



Ministry of Agriculture, Livestock and Irrigation
Department of Agriculture
Tanintharyi Region, Dawei District
Thayetchaung Township



Study on Salinity Resistant Varieties of Rice On Farm Trial

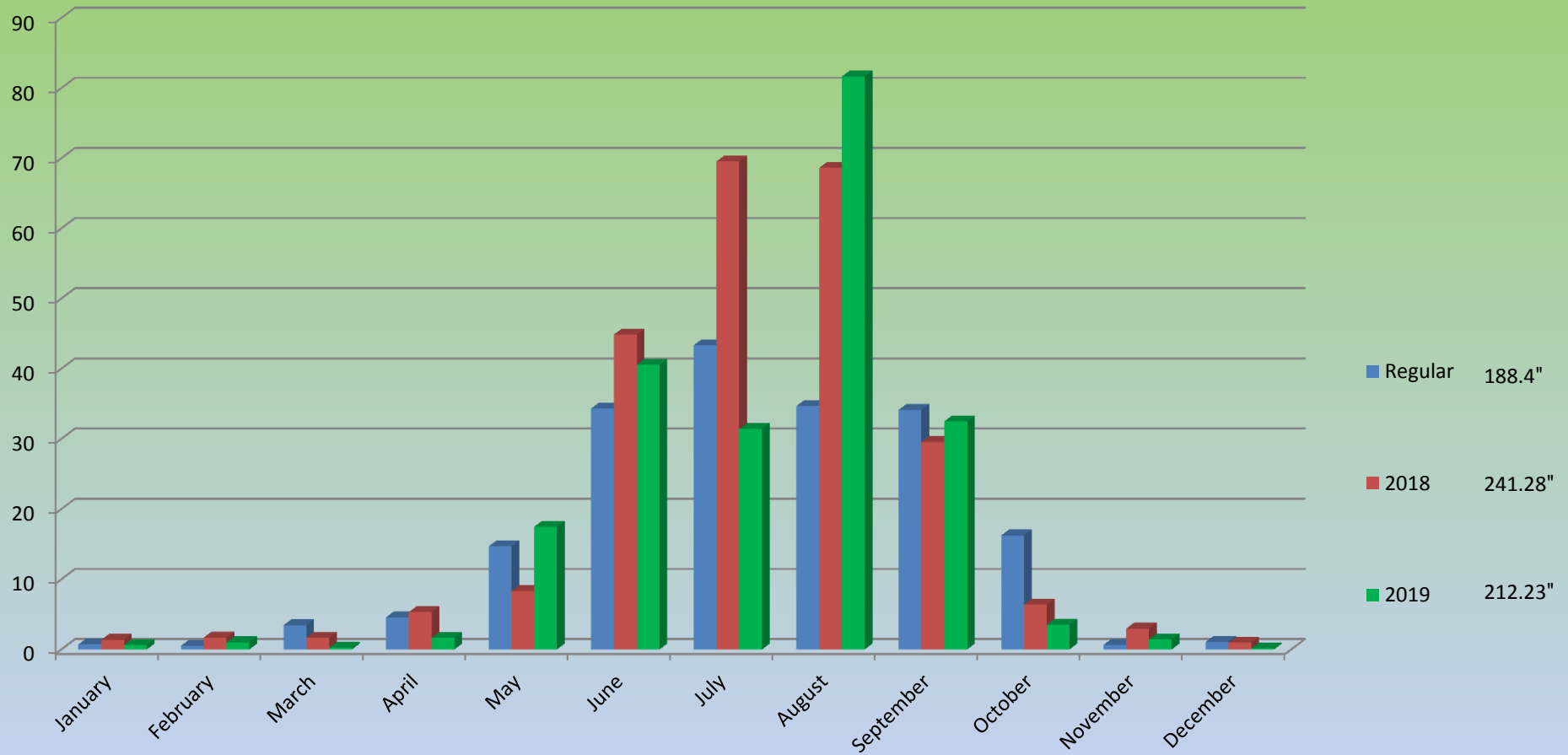
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Introduction

