

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

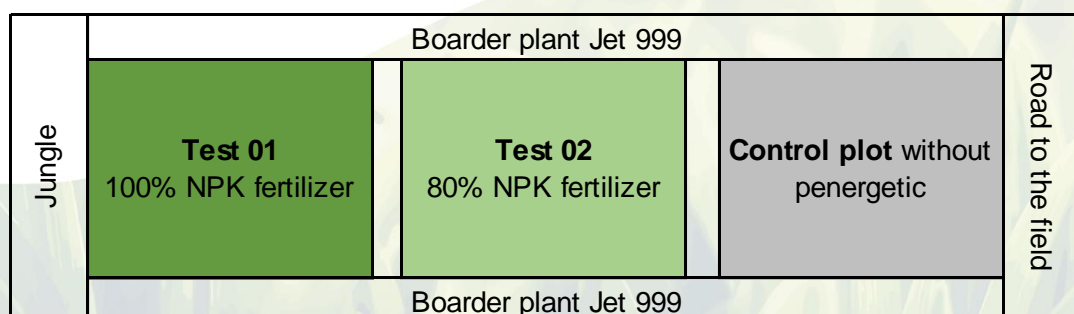
Application on Corn in Sri Lanka

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.

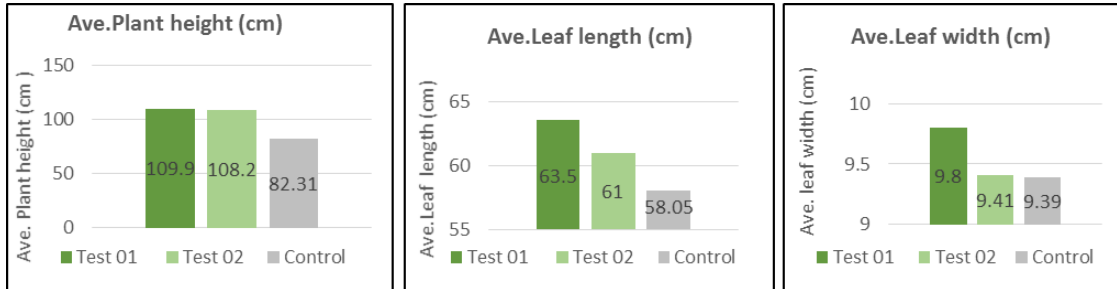
Both Test 01 and Test 02 were treated with the same quantities of Penergetic:

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

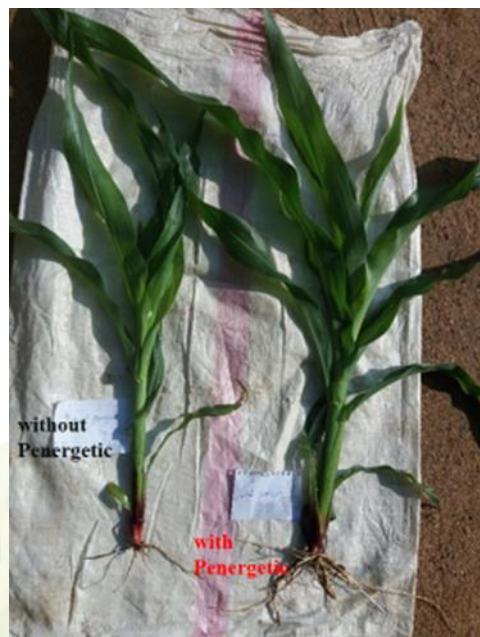
Trial Design – Complete block design



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 |

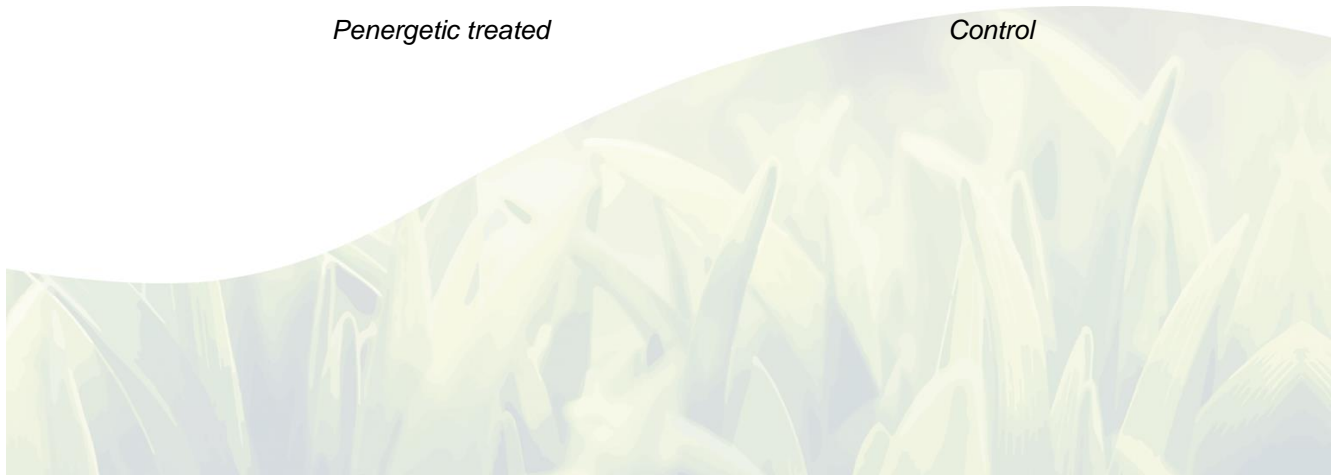
Note: Plant height was taken by collar region of the plant to upper most bud of the plant.
Leaf length and leaf width was taken by 2nd leaf from upper most bud.

