

# Experiment of a New Hot Pepper Variety

## Check-up for TSC

Crop Name	– Hot Pepper
Experimental Design	– RCB Design
Farm	– VFDC
Township	– Thazi
District	– Meiktila
Division	– Mandalay
Presenter	– U Zaw Min Htwe
Position	– Deputy Staff Officer ( VFDC )

## Region's Summary

- Establishment – 1957
- Location – Near Meiktila-Taunggyi Highway Road
- Total Acre – 858.29 ac
- Planting Area – 596.68 ac
- Non-planting Area – 261.61 ac
- Water Use – Underground Water  
( Drip, Sprinkler, Furrow )
- Cropping Pattern – Pulses – Vegetables – Oil Crops

# Design and Layout

- Design – RCB ( Randomized Complete Block ) Design
- Error Degree of Freedom – 12
- Treatment – 4
- Replication – 5
- Spacing – 2' x 3'
- Plant Population per Plot – 40 plts
- Sample Plants per Plot – 10 plts
- Experiment Area – 0.19 ac

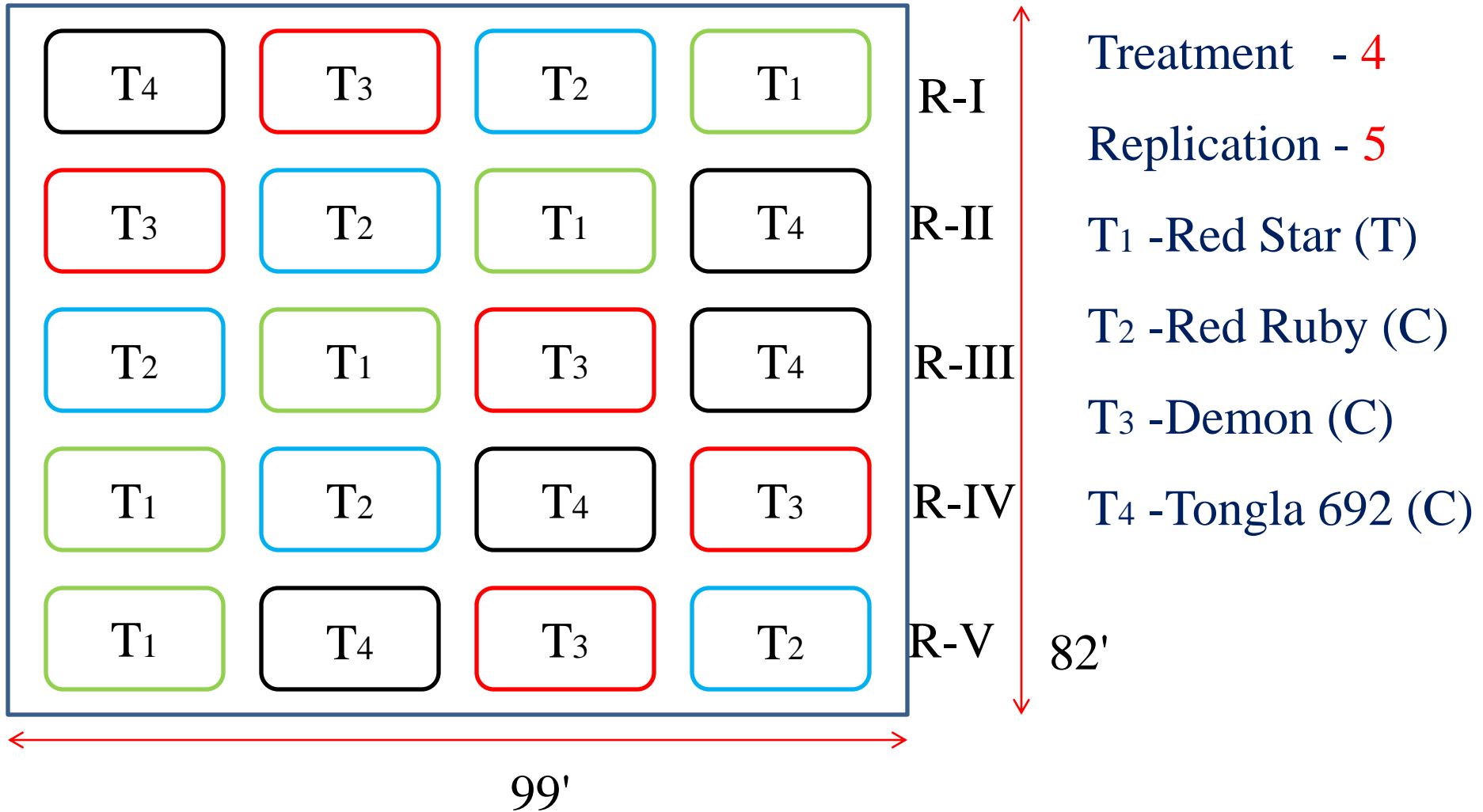
# Weather Condition During Experiment

- Planting Season - Rainy Season
