¹