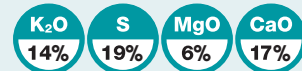


# Growing CORN IN FRANCE



**POLY4**  
An Anglo American Product



## KEY FINDINGS

**7% higher yield than  
standard farm practice**

**Enhanced crop nutrition**

**Financially efficient**



## POLY4 BENEFITS



Source of macro and micro nutrients



Sustained nutrient delivery



Suitable for organic farming



Excellent environmental profile

## A CASE FOR POLY4

- France is the third largest maize producer in Europe and the 11th largest globally.
- MOP + AS is a standard farm fertilizer practice if application of potassium is required.
- S deficiency is an increasing problem for European farmers.
- POLY4 supplies K, S, Mg, Ca and micro nutrients in one product.
- POLY4 provides a sustained delivery of nutrients. This is important for grain fill when K requirements are high.

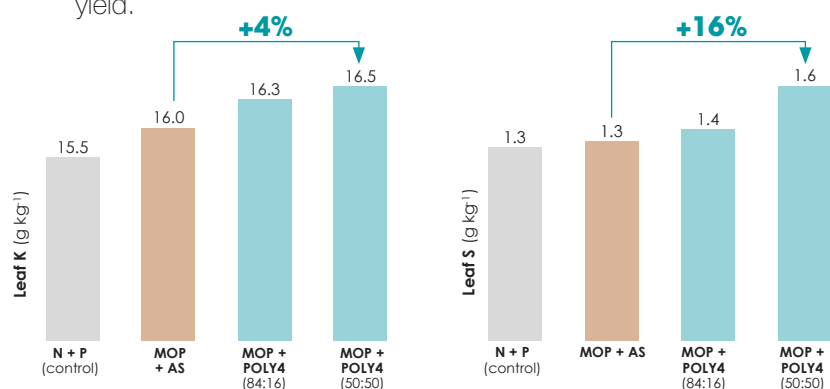
Treatments	Nutrients applied (kg ha <sup>-1</sup> )						
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	MgO	CaO	S	Cl
N + P (control)	158	90					
MOP + AS	158	90	180			39	138
MOP + POLY4 (84:16)	158	90	180	12	35	39	122
MOP + POLY4 (50:50)	158	90	180	39	109	122	88

\*All treatments received standard N and P applications. The MOP + POLY4 received either 16% or 50% of the K fertilizer from POLY4 with the remainder from MOP.

## ENHANCED CROP NUTRITION



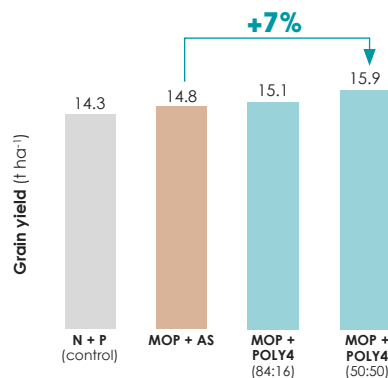
Leaf tissue analyses indicated the N + P (control) and MOP + AS fertilized crops were deficient in K (<16 g kg<sup>-1</sup>) and S (<1.5 g kg<sup>-1</sup>). The MOP + POLY4 (50:50) treatment had the highest concentration of both K and S making POLY4 a very effective K and S fertilizer. Increased K and S supply to deficient crops can produce a greater yield.



## HIGHER YIELD



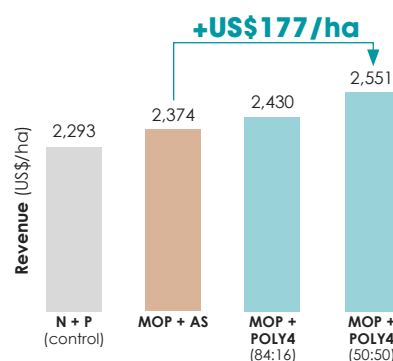
The POLY4 fertilizer programmes had up to 1.1 t ha<sup>-1</sup> more yield than standard farm practice (MOP + AS). The largest yield was achieved when 50% of K<sub>2</sub>O was supplied by POLY4.



## FINANCIALLY EFFICIENT FERTILIZER PROGRAMME



The POLY4 fertilizer programmes had the highest revenues.



## TRIAL FOCUS

To assess the response of corn yield to standard fertilizer practice and POLY4 fertilizer programmes.

PARTNER

**ANTEDIS**

LOCATION

**Simandre, France**

DATE

**2018**

Notes: 1) FAO Stat, 2017; 2) 158 kg N and 90 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> applied to all treatments; 3) Initial soil analysis: pH (water) 6.8, 1.9% SOM, 110 mg P kg<sup>-1</sup>, 50 mg K kg<sup>-1</sup>, 684 mg Ca kg<sup>-1</sup>, 35 mg Mg kg<sup>-1</sup>; 4) Data analysed by Genstat ANOVA analysis, with Fishers LSD (5%) used to separate means; 5) Leaf nutrient analysis after representative leaves (below and opposite cob) were taken at grain filling (GS71); 6) Maize price was US\$161/t.

Source: Antedis, France (2018), 17000-ASA-17013-18 (com).

Follow us on social media

