

Anwendungsbericht/User Application Report

Produkt/Product:

penergetic b
penergetic p

Fachberater/Consultant:

Priyanga Dematawa
Sri Lanka

Anwender/User:

K B Stores, Horivilla,
Palugaswewa/Sri Lanka

Datum/Date:

2018

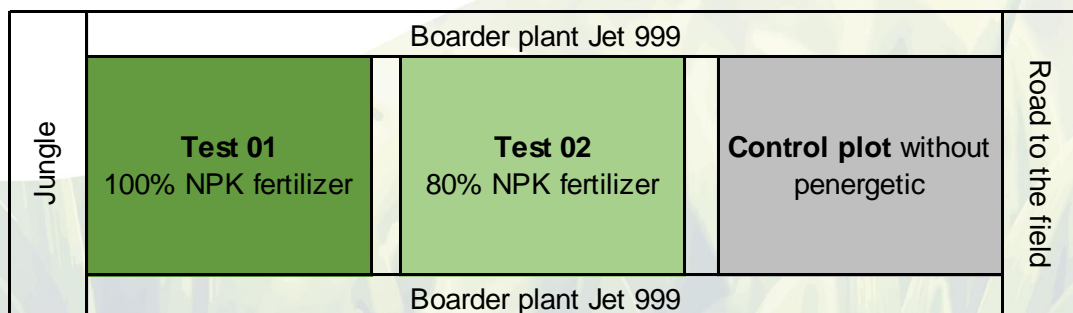
Application on Corn in Sri Lanka

Variety: Jet 999
 Trial duration: 110 days
 Plot size: 2000 m²
 Plant spacing: 60 x 30 cm
 NPK fertilizer: 100% in control and in Test 01,
 80% in Test 02.

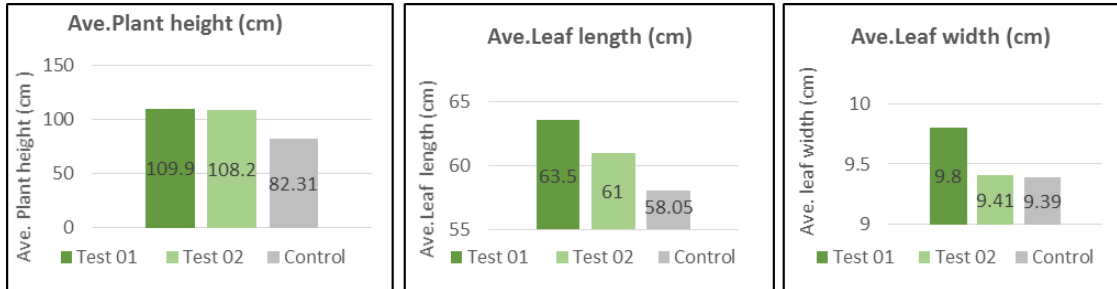
Both Test 01 and Test 02 were treated with the same quantities of Penergetic:

- penergetic b 1 application of 60g, 3 weeks before seeding
- Penergetic p 3 applications of 40g

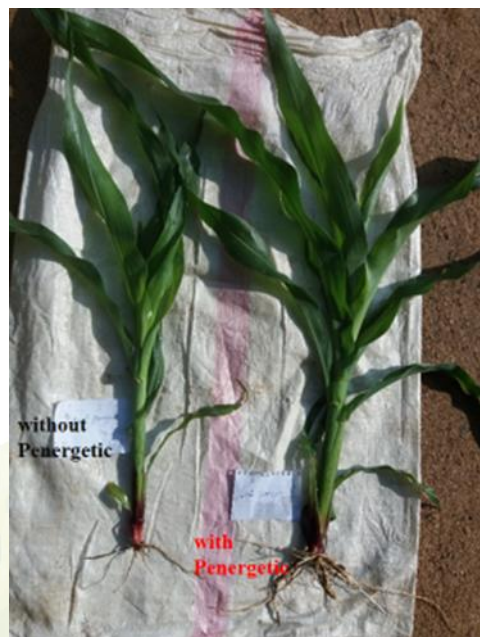
Trial Design – Complete block design



Plant growth parameters 2 months after planting



Seedlings 2 weeks after planting – left penergetic b treated, right control



Seedlings 50 days after planting – left control, right penergetic b and p treated

