KREOTEC

Trial in corn, Spain: Reduced Nitrogen Application

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STUDY DETAILS

Crop:	Long Cycle Corn
Country:	Spain
Year:	2018
Product(s):	Kreotec
Trial Type:	Demonstration

STUDY AIMS

Evaluate if Kreotec could successfully replace 39% of the of long season corn crops nitrogen requirements.

TREATMENTS

Treatments:	**Control:** Basal: 500kg/ha (NPK 6-9-11) + 280kg/ha (NPK 18-46-0) = 80kg N/ha Top Dress: 700kg/ha (NPK 32-0-0) = 224kg N/ha **Total Applied N = 304kg/ha** **Kreotec:** Basal: 500kg/ha (NPK 6-9-11) + 280kg/ha (NPK 18-46-0) = 80kg N/ha Top Dress: 330kg/ha (NPK 32-0-0) = 106kg N/ha **Total Applied N = 186kg/ha** **Total N Reduction = 39%**

KREOTEC

SPECIFICS

Specific Location:	Montesusin Huesca
Specific Trial Dates:	5th May 2018 – 24th October 2018
Trial Manager:	Antonio José Bernabé García
Distributor:	Symborg
Irrigation:	Unspecified
Previous Crop:	Unspecified
Basal Fertiliser:	500kg/ha (NPK 6-9-11) 280kg/ha (NPK 18-46-0)
Kreotec Application Date:	12th June 2018
Application Growth Stage:	14 BBCH
Application Method:	Sulfation
Kreotec Application Rate:	450g/ha (2.2x106cfu/gr)
Water Rate:	250-350 litres/ha
Crop Variety:	40F
Previous Treatments	Unspecified

RESULTS

Harvest Details

Harvest Date:	24 October 2018
Harvest Method:	Combine Harvester

Figure 1: *SPAD measurements*

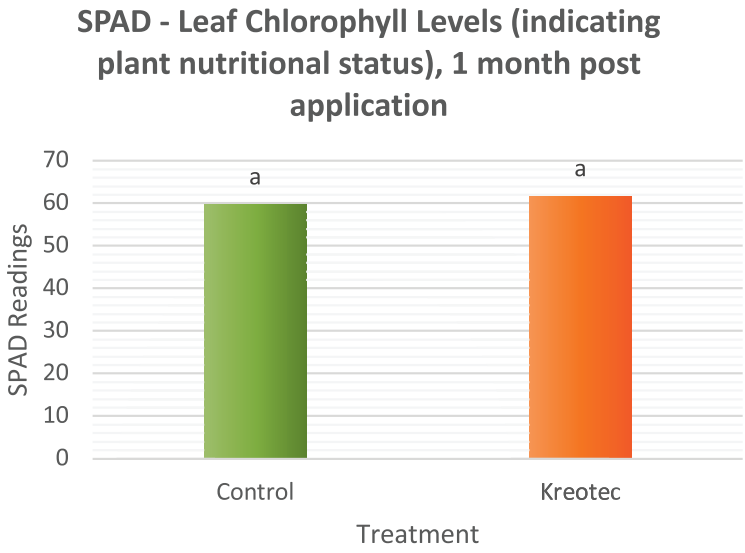
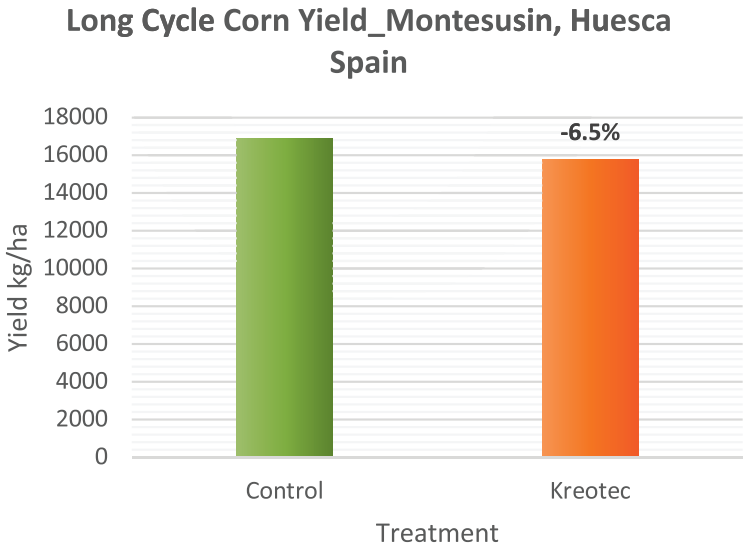


Figure 2: *Yield*



KEY FINDINGS

- Kreotec successfully inoculated the plant with the microbes which persisted throughout the growing period. Kreotec maintained a level of SPAD (Chlorophyll), plant health and plant canopy density equal to the control (conventional fertilization)
- A yield reduction of 6.5% was experienced with the use of Kreotec in this trial, however there was a saving of 40% total applied nitrogen. As the trial was not replicated it is possible that this yield reduction was due to in-field variation and may be within statistical error values.

Additional information in relation to this trial is available by contacting Thinkbio

Thinkbio would like to acknowledge the work undertaken by Antonio José Bernabé García