User Application Report

Product:
Penergetic p

User:
Two trial fields in Uruguay
Consultant:
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Rudolf Balz/ Adrian Gutierrez

Date: 2013-2014

Optimized Sorghum (Millet) Growth

Two trials (Penergetic versus control) with 2 tests per trial were made with seed “Pioneer 8419”. One area remained untreated and was established as control.

Summary Introduction

- With Penergetic-k treatment you are able to improve sorghum harvest.
- Higher productivity due to more grains and better tillering of the plants.

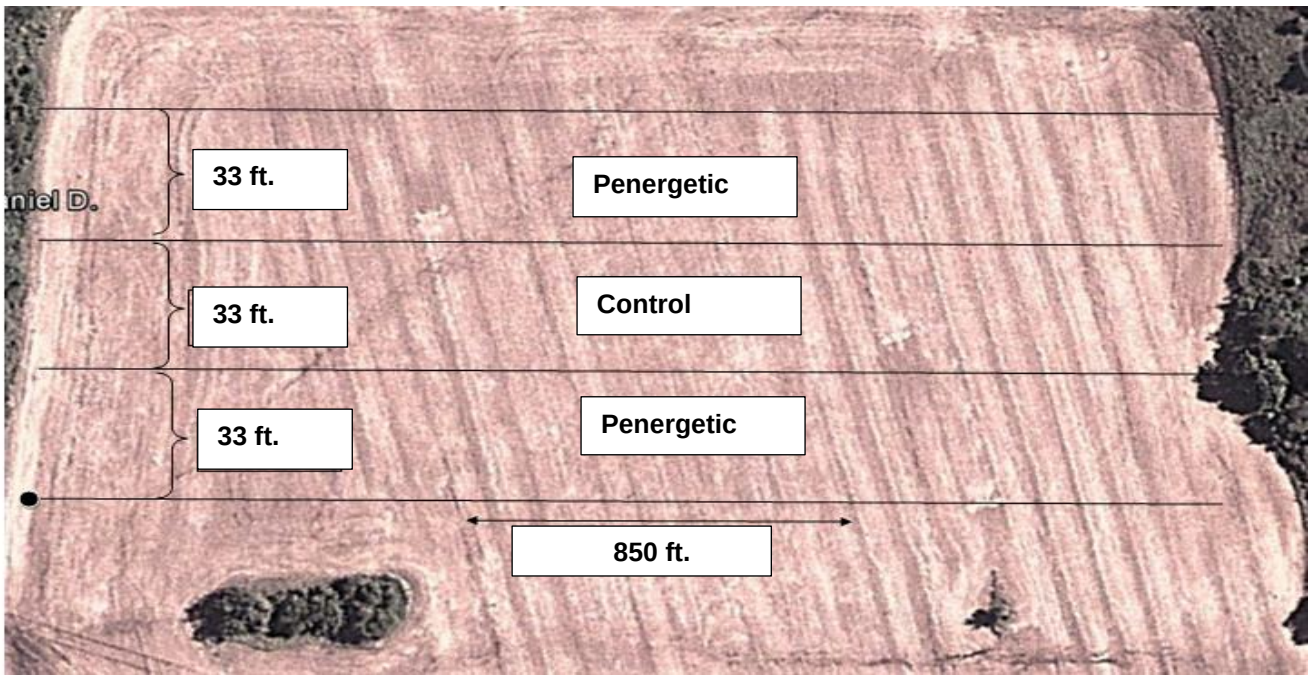
Facts and Figures

Penergetic Treatment

Treatment	**Density:**	**8 lbs. of seed per acre**
	Fertilization:	**2/1/2014: 130 lbs./ac. Supertriple, 90 lbs./ac. urea**
		17/2/2014 80kg/ha urea.
	Plant protection:	**16/1/2014: Triflumuron 13.2 oz./ac.**
		Clorofos 26.4 fl. oz./ac.
	Penergetic p	**4.2 oz./ac. (foliar sprayed at V6 stage)**
Treatment Time		**Seeding 15th December 2013**
RESULTS	■ **Significant increase of yield per acre, (higher values for panicles/ton, more grains/panicle, more grains/sq. ft., higher kernel/grain weight).**	

APPLICATION

Trial Fields



Producer: Daniel Duburdieu
Design: Semi commercial farm – application with and without penergetic p.
Equipment: Ground sprayer
Cultivation: Sorghum
Harvest: Manual, with 20 random samples per treatment

Two sorghum fields, located on Road 2 approx. two miles from Mercedes. Soriano treatments with the bio stimulant penergetic p were applied. One area remained untreated and was established as control. For the sprays a three-point sprayer with an operating width of 33 feet was used.

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RESULTS – See the difference in comparison

Facts and Figures in Detail

Sampling: Collected on 8th May 2014.

Method: Randomized, manually selected panicles in one running meter.

Samples: Number of samples: 24 per treatment.

Measurement:

- Numbers of panicles per linear foot (**NPF**)
- Grains per panicles (**GPP**)
- Grains per square foot (**GSF**)
- 1000 kernel weight (**PMG)**
- Estimated yield per acre

Treatments:

- 1A Penergetic-p first collection of samples in field 1
- 1B Penergetic-p second collection of samples in field 2
- Control

Results

The results are shown in the following table (**abbreviations described above**)

Treatment	NPF	GPP	GSF	PMG (in grams)
1A Penergetic	2.17	1959	1,300	26.53
1A Control	2.32	1641	1,166	26.93
1B Penergetic	2.45	1359	1,016	26.83
1B Control	2.08	1536	976	25.09

Treatment	Performance in lbs./ac.
1A Penergetic	3,247
1A Control	2,956
1B Penergetic	2,567
1B Control	2,306

Differences in favour of Penergetic		
Treatment	lbs./ac.	%
1A Penergetic	291	9.84
1B Penergetic	261	11.32
Average	**276**	**10.58**

Summary

The two penergetic p treated fields averaged a 10.6% higher yield per acre than the comparable (untreated) Control fields no doubt in part due to the higher number of grains per panicle.
The results using penergetic p are very favourable, particularly in that it is often difficult to see differences in a standing crop of sorghum.

APPLICATION

Pictures of Trial Fields

RESULTS – See the difference in comparison

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