

## Jute Agrotextiles

A variety of Jute fabrics were developed for the purpose of specific applications as Agrotextiles. Some important application areas and products are given below.

- **Jute Agrotextiles Application Areas :** Soil Conservation, Mulching, Weed Management, Sleeves for Sapling growth, Afforestation in semi-arid zone
- **List of Jute Agrotextile Products:** Canvas Cloth, Tarpaulins, Non-woven, Baler Twines, Sapling bags, Scrim cloth.

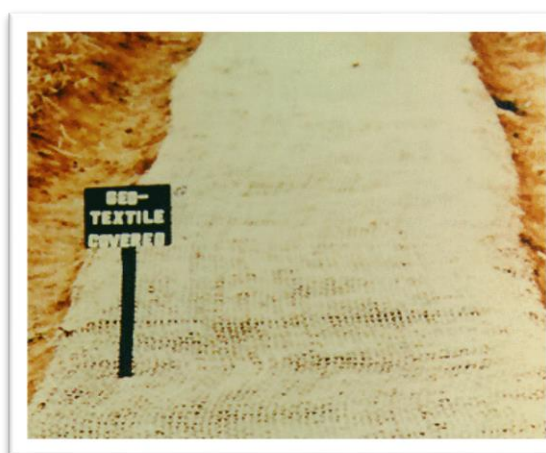
### Favourable Properties of JAT(Jute Agrotextiles)

- High water holding capacity as compared to synthetic materials.
- Jute coalesces with soil after degradation and increases its permeability and supplementing its nutrient level.
- Fosters faster growth of vegetation even in arid and semi-arid zones.
- Suppress weed-growth effectively without use of chemical weedicides.
- Jute sleeves are porous, ensures better aeration and can be directly planted within the soil.
- Packed agro products remain fresh.

## 1. Application of JAT (JUTE AGROTEXTILES)

### A. Application of Jute Agrotextile in Soil Conservation & Agromulching

<b>Name of the Project and location</b>	Field trial with Jute Agrotextile in Mulch on seed bed of Tobacco nursery at Hunsur, Karnatak
<b>Objective</b>	Comparative performance of JAT with straw and bare plot.
<b>Properties of Jute Agrotextile used</b>	1. Weight : 250 GSM 2. Tensile strength(kN/m) [MD x CD] : 10 x 7.5 3. Water Absorption capacity (%) : 350 4. Type of JAT : Open Weave
<b>Results</b>	Number of transplantable seedlings and survival rate increased by 5%.



No. of seedlings per sq. meter, Weight of plants (g), Height of plant (cm), Survival rate (%) was increased in case of JAT application.

## B. Application of Jute Agrotextile in Weed Management

<b>Name of the Project and location</b>	Field trial with Jute Agrotextile in Tea Estate for Weed Management at Borbetta Tea Estate, Assam
<b>Objective</b>	To study the effectiveness of Jute Agrotextile in weed suppression
<b>Properties of Jute Agrotextile used</b>	1. Weight : 500 GSM / 750 GSM 2. Tensile strength(kN/m) [MD x CD] : 5 x 6 / 7 x 8 3. Water Absorption capacity (%) : 650 / 700 4. Type of JAT : Nonwoven
<b>Results</b>	60% reduction of weeds.



Emergence of weeds in tea plantation



Suppression of weeds in tea plantation with JAT

## C. Application of Jute Agrotextile in Seedlings growth of saplings

<b>Name of the Project and location</b>	Study of the efficacy of Jute sleeves in raising of seedlings compared to conventional poly-sleeves at Shimphere Nursery, Sikkim
<b>Objective</b>	To study the comparative advantages in using Jute sleeves in place of poly sleeves for holding soil bulbs of seedlings.
<b>Properties of Jute Agrotextile used</b>	1. Fabric Used : 272 GSM Hessian 2. Size of Sleeve : 23 cm x 15 cm 3. Type of JAT : Woven
<b>Results</b>	Excellent performance in growth and survival



Sapling in conventional poly-sleeves



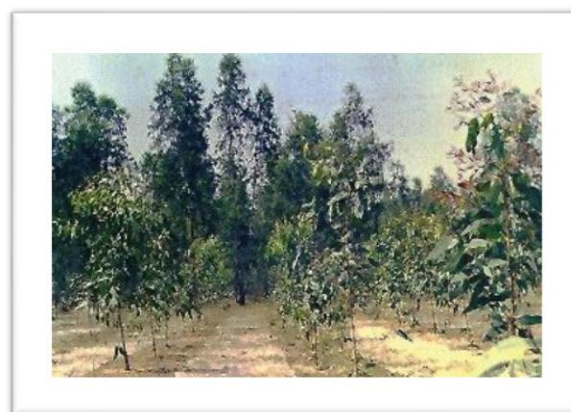
Jute Sleeve for growth of sapling

#### D. Afforestation in semi-arid zone

<b>Name of the Project and location</b>	Study of the effectiveness of Jute Agrotextile in plant growth in a semi-arid zone at Hijli&Porapara, Midnapore in West Bengal
<b>Objective</b>	Quantification of difference in growth of plants with and without Jute Agrotextile in a semi-arid zone.
<b>Properties of Jute Agrotextile used</b>	1. Fabric Used : 300 GSM 2. Size of Sleeve : 23 cm x 15 cm 3. Weight of Sleeve : 26 gm 4. Type of JAT : Open weave
<b>Results</b>	Growth of the trees in the treated area significantly higher. No sign of erosion



Growth of plants without JAT



Growth of plants with JAT

## Why JCI

- CPSE (Central Public Sector Enterprise) – one Government of India Organization, is trustworthy in commitment of deliveries, quality, correct pricing.
- Strong product specific vendor base across its PAN India network.
- Registered in GeM.
- Scope of PAN India JDP operation through opening of marketing offices in different states.
- Scope of varied range of R&D on products and handicraft items to bring forward new designs, styles in collaboration with various Govt. / Non Govt. enterprises , artisan clusters.
- Manufacturing of JDP items through empanelled MSMEs, WSHGs, Jute Mills and thus creating scope of generating livelihoods of rural artisans and improvement in Jute Economy.
- Increasing raw jute demand and thus jute cultivation also.