

Influence of flower pruning on yield and growth of sweet pepper.

Objective: To assess the influence of pruning the king flower only versus pruning of both the king flower and second flower set on the yield of sweet pepper.

Methods and materials:

Test location: Mama Clementina Foundation Production Farm (Weruweru Farm), in Weruweru, Hai District of Kilimanjaro.

Bimodal rain pattern: Oct – Dec and March – June, approx. 1 200 mm annually

Mean minimum temperature at night is 15°C to 17°C and mean maximum temperature ranges from 25°C to 33°C depending on season.

Design: A randomized complete block design was used with four replications

Sowing date: 27 February 2016

Planting date: 8 April 2016

First harvest date: 3 June 2016

Plant spacing: 1m wide beds were spaced 50cm apart (furrow) with two rows per bed spaced 75cm apart. In-row spacing was 50cm in zigzag manner.

Treatments:

- 1) Pruning of first (king) flower
- 2) Pruning of first (king) and second flower.

Seeds of the open pollinated variety Tycoon were raised in trays. Transplanting was done in a well-prepared plot. Fertilizer was applied at 264 N/ha, 214 P₂O₅/ha and 276 K₂O/ha with phosphorus as basal and the Nitrogen and Potassium fertilizer split applications (topdressings).



Results: There was no significance difference in yield .There was also no significance difference between number of fruits per plot and average fruit weight.

Treatment	Yield t/ha	Total fruits/plot	Average fruit weight (g)
Pruning first flower	5.4	103.8	62.9
Pruning first and second flower	4.9	102	58.0
l.s.d	1.49	28.1	10.53
p-value	0.5 (NS)	0.9 (NS)	0.3 (NS)

NS is Not significant at p =0.05

Conclusion

Pruning of the first flower (to increase yield) is a standard practice in major sweet pepper producing nations. This experiment showed that there is no benefit in pruning beyond the first fruit.