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**Summary of Current Status of  
Cotton Research Program in the Sudan**

*By*

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## Introduction

- **Indigenous**
- **Commercial started 1876**
- **big jumped 1926.**
- **These large production**
- **back by strong research programs (ARC).**



## Objective:

**To focus and updating the current  
status of cotton research program in  
the Sudan.**

## Frame work of cotton program:-

**Frame work pillared upon:-**

- 1. Breeding .**
- 2. Fibre testing – stickiness.**
- 3. Agronomy**

## 1. Breeding:-

**The broad work and objectives:-**

**Breeding for:-**

**Higher yields,  
Earliness,  
Disease - insect resistance.  
Maintenance of existing varieties.  
Higher GOT.  
Bt.**

## Out put:

**New styles and variants having:-**

- ✓ **Different balances of fiber characteristics.**
- ✓ **Early maturing.**
- ✓ **High GOT**
- ✓ **Bt. cotton.**

**The number of released varieties and above 50.**

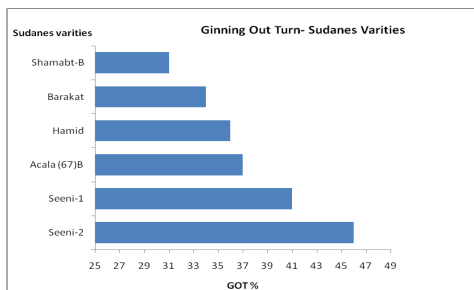
- ✓ Only 6 or 7 currently grown.
- ✓ Barakat (33-35mm)
- ✓ Shambat-B(30-32mm)
- ✓ Barac(67)B (27-28mm)
- ✓ Acrain(24-26mm).

**In addition nine varieties were recently released of these:-**

- ✓ Hamid(27-29mm). Early mature
- ✓ Abdin (29-33mm). Early Mature
- ✓ Seeni-1(26-28mm)Bt.

**Fibre properties of commercial and newly release varieties**

Varieties	Length (mm)	Micronaire Value	Strength g/ tex.
<b>Main commercial</b>			
Barakat	33-35	37- 4.1	37-40
Shambat-B	30-32	3.7-3.9	32-36
Barac(67)B	27-28	3.9-4.2	27-29
Acrain	24-26	3.5-3.9	25-28
<b>Main Newly Released</b>			
Hamid	27-29	4.5-4.8	28-31
Abdin	29-33	4.3-4.5	30-33
Wager	27-28	4.4-4.5	28-30
Seeni-1 (Bt.)	26-28	4.6-4.9	27-29



## 2- Fiber testing and Stickiness

### 2.1. Fiber testing:

Aimed to test - study- monitoring the quality performance of - existing -Prospective genotypes - other selections.

Data collected the followings :-

- ✓ Commercial .
- ✓ National variety Trial (DVT).
- ✓ Selections, lines and cultivars grown at GRS.
- Using HVI .
- ✓ 100% for breeder and selections
- ✓ 5-10% for commercial (20-100% near future).

✓ Yarn test were also conducted for promising lines, using micro-ring spinning.

## 2- Fiber testing and Stickiness

### 2.2. Stickiness

- ✓ Stickiness observed in Sudan in the early 1960s.
- ✓ 1980s, became a worldwide issue that garnered ARC's attention.
- ✓ ARC continued its research nationally, findings were revealed.

### 2.2. Stickiness

✓ Global Research Program (Sudan-France), financed mainly by the Common Fund for Commodities (CFC), was entrusted with the goal of developing an objective methodology to control stickiness.

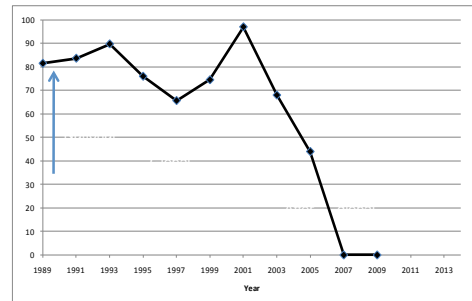
✓ The efforts revealed considerable variability in stickiness levels among the cotton production areas, and considerably lower levels of stickiness were observed in some schemes.

**Research continued, and practical knowledge on preventing stickiness was shared across Sudan. Of these:-**

- ✓ **Decreases in insecticides use.**
- ✓ **Early picking.**
- ✓ **Improving cultural practices .**

*yield the best results*

**Figure 1: Mentioned Stickiness Problems for Sudan production (in % of answers), ITMF Cotton Contamination Surveys.**



Source : Gourlot et al -2011

### **3-Agronomy**

- 3.1. Optimizing insecticide and nitrogen use.
- 3.2. Evaluation of planting date.
- 3.3. Fertilizers management .
- 3.4. Irrigation scheduling.

**Thank you**