

CROP: POTATO, VARIETY: ASTERIX

*Solanum tuberosum*

## BASIC INFORMATION

<b>TARGET</b>	Yield and quality improvement
<b>CROP</b>	Potato, Asterix variety
<b>RATE</b>	5 l/ha + 5l/ha
<b>LOCATION</b>	Montijo • Portugal
<b>TRIAL DATE</b>	August 2012 - January 2013
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## APPLICATION & HARVEST

Applications of **TRANSFORMER** were made by solo pulverization using herbicide application bars on two plots of 0,5 ha each and 14 ha was left untreated as a control. Two applications were made at a rate of 5 l/ha **TRANSFORMER** in 320 l/ha water for each application. The field was irrigated after application. The trial was monitored during site visits, which were made once a month. The potatoes were harvested mechanically. A 1000 m<sup>2</sup> area in each of the treated plots and the untreated plot was harvested for the trial.

## OBSERVATIONS & EVALUATION

One week before harvest, four randomly selected sections, 3 meter plots in the row, in both the treated and untreated areas, were harvested for quality control. It was observed that the treated plants had more tubers per plant with more uniform growth and fewer defective tubers.

The untreated tubers were on average between 5 and 10 cm deep while in the treated area tubers developed down to 25 cm deep. This is why the untreated had more frost and sunburn damage, as ridges are subject to erosion by irrigation and wind.

## RESULTS

The application of **TRANSFORMER** resulted in an increase in the commercial production of 4611 kg/ha, an 18,5 % increase. This yield increase gave an increased income of €1521,79/ha when the ruling price at the time of harvest was €0,33/kg. Hence the farmer had a significant increase in the commercial value with the application of **TRANSFORMER**. These increases are as a result of better water management with the application of **TRANSFORMER** therefore higher yielding plants and healthier plants which produce a better quality crop.

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## FIELD SITUATION

- Planting on 15 August 2012
- First application (5 l/ha) on 19 September 2012
- Second application (5 l/ha) on 12 October 2012
- Harvest on 31 January 2013
- Soil: loamy sand texture with compacted layer at 30 cm
- Plant spacing: 30 cm by 80 cm

FIGURE 1

### Potato production (kg/ha)

■ UNTREATED CONTROL ■ TRANSFORMER

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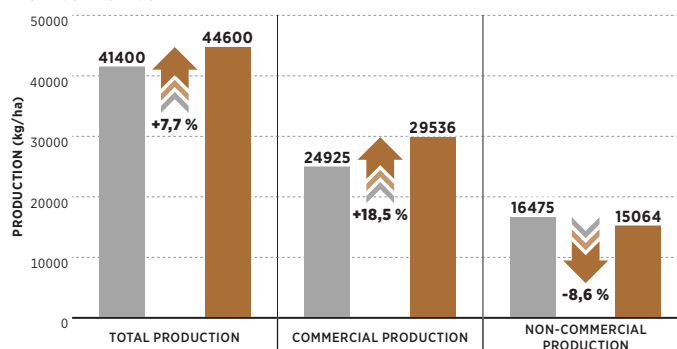


FIGURE 2

### Potato production per size class (kg/ha)

■ UNTREATED CONTROL ■ TRANSFORMER

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