



Value-Added Products from Banana Pseudostem Fibres

Transforming Agricultural Waste into Wealth

About the Technology

Banana plants produce massive amounts of pseudostem biomass after fruit harvest, which is typically discarded as agricultural waste. ICAR-CIRCOT has developed eco-friendly, sustainable processing technologies to extract high-quality natural fibres from banana pseudostems and convert them into valuable commercial products.

Product Portfolio

1. Textiles & Fashion

- ✓ **Blended Yarns:** Blended with cotton or jute to manufacture coarse fabrics, denim, and jacket materials.
- ✓ **Home Furnishings:** Curtains, cushion covers, table runners, mats

2. Molded Products

- ✓ **Kitchenware and Cutlery:** Disposable plates, knives and spoons.
- ✓ **Nursery Seedling Trays:** Disposable and Reusable seedling trays.

3. Pulp, Paper & Packaging

- ✓ **Specialty Paper:** Craft paper and grease-proof paper.
- ✓ **Biodegradable Packaging:** High strength paper bags for packaging.

4. Industrial Products

- ✓ **Wall Panelling and False Ceiling:** Light weight and aesthetic panels.



Decorative wall panels



Seedling Trays



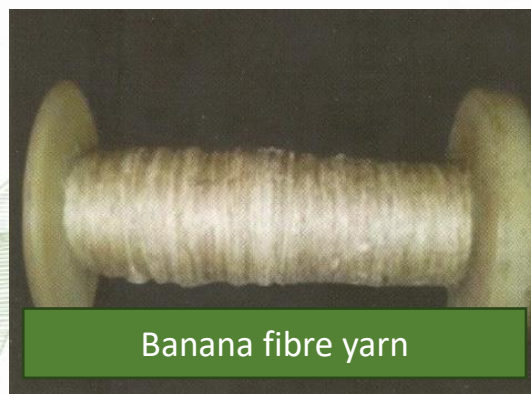
Kitchen Cutlery

Key Highlights & Advantages

- **100% Eco-Friendly & Biodegradable:** Replaces synthetic and non-renewable raw materials.
- **Farmer Income Multiplier:** Provides additional revenue for banana growers.
- **Versatile Material Properties:** High strength, good moisture absorption, and lightweight.
- **Industrial Feasibility:** Scalable processing models suitable for MSMEs, startups, and FPOs.

Technology Transfer & Commercialization

- **Technology Licensing:** Know-how transfer for fiber extraction and product manufacturing.
- **Custom Machinery Design:** Technical specifications for extraction machines and decorticators.
- **Testing & Quality Evaluation:** Comprehensive physical and chemical fibre characterization services.
- **Incubation & Training:** Hands-on training programs and business incubation assistance.



Banana fibre yarn



Molded products



Grease proof paper

About the Institute

ICAR-Central Institute for Research on Cotton Technology, established in 1924, a constituent institute of Indian Council of Agricultural Research, is engaged in carrying out basic and strategic research in processing of cotton & its agro-residues, development of value-added products and quality assessment of cotton.

Contact us

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