- Total Rainfall - 34.05 inches ( during experiment )
- Total Raining Days - 48 days ( during experiment )
- Highest Maximum Temperature - 38.0 C ( during experiment )
- Lowest Minimum Temperature - 9.2 C ( during experiment )

# Hot Pepper Experiment

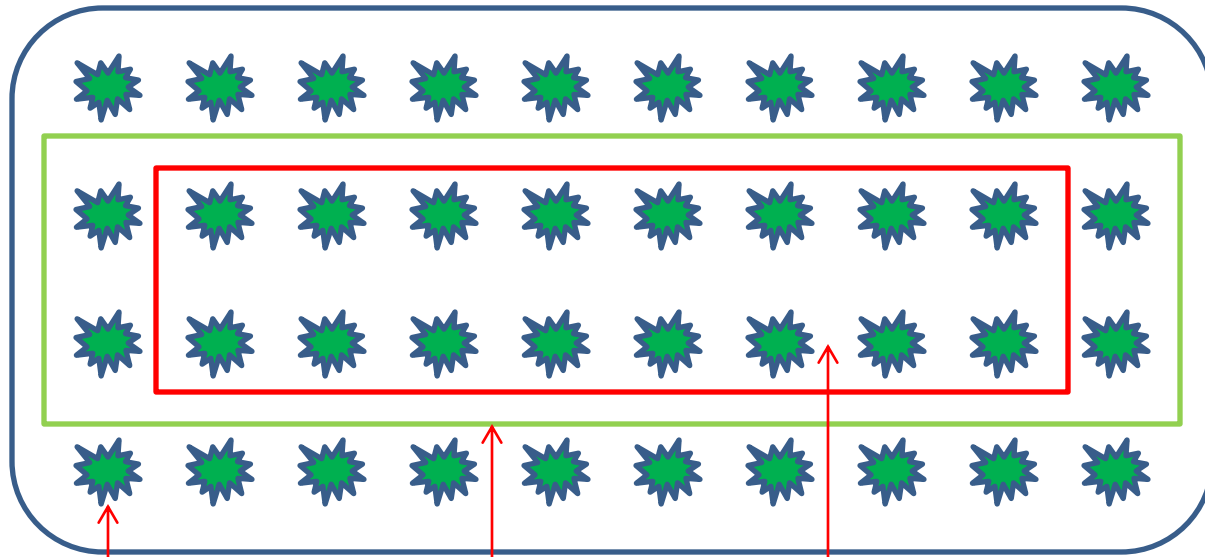


# Plot Layout of Experiment



# Experiment Area = 0.19 acre

# Harvesting And Data Collected Area



Plot Size - 20' x 12'

Spacing - 2' x 3'

Plant Population - 40

Sample Plant - 10

Border Line

Harvesting Area

Sampling Area

# Characteristics of Hot Pepper Varieties

<b>Sr. No.</b>	<b>Variety Name</b>	<b>50 % Flowering Time (DAS)</b>	<b>Fruiting Habitet</b>	<b>Plant Population per Plot at Harvesting Time</b>	<b>1<sup>st</sup> Harvesting Time (DAS)</b>
1	Red Star	83	Upright	17	117
2	Red Ruby	81	Upright	19	117
3	Demon	77	Upright	18	117
4	Tongla 692	75	Upright	19	117