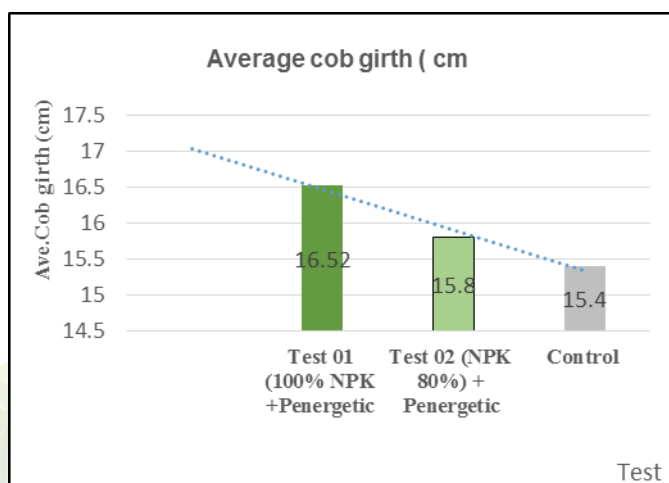
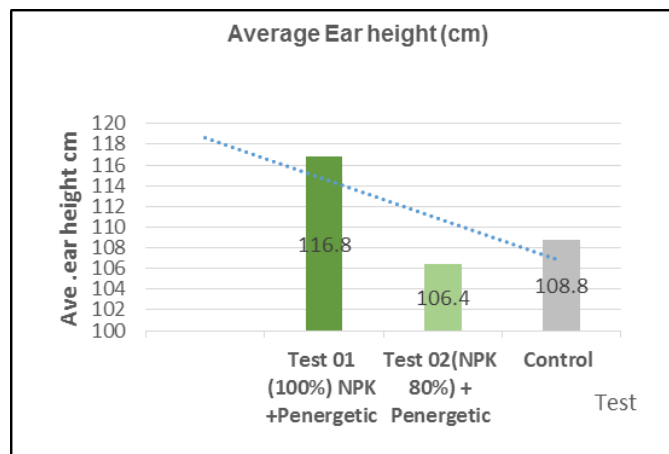


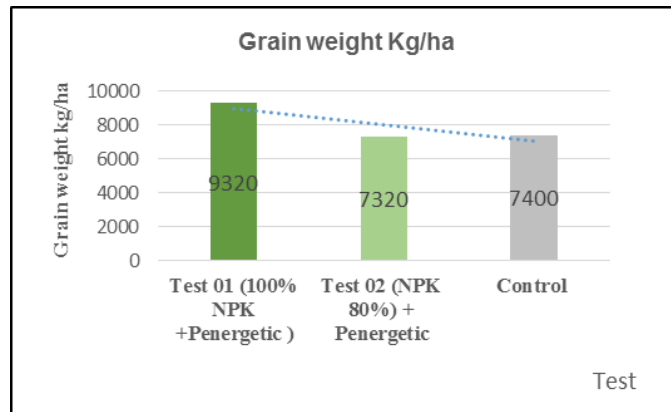
Penergetic treated



Control



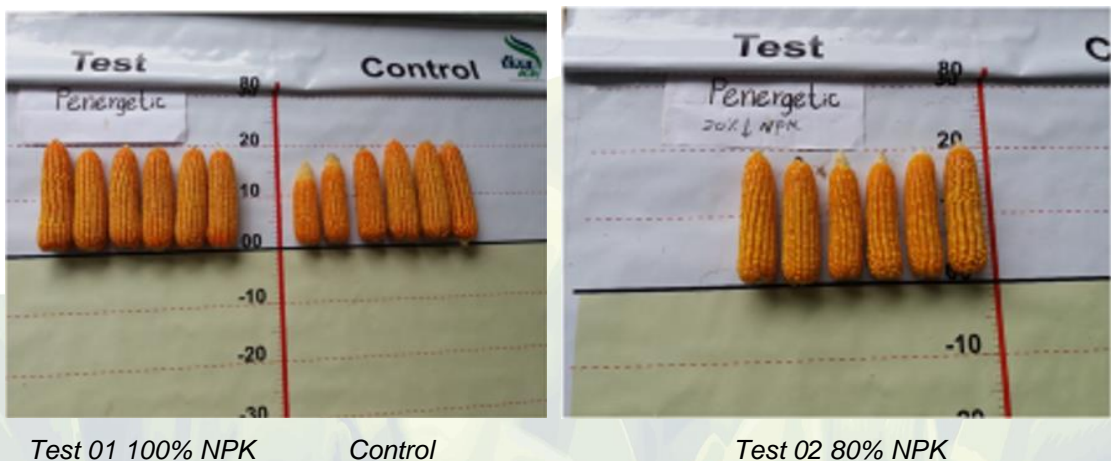




Yield comparison, 10 cobs



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.

