Ministry of Agriculture, Livestock and Irrigation
Department of Agriculture
Tatkon Township, Oattara District, Nay Pyi Taw

Yield Trial Demonstration of post-monsoon Long Staple Cotton at Oakshitkone Village

Daw Thandar Nay Win
Deputy Assistant Staff Officer

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Introduction

- **Cotton - traditional crop grown in Myanmar**
  - principal fiber crop of the country
- **Tatkon - only one high production area in Nay Pyi Taw**
  - about (9460 ac) of post-monsoon long staple cotton
  - about only (70 ac) of it in Oakshitkone village
- **It needed to increase the production area by sharing knowledge, technology**

Objectives

- ✓ **To evaluate high yielding and good quality cotton crop in cotton production**
- ✓ **To get the most profit for farmers by growing high yielding cotton varieties with the climate adaptability**
- ✓ **To develop the role of agriculture by growing high quality cotton varieties**

Materials and Methods

Year/ Location	-	2018 postmonsoon/ Oakshitkone village, Tatkon township
Tested varieties	-	1. Shwe Taung – 8 2. Ngwe Chi – 6 3. Ngwe Chi - 9
Design	-	(3x1) Simple Trial with large scale
Spacing	-	3 ft x 3 ft
Seed rate	-	3 viss/ ac(treatment with Imidachloprid)
Fertilizer dosage	-	Basal - 15:15:15 compound 50 kg/ac Squaring time - 15:15:15 compound 25 kg + Urea 25 kg/ac Flowering time - 15:15:15 compound 25 kg + Urea 25 kg/ac

Sr.No	Contents	Counting	Quality
1	Land preparation		
	- Ploughing	time	2
	- Harrowing	time	2
	- Line drawing	time	1
2	Thinning (two plants per hill)	time	1
3	Inter-cultivation	time	7
4	Manual weeding	time	2
5	Pesticide application (Imidachloprid , Acephate, Cartep Hydrochloride)	time	5
6	Picking seed cotton	Time	5

No	Farmers' Name	Village tract	Plot No	Variety	Sown Area (Acre)
1	U Win Zaw	Oakshitkone	1279	Shwe Taung -8	2
2	U Htay Htay	Oakshitkone	1279	Ngwe Chi - 6	1
3	U Pin	Oakshitkone	1279	Ngwe Chi - 9	2
	Total				5

Note * In yield trial demonstration, the experimental plot for each variety

- conducted with the area of 1.00 ac

Yield Trial Demonstration of post-monsoon Long Staple Cotton

Sowing

Thinning

Manual weeding

Fertilizer application

Results

No	Contents	Shwe Taung-8	Ngwe Chi-6	Ngwe Chi-9
1	Plant type	Spread	Circle	Erect
2	Days to squaring (Days)	31 DAS	31 DAS	35 DAS
3	Days to flowering (Days)	56 DAS	56 DAS	61 DAS
4	Days to boll cracking (days)	95 DAS	95 DAS	99 DAS
5	No of male branches per plant	2-4	1-2	-
6	No of female branches per plant	14	13	13
7	Plant height at picking time (ft)	5	5	4.5

DAS = Days After Sowing

No	Contents	Shwe Taung - 8	Ngwe Chi - 6	Ngwe Chi - 9
8	Plant Population at picking time	9666	9673	9660
9	Average boll per plant	33	27	27
10	Seed cotton boll per plant	27	26	24
11	Boll weight of seed cotton (gm)	5.88	4.92	4.05
12	Yield (viss/ac)	652.50	628.75	579.50
13	Fiber length (mm)	28.79	26.15	27.47

Result and Discussion -1

❖ **Among the tested varieties,**

Shwe Daung-8 - most locally adaptable to climate change

- resistant to pests and diseases in Tatkon

- Highest cotton yield and quality lint yield

- Uniformity in maturity

- The most Farmers' preference variety

Shwe Taung – 8 long staple cotton field

Result and Discussion -2

❖ **Ngwe Chi – 6** **- adaptable in that area,**

- less resistant to pests and diseases

- less compact of plant type

- short picking time than Shwe Taung – 8

Ngwe Chi – 6 long staple cotton field

Result and Discussion -3

- **Ngwe Chi - 9 - not resistant to high rainfall and drought**
  - but, sensitive to response of soil type in plant and growth performance
  - Moderately resistant to pests and diseases

Yield Trial Demonstration of post-monsoon Long Staple Cotton

Farmers' Field Discussion

Field Demonstration

Field Visit

Scouting

Suggestions and Recommendations

- **Shwe Taung – 8, Ngwe Chi – 6 - most suitable in Tatkon**
- **But, Ngwe Chi – 9 variety - should sown in fertile soil**
- **Adaptable Shwe Taung – 8, Ngwe Chi – 6 should established for special cotton seed production zone**
- **By sharing technology, growers gain the increasing of income**
- **It also needed the sustainable market for cotton growers**
- **High yield and good quality cotton – should sown to expand the area**

References

- စိုက်ပျိုးရေးဦးစီးဌာန ၊ ဝါနှင့်လျှော်မျှင်ထွက် သီးနှံ ဌာနခွဲ ၊ ဝါ ၊ လျှော်မျှင် နှင့် ပိုးချည် ဘာသာရပ်ဆိုင်ရာ ပို့ချချက်များ (၂၀၁၇ ခုနှစ်)
- စိုက်ပျိုးရေးဦးစီးဌာန ၊ စိုက်ပျိုးပညာပေးရေးနှင့် ကျေးလက်ဒေသ ဖွံ့ဖြိုးရေး သင်တန်းကျောင်း (သီးနှံစိုက်ပျိုးနည်း စနစ်များ) ၊ ၂၀၁၈ ခုနှစ် ၊ ဇန်နဝါရီလ (တတိယ အကြိမ်)
- စိုက်ပျိုးရေးဦးစီးဌာန ၊ ဝါသီးနှံ အထွက်နှုန်း မြင့်မားစွာ ရရှိရေး လိုက်နာ ဆောင်ရွက်ရမည့် နည်းစနစ်များ (၂၀၁၅ ခုနှစ်)
- စိုက်ပျိုးရေးဦးစီးဌာန ၊ စက်မှုကုန်ကြမ်းသီးနှံများ ဆိုင်ရာ သိကောင်း စရာများ ၊ သိပ္ပံနည်းကျ စိုက်နည်းစနစ်များနှင့် သီးနှံအလိုက် ဆောင်ရွက်ရမည့် လုပ်ငန်း အချိန်ဇယားများ (၂၀၁၂ ခုနှစ် ၊ ဇွန်လ)

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