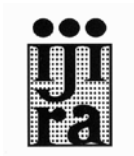


# **PRESENT TESTING FACILITIES AT IJIRA**



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JUTE IS ECO - FRIENDLY AND RENEWABLE SOURCE OF ENERGY

## **PRESENT TESTING FACILITIES AVAILABLE AT IJIRA**

This document is downloaded from the website [www.ijira.org](http://www.ijira.org)  
For further details, please feel free to contact us : [info@ijira.org](mailto:info@ijira.org)  
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### **A. Chemical**

1. TKP(Tamarind Kernel Powder)
2. Copper Content in Jute samples
3. JBO Analysis
4. Hydrogen Peroxide Strength
5. Unsap Matter Content of Food Grade Jute Products
6. RBO Analysis
7. Emulsifier
8. Emulsion Stability
9. Oil content in yarn/fabric
  - a) Elemental analysis of Jute (Micro & Macro elements)
  - b) Fibre identification in blends
  - c) Viscosity of Size paste
10. Colour Fastness to
  - a) Light
  - b) Washing
  - c) Rubbing
  - d) Perspiration
11. Group Analysis of dyestuff
12. Water – Repellence Test
13. Fire Retardant Test

### **B. Biological**

1. Mildew Test of Jute Samples
2. Rot-Proof Test
3. Microbial Load on Jute Products
4. Water Analysis
5. Damage Count of Jute Products

### **C. Geo-Textiles**

1. Weight
2. Ends x Picks /dm
3. Thickness
4. Width
5. Apparent opening size (AOS)
6. Grab Tensile Strength
7. Wide Width Tensile Strength
8. Bursting Strength
9. Water Permeability
10. Puncture Resistance
11. Copper content
12. Bitumen content
13. Transmissivity and Cone Drop Test facility would be available shortly.

#### **D. Composite Laboratory**

1. Flexural Strength & Modulus
2. Tensile Strength & Modulus
3. Impact Strength
4. Water absorption % for 2 and 24 hrs
5. Boiling water absorption %
6. Thickness Swelling % for 2 and 24 hrs
7. Density
8. Brabender Plastic-order for study of melt blend Rheology

#### **E. Physical Testing of Jute Sliver/Fibres/Yarns/Fabric/Bag**

##### **1. Sliver**

- (a) Irregularity (Weight CV %)
- (b) Weight
- (c) Fibre Length
- (d) Fibre Fineness
- (e) Fibre Length Distribution

##### **2. Fibre**

- (a) Length
- (b) Fineness
- (c) Bundle tenacity
- (d) Brightness
- (e) Flexural rigidity

##### **3. Yarn**

- (a) Count
- (b) Strength
- (c) Elongation
- (d) Twist
- (e) Abrasion resistance

##### **4. Fabric**

- (a) Construction
- (b) Strength
- (c) Thickness (d) Ballistic work of rupture (B.W.R)
- (e) Abrasion resistance (f) Flexural rigidity (stiffness)
- (g) Fibre shedding (on abrasion)
- (h) Crease recovery
- (i) Water permeability

5. **Bag**
  - (a) Weight
  - (b) Dimension
  - (c) Seam strength
  - (d) Drop test
6. **Card/Gill Pin.** Impact strength (shear)
7. Moisture Regain %
8. Calibration and Certification of transistorised Moisture Meter.

#### **Following Facilities Available at Pilot Plant**

9. Preparation of
  - (a) Yarn of various counts
  - (b) Sliver from Carding /Drawing
  - (c) Cop of various counts.
  - (d) Ply yarn of various counts
  - (e) Bleaching & Dyeing of yarn/fabric
  - (f) Stitching of various quality on jute fabric
  - (g) Lock stitch
  - (h) Heracles stitch
  - (i) Hemming stitch
10. 3-D models of machinery parts and subsequently their 2-D drawings with the help of CAD system.