

# Mesta Cultivation Guide

## Introduction

Mesta (*Hibiscus sabdariffa* and *Hibiscus cannabinus*) is a natural fiber crop grown for its strong and eco-friendly fibers. It is an alternative to jute and thrives in tropical and subtropical regions with moderate to high rainfall. Mesta fiber is used in making ropes, bags, mats, and textiles, contributing to the sustainable fiber industry.

## Steps of Cultivation

### 1. Variety Selection

- Choose high-yielding and disease-resistant varieties.
- Common varieties include AMV-4, JRM-5, HS-4288, and Bidhan Rupali.

### 2. Soil Preparation

- Prefers well-drained sandy loam or clayey soil with a pH of 5.0–7.5.
- The land should be plowed 2–3 times to achieve a fine tilth.
- Organic manure or compost should be added to improve soil fertility.

### 3. Sowing and Spacing

- Sowing is done from April to June, depending on rainfall.
- Seeds should be sown in rows with a spacing of 25–30 cm.
- Seed rate: 6–8 kg per hectare for broadcast sowing, 4–5 kg per hectare for line sowing.

### 4. Irrigation and Water Management

- Requires moderate irrigation, especially during dry conditions.
- Avoid waterlogging as it can harm plant growth.
- Proper drainage channels should be maintained in the field.

### 5. Fertilization and Nutrient Management

- Apply nitrogen, phosphorus, and potassium fertilizers for better growth.
- Organic manure, such as compost or farmyard manure, enhances fiber quality.
- Micronutrients like zinc and boron improve plant vigor.

### 6. Weeding and Pest Control

- Regular