Ministry of Agriculture,Livestock and Irrigation

Department of Agriculture

Tanintharyi Region, Myeik Township

Comparison of Different Sex Ratio on Six Progenies of Oil palm, (Tenera× Pisifera)s

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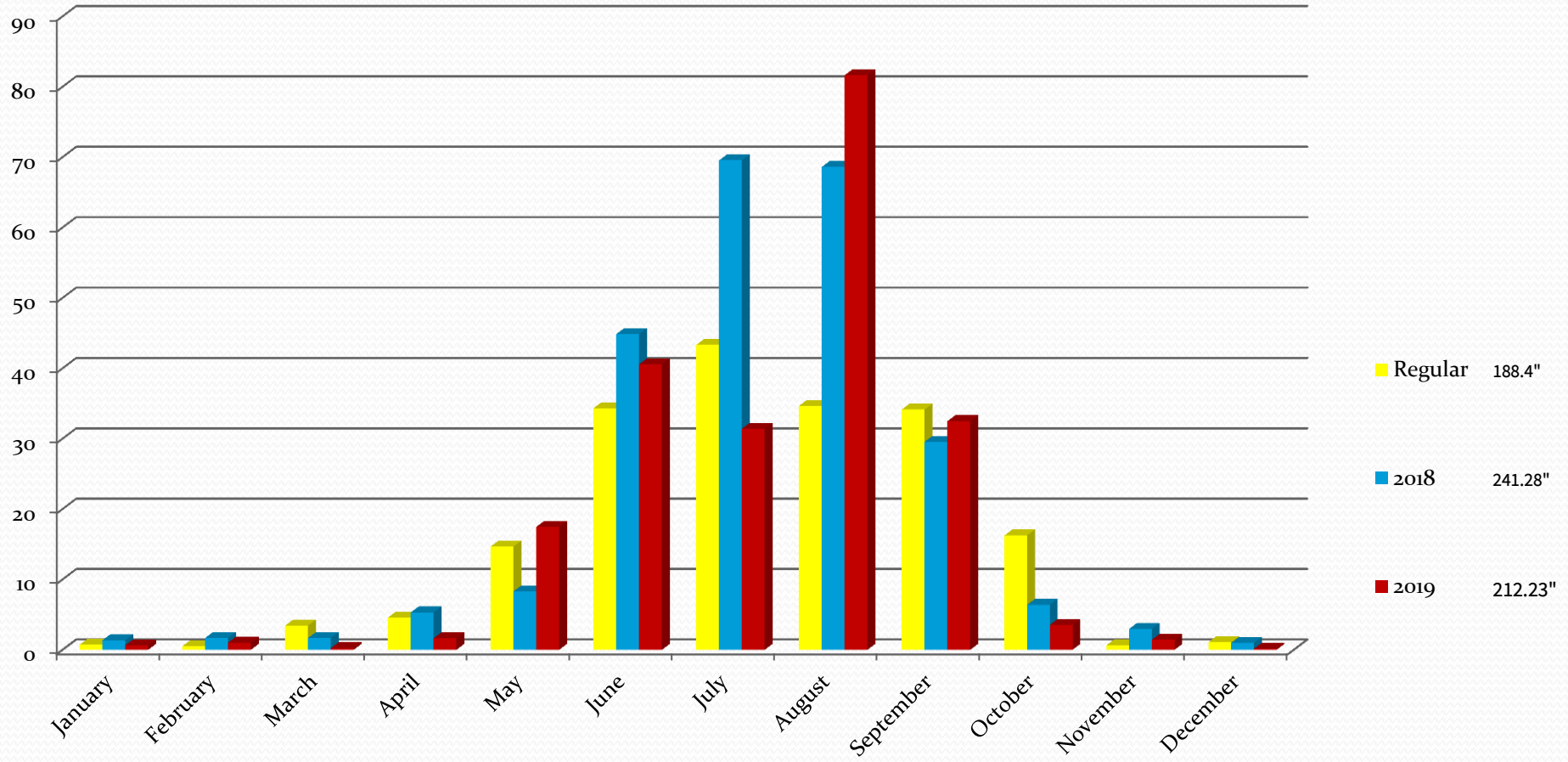
Location of Myeik Township

- 10 miles /1 furlong east from Myeik.
- Myeik–Tanintharyi–Kawthaung Union Highway
- North Latitude 12´ 26" and East Longitude 98´ 41"
- 204 feet above average sea level

