Title: Quality Evaluation of Cotton Fibres

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<th>Code No.</th>
<th>TMC/MMI/4.1</th>
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<td>Year</td>
<td>2007-08</td>
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<td>Name of the PI and Lead center</td>
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**INTRODUCTION**

Evaluation of fibre quality as per standard norms is essential for evolving genotypes with fibre meeting the textiles standard. Accordingly, breeder's samples from different regions developed under the minimission programme need to be tested for fibre properties and reported to the respective breeders. A genotype is promising when the three fibre characters viz. 2.5% span length; micronaire and strength are matching as per CIRCOT fibre quality norms. Most promising indicates the strength value higher than required.

**OBJECTIVES**

1. Evaluation of fibre quality parameters obtained under different TMC projects
2. To standardize technique for quantifying pesticide residues in the cotton lint,

**ACTIVITIES**

1. Different fibre attributes will be measured for all the samples received from different projects.
2. Estimation of toxic elements present in lint,
3. Standardization of technique to detect and quantify banned pesticide residues in cotton lint

**SALIENT FINDINGS**

Fibre quality parameters from different projects were tested. 115 samples were long to extra long staple and possess strength more than 27.0 g/t, 32 samples have strength above 30.0 g/t. Further, micronaire values were also in the range of 3.5 to 4.5, which is very good for long to extra long cottons. These samples could be further taken in AICCIP programme.

High percentage of promising strains were observed under MM 1.3 MM 1.4 at Sirsa, Bharuch.

Rest of the samples show low strength value (21°-22° g/t) in general.

**Fibre Quality evaluation using HVI**