- Tanintharyi Region is tropical monsoon climate with heavy rainfall and sea water coastal region
- Rice is the important crop, grown in (241998) acres, about (22.15 %) of total cultivated area in Tanintharyi Region
- At present, rice production is about (16,816,329) baskets in 2018–2019
- The population is estimated to around (1,374,235) persons and demand for local consumption alone will be in the approximately of (19,613,424) baskets and the security percentage is (80.76%)

Rainfall Data of Tanintharyi Region

Inches



Objective

- To study the adaptable varieties with the performance of their agronomic characters and yields
- To replace salinity resistance varieties instead of local varieties growing in salinity area

Problem Statement

- To introduce salinity varieties adaptable to local condition(salinity area)
- To extend production and utilization of high yielding varieties appropriate with local condition

Experimental Design

- Season – 2018–2019, rainy season
- Location –Sinphyupyin village, Thayetchaung Township, Dawei District, Tanintharyi Region
- Farmer – U Tin Hlaing
- Design – On farm test ,Five varieties with one replication
- Plot Size – 0.19 ac (5 sub – plot)
– one sub–plot was (50'×33.3'), (0.038)ac
- Length of Planting row – 50 feet
- Number of Planting row– 50 rows
(one row with 100 hills and one sub–plot with 5000 hills)
- Spacing – 8 "×6"

Experiment – Simple trial with five treatments and one replication

Treatments

T₁ _ IR 85922-4-1-1 AJY1

T₂ _ IR 86385-48-1-1-B

T₃ _ IR87923-2-2-1-B

T₄ _ Pyimyanmarsein(ck)

T₅ _ Kyawzeya(ck)

Materials and Methods

- The experiment was conducted at Sinphyupyin village, Thayetchaung Township, Dawei District, Tanintharyi Region in rainy season 2018–2019.
- IR 85922-4-1-1 AJY1, IR 86385-48-1-1-B , IR 879-23-2-2-1-B , Pyimyanmarsein(ck) and Kyawzeya(ck) were including in this experiment.
- Seeds are sown in nursery on July 5,2019 and transplanted on August 6, 2019.
- Seedlings were transplanted at 3 plts per per hill
- Yield and yield component data were taken and analyzed.