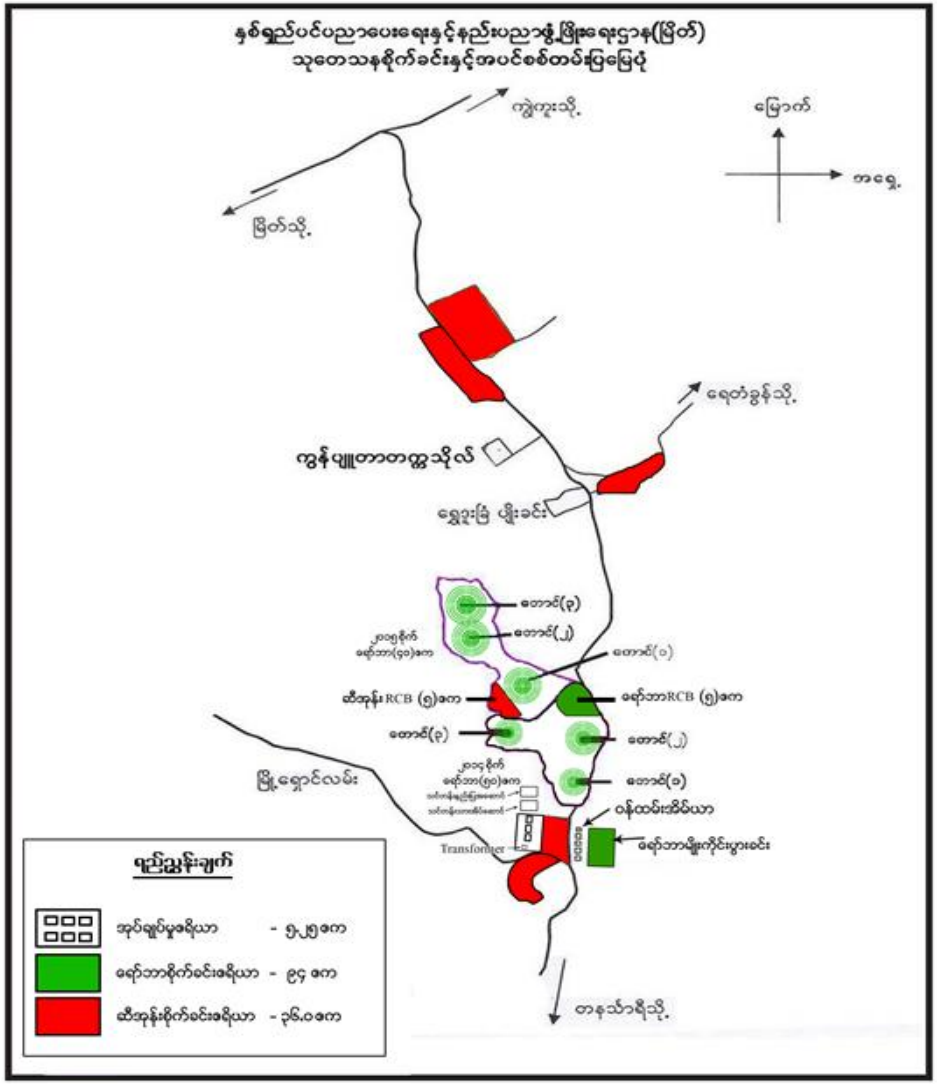
Rainfall Data of Tanintharyi Region

Inches



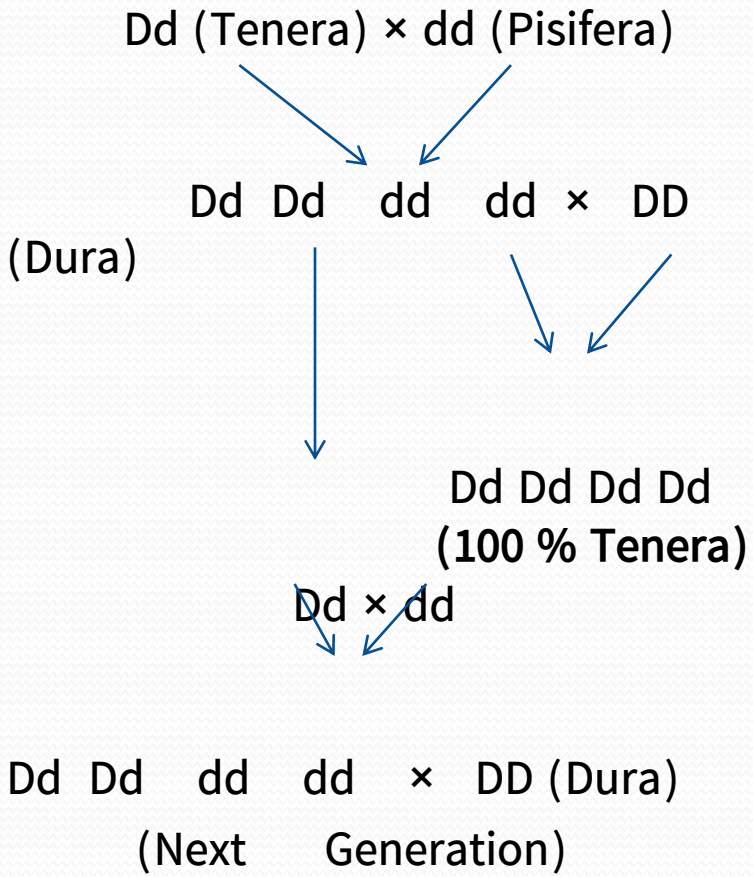
Location

Perennial Crops Research and Development Center (Myeik) Shwe Duu



Introduction

- Male inflorencence, Pisifera is very important for the production of good hybrid variety, Tenera
- Therefore , comparison of different sex ratio on six progenies of oil palm (Tenera×Pisifera)s was studied



Objectives

