Growing CORN IN FRANCE

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.

poly4.com
ENHANCED CROP NUTRITION

Leaf tissue analyses indicated the N + P (control) and MOP + AS fertilized crops were deficient in K (<16 g kg⁻¹) and S (<1.5 g kg⁻¹). 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.

The POLY4 fertilizer programmes had up to 1.1 t ha⁻¹ more yield than standard farm practice (MOP + AS). The largest yield was achieved when 50% of K₂O was supplied by POLY4.

FINANCIALLY EFFICIENT FERTILIZER PROGRAMME

The POLY4 fertilizer programmes had the highest revenues.

**Notes:** 1) FAO Stat, 2017; 2) 158 kg N and 90 kg P₂O₅ ha⁻¹ applied to all treatments; 3) Initial soil analysis: pH (water) 6.8, 1.9% SOM, 110 mg P kg⁻¹, 50 mg K kg⁻¹, 684 mg Ca kg⁻¹, 35 mg Mg kg⁻¹; 4) Data analysed by Genstat ANOVA analysis, with Fisher’s 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. 

*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.*

### Trial Focus

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

### Partner

**Antedis**

### Location

**Simandre, France**

### Date

2018