Activities for yield trials of five tested varieties



Activities for yield trials of five tested varieties

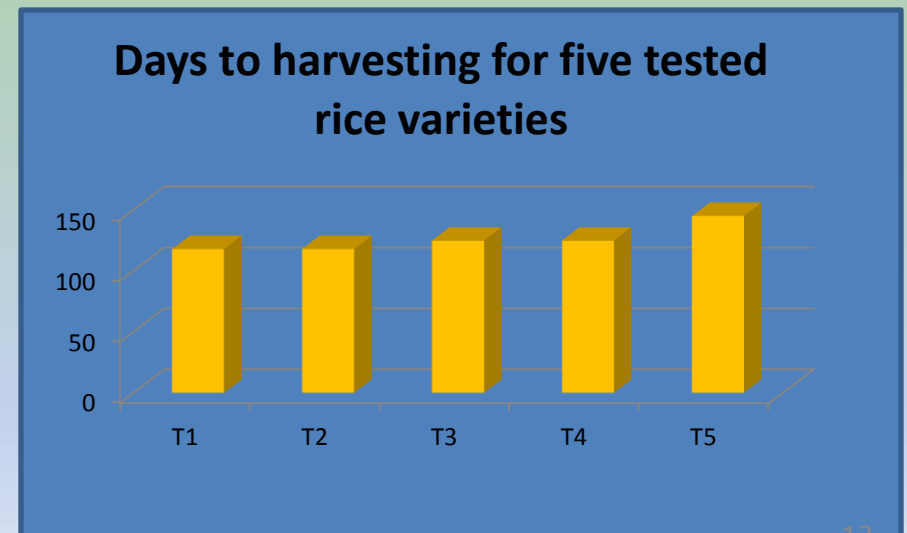
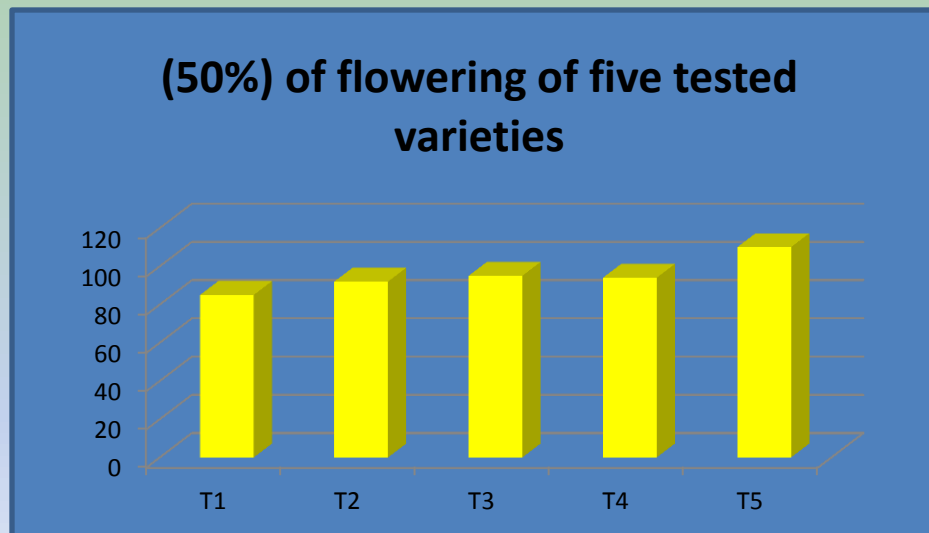
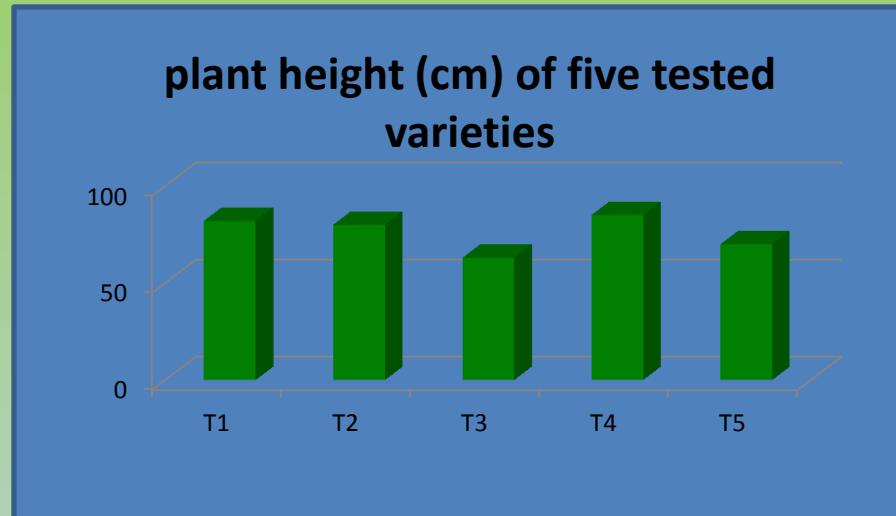


Activities for yield trials of five tested varieties



Results and Discussion

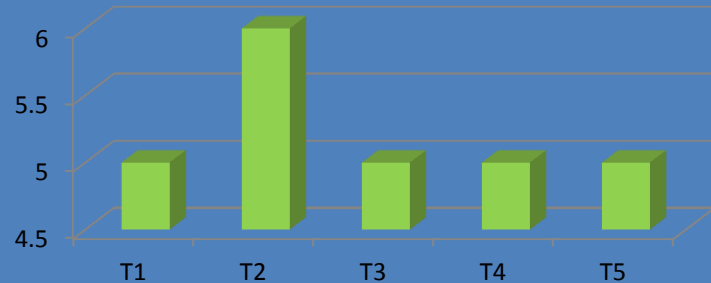
(Comparison of crop growth and development characters of tested rice varieties)