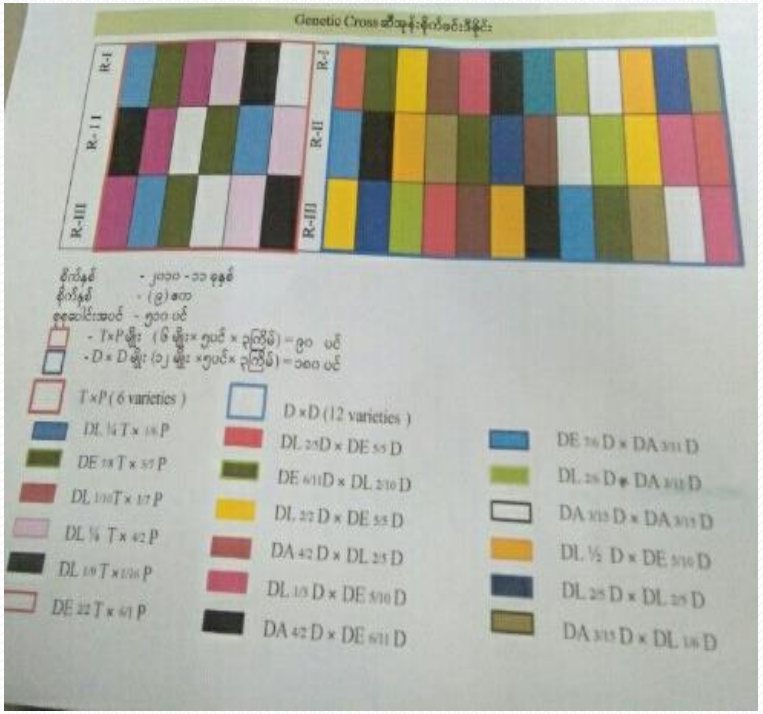
(1) To select for best male parent variety

(2) To get improved variety for next generation

(3) To get good combination, Dura and Pisifera for best hybrid variety of oil palm

Method and Design

Treatment	(6)
Replicate	(3)
Spacing	(30 × 30)ft Triangle
Total plants	(510) plants
Acre	(9) ac
Design	(RCB)
Planting year	(2010–2011)
Plants on border line	(225) plants



Progeny Trials (Tenera × Pisifera)

Progeny Trials (Tenera × Pisifera)