# Fruit Characters of Hot Pepper Varieties

<b>Sr. No.</b>	<b>Variety Name</b>	<b>Fruit Length (cm)</b>	<b>Fruit Diameter (cm)</b>	<b>Fruit Parameter (cm)</b>	<b>Average Fresh Fruit Weight (g)</b>
1	Red Star	5.9	0.8	3.1	2.0
2	Red Ruby	6.3	0.9	3.5	2.0
3	Demon	5.8	0.8	2.9	1.9
4	Tongla 692	6.3	1.0	3.5	2.0

## Yield per Plant of Hot Pepper Varieties

<b>Sr. No.</b>	<b>Variety Name</b>	<b>Total Fruit Number per Plant</b>	<b>Total Fresh Fruit Weight per Plant (g)</b>	<b>Total Dry Fruit Weight per Plant (g)</b>
1	Red Star	104	182.8	62.0
2	Red Ruby	159	263.2	81.6
3	Demon	110	165.4	52.8
4	Tongla 692	91	175.4	63.2

## Fresh and Dry Fruit Yield of Hot Pepper Varieties

Sr. No.	Variety Name	Total Fresh Fruit Yield Per Acre (kg)	Total Dry Fruit Yield per Acre (kg)
1	Red Star	1057.8	360.0
2	Red Ruby	1352.4	419.0
3	Demon	940.0	300.6
4	Tongla 692	1088.2	391.2

# Red Star (Test Variety)



# Red Ruby (Check Variety)



# Demon (Check Variety)



# Tongla 692 (Check Variety)



# Fruit Characters of Hot Pepper Varieties



# Fruit Characters of Hot Pepper Varieties

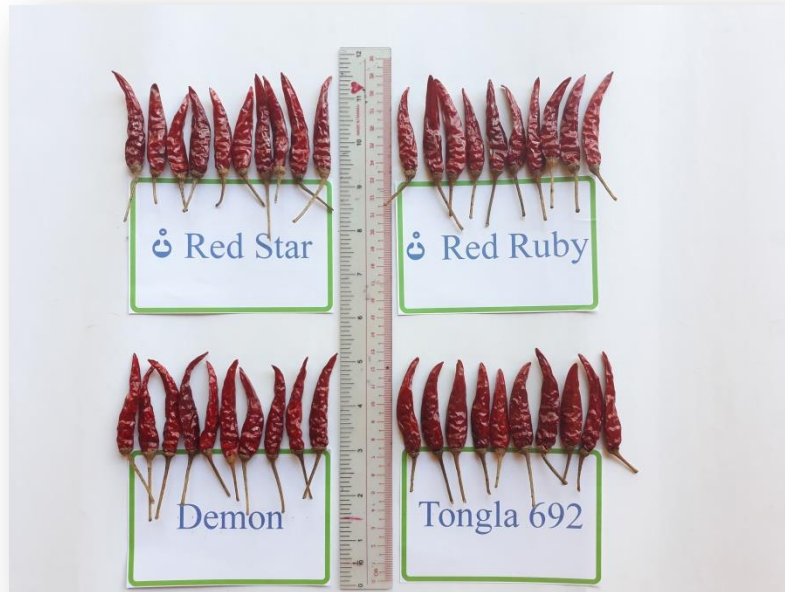


Tongla 692 has good fruit length, fruit diameter and fruit weight more than other varieties.

Fruit color of Red Ruby and Tongla 692 are more dark green than Red Star and Demon. Some consumer not like dark green color.



# Fruit Characters of Hot Pepper Varieties



Red Star and Demon varieties have strong fruit pedicels.

( Suitable for drying)

Demon is very hot taste.

Red Star and Red Ruby are a little hot more than Tongla 692.

# Pests and Diseases on Hot Pepper Varieties

- Pests – Aphids, Jassids, Red Spider Mites

(All varieties has semi-resistance)

Use Suitable Pesticides (eg., Profenofos, Imidacloprid,  
Cypermethrin)

- Disease – Bacterial Wilt, Anthronose, Bacterial Soft Rot

(All varieties has semi-resistance)

Use Suitable Fungicides (eg., Kasumin, Coside, Metalaxy)



THANK YOU