Agronomic characters

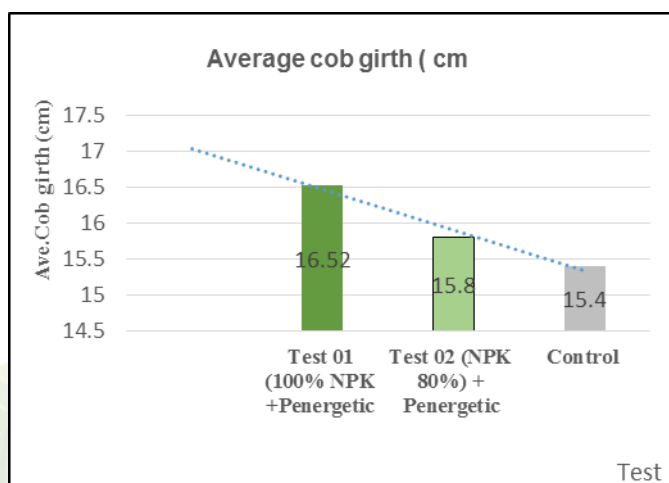
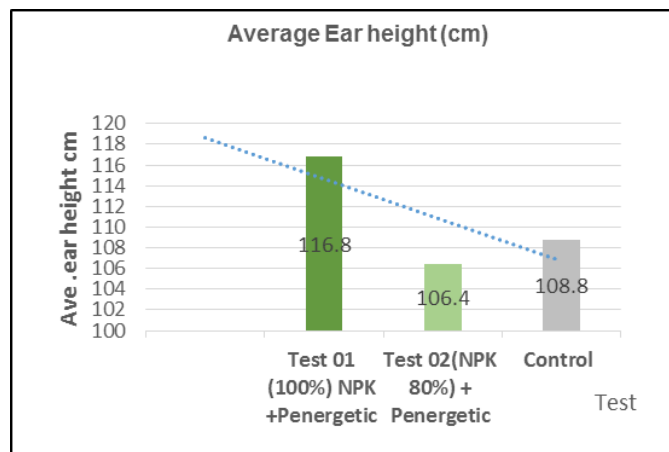
Agronomic characters	Test 01 (100% NPK +Penergetic)	Test 02 (NPK 80%) + Penergetic	Control
Average grain yield (Kg/ha)	9320	7320	7400
Days to harvest	110	110	110
Average plant height (cm)- 1 WAP	6.3	6.1	5.9
4 weeks after planting	56.97	52	47.7
Average ear height (cm)(from collar region to ear base)	116.8	106.4	108.8
Average cob length (cm)	19.8	18.8	18.3
Average maximum cob girth (cm)	16.52	15.8	15.4
No of seed rows	14	14	14
1000 grain weight (g)	301	298	270
Seed colour	Orange	Orange	Orange
Pest and disease (Sheath blight /Stem borer)	No pest found	No pest found	No pest found

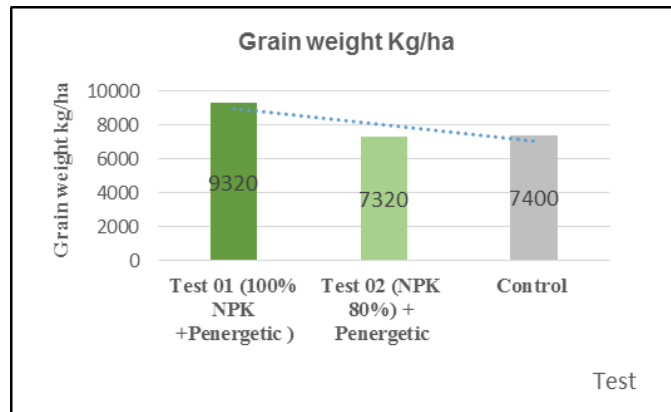
Note: Plant height was taken by collar region of the plant to upper most bud of the plant.
Leaf length and leaf width was taken by 2nd leaf from upper most bud.



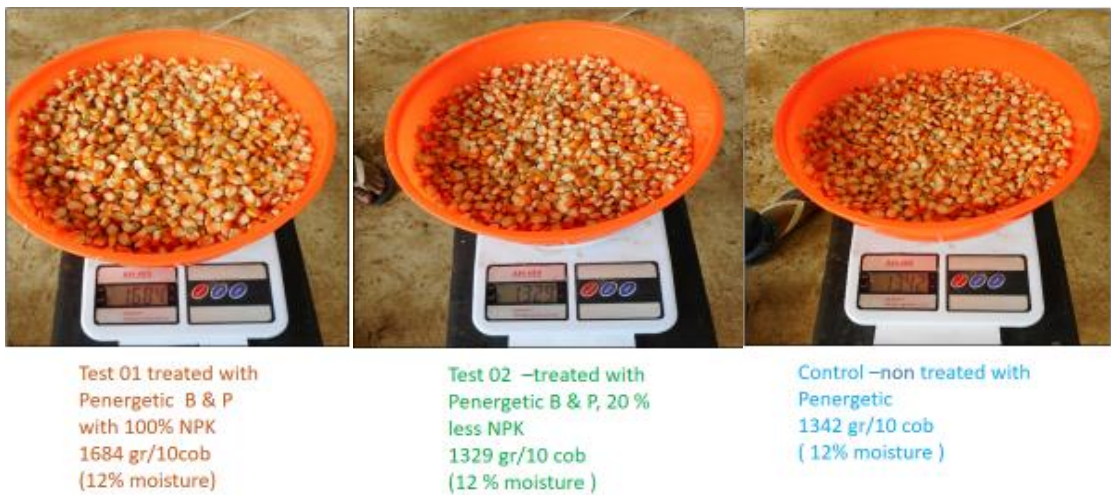
Penergetic treated

Control





Yield comparison, 10 cobs



Test and Control cobs were selected randomly, harvested 5m x 5m area in each plot.



Conclusion

According to the results Test 01 showed considerable yield increase towards the control and the Test 02 (20 % with respect to the control plot). However, test 02 showed yield reduction with respect to the control.

Test 01 showed highest cob length, cob girth and grain weight than the test 02 and control. However, test no 02 was the lowest.

Therefore we can conclude that there is positive impact for plant growth by using Penergetic treatment but reduction of fertilizer such as NPK 20 % lead to yield and growth reduction.

