

# Training Course in COTTON QUALITY EVALUATION





## Central Institute for Research on Cotton Technology

(Indian Council of Agricultural Research) Adenwala Road, Matunga, Mumbai 400 019

## Why Training?

Cotton quality evaluation is made in India largely by hand and eye methods, which are known to suffer from limitations of inconsistency, subjectivity and inaccuracy. In recent years, all those who are connected with cotton - breeders, traders and industry personnel - have become quality conscious, especially after liberalisation of the country's economy and the progressive removal of international trade barriers bound to result from the signing of GATT agreement. There is widespread need for well trained personnel to evaluate cotton and cotton textiles on a scientific basis. Institutions with appropriate infrastructure for training of staff employed in cotton quality as well as general textile testing are very few in the country. Tailor-made courses are conducted at the Central Institute for Research on Cotton Technology (CIRCOT) to impart adequate theoretical knowledge and sound practical skill in testing methods for cotton fibre, yarn and fabrics.

#### About the Institute

CIRCOT, established in 1924, is a research institute under the Indian Council of Agricultural Research. The main objective of the Institute is to participate in cotton improvement research by evaluating the quality of new strains evolved at agricultural research stations in India and providing the necessary technological inputs that will promote cottons meeting the quality requirements of the textile industry. In addition, the Institute undertakes basic and applied research in post-harvest technology, commercial testing of textile materials, developing new technologies for utilisation of cotton, cotton plant, agricultural and industrial processing wastes and functions as a national centre for education and training in cotton technology and related areas.

#### Course Details

CIRCOT conducts two series of courses, all during the period of six months from June to November every year. The Integrated Training Course and Short Duration Course of 4 weeks' and 2 weeks' duration, respectively, are conducted in several batches, the time schedules for which are announced in March or April. A Certificate is issued to each participant after satisfactory completion of the course. Highlights of the training courses are given below.

	Integrated Training Course	Short Duration Course
Duration	Two weeks	One week
Fee per Candidate	Rs.4,000*	Rs.2,000*
Qualification	Pass in S.S.C or equivalent examination with experience in cotton trade/industry	Pass in S.S.C or equivalent examination with experience in cotton trade/industry

<sup>\*</sup> Fees to be paid by Demand Draft drawn in favour of **Director**, **CIRCOT** payable at Mumbai.

Package programmes for training in specific areas will also be arranged on request.

#### **Course Content**

#### \* Introduction

The importance of cotton in world fibre consumption – A brief outline of the main stages in cotton growing, marketing and processing – Need for objectivity in the testing of cotton for fibre properties.

#### \* Cotton Production

Fibre growth – Development of different varieties – Fibre structure – Ginning – Visual grading.

## \* Fibre Quality Evaluation

Theoretical background – Sampling for testing – Logic and methods – Measurement of length, fineness, maturity, strength, fibre quality index – HVI evaluation for fibre quality.

## \* Spinning of Cotton

Theory of ring spinning – Microspinning – Fullspinning – Spinnability of cotton – Methods used in different countries – CIRCOT methods – Concept of open end spinning.

## \* Yarn Quality Evaluation

Theoretical background – Linear density – Twist – Strength – Extensibility – Evenness – Yarn appearance.

## \* Fabric Quality

Dimensional characteristics of fabrics – Ends and picks – Cover factor – Fabric strength.

### \* Statistical Interpretation

Statistical analysis of test data and their interpretation.

## Enquiries may be addressed to:

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