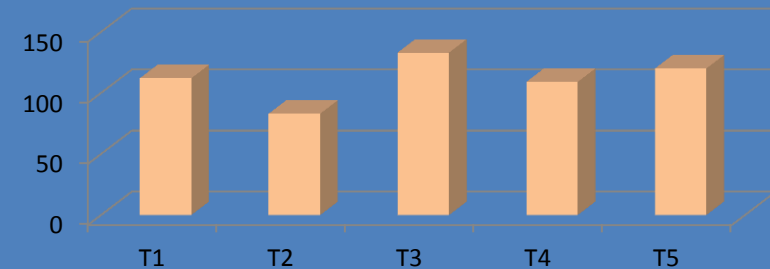
Results and Discussion

(Comparison of crop growth and development characters of tested rice varieties)

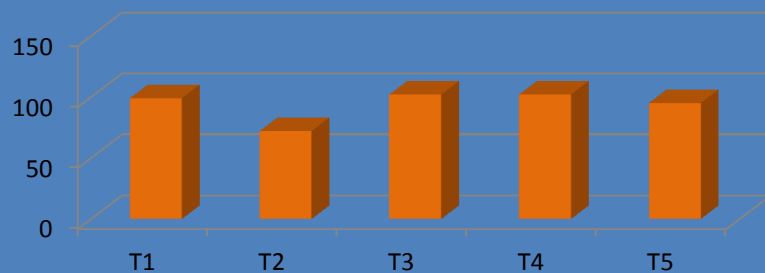
No. of panicle per hill of five tested varieties



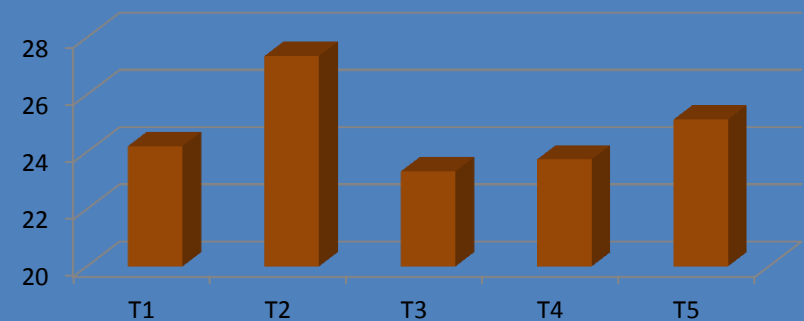
No. of total grains per panicle of five tested varieties



No. of filled grains per panicle of five tested varieties



1000 grain weight of five tested varieties



The Characteristics of Five Different Rice Varieties

Sr	Charcateristics	IR 85922-4-1-1AJY1	IR 86385-48-1-1-B	IR 879-23-2-2-1-B	Pyimyan marsein (ck)	Kyawzeya (ck)
1	Plant height(cm)	82	80	64	85	70
2	No. of panicle	5	6	5	5	5
3	50% flowering(days)	85	92	95	94	110
4	Filled grain/ Panicle	99	72	102	102	95
5	1000 grains weight	24.20	27.35	23.32	23.74	25.13
6	Yield (bsk/sub plot)	2.62	2.48	2.48	2.73	2.73
7	Yield(bsk/ac)	68.81	65.41	65.41	71.95	71.95
8	Maturity(days)	118	118	125	125	145

Results and Discussion

- No. of panicles per hill is highest in IR 86385-48-1-1-B
- Early flowering in IR 85922-4-1-1AJY1, IR 86385-48-1-1-B ,
IR 879-23-2-2-1-B than ckeck varieties
- IR 85922-4-1-1AJY1 gave high yield than IR 86385-48-1-1-B ,
IR 879-23-2-2-1-B
- Pyimyanmarsein(ck) , Kyawzeya(ck)gave high yield than other
(3 varieties)

Conclusion

- ❖ Among five varieties , check varieties (Pyimyanmarsein , Kyawzeya) were found to be high yielding varieties
- ❖ Local farmers interseted IR 85922-4-1-1AJY1 , Pyimyanmarsein which were adaptable in local conditions
- ❖ Therefore, IR 85922-4-1-1AJY1 and Pyimyanmarsein(ck) rice varieties were recommended as local adaptable and good yield performance

Thank You For Your Attention

WELCOME TO

THAYET CHAUNG

*Department Of Agriculture
Thayetchaung Township
Tanintharyi Region*

PHOTOGRAPHY