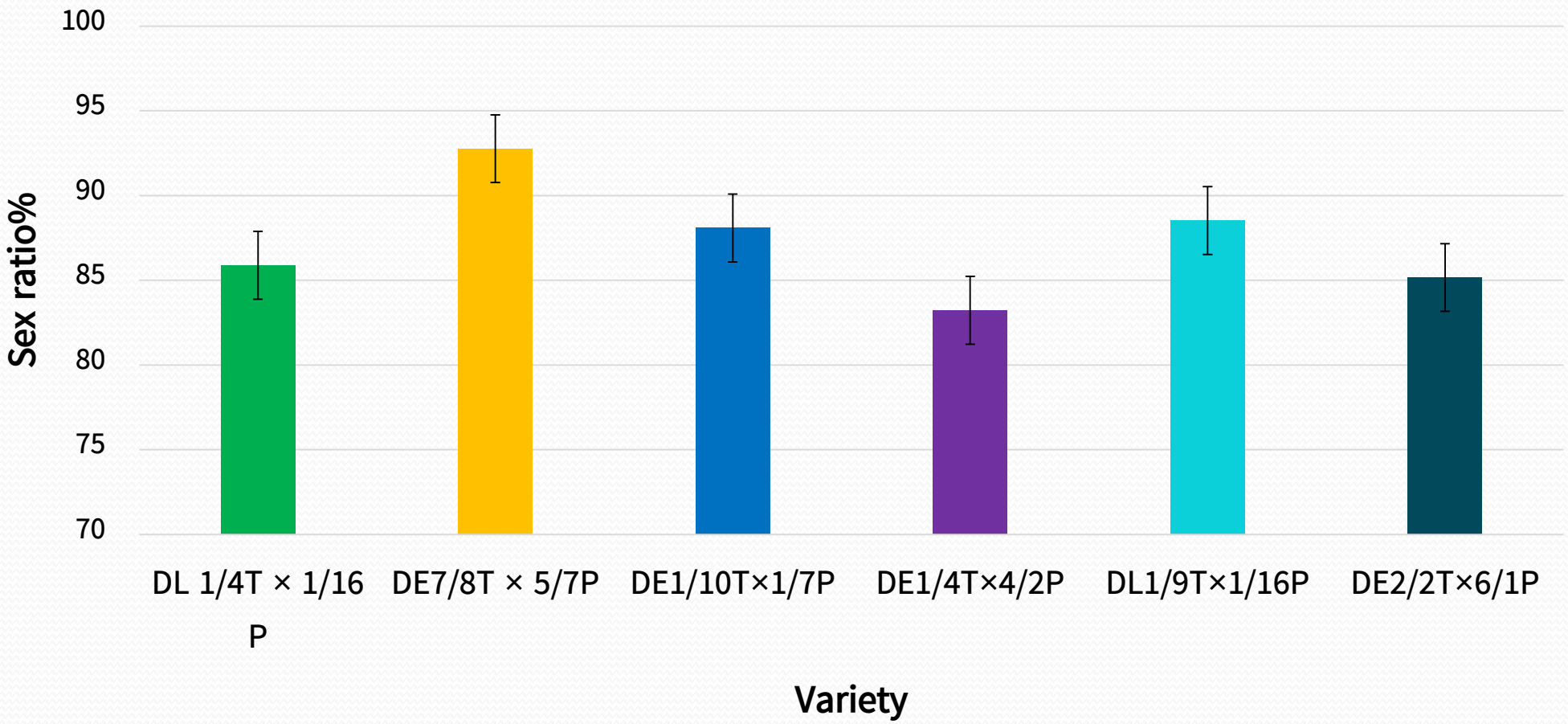
Comparison of Sex Ratio for Six Progenies (Tenera × Pisifera)s

Variety	Rep I	Rep II	Rep III	Total	Mean
DL ¼4T × 1⁄16 P	80.83	87.24	89.57	275.64	85.88
DE⁷⁄₈T × ⁵⁄₇P	90.32	96.64	91.33	278.29	92.76
DE1⁄10T×1⁄7P	78.60	91.33	94.31	264.24	88.08
DE¼T×⁴⁄₂P	81.86	86.59	81.24	249.69	83.23
DL⅑T×1⁄16P	92.57	85.88	87.12	265.57	88.52
DE²⁄₂T× ⁶⁄₁P	80.95	85.67	88.85	255.47	85.16

According to ANO Table

Variety	Mean (Sex Ratio)
DL ¼4T × 1⁄16 P	85.88 (2.61)A
DE⁷⁄₈T × ⁵⁄₇P	92.76 (1.96) A
DE1⁄10T×1⁄7P	88.08 (4.82) A
DE¼T×⁴⁄₂P	83.23 (1.69) A
DL1⁄9T×1⁄16P	88.52 (2.05) A
DE²⁄₂T× ⁶⁄₁P	85.16 (2.29) A
Pr>F	0.21
CV%	12.39
HSD(0.05)	3.57

Comparison of Sex Ratio for Six Progenies (Tenera × Pisifera)s



Results

- Tenera × Pisifera (DE$^{7}/_{8}$T × $^{5}/_{7}$P) is found highest sex ratio in comparison
- Tenera × Pisifera (DE$^{1}/_{4}$T×$^{4}/_{2}$P) was found lowest sex ratio

Conclusions and Recommendations

(1)It can be concluded that the male inflorencence from the progeny(DE$^{7}/_{8}$T × $^{5}/_{7}$P)should not be chosen as a male parent because of its highest sex ratio.

(2) It is concluded that the (DE$^{1}/_{4}$T×$^{4}/_{2}$P) variety has the lowest sex ratio in this comparison, so it should be used as a male parent.

Future Program

- Continuous hybridization and selection for to get 100% pure Pisifera
- Selection of available combinations (Dura × Pisifera) to get the best planting materials (Tenera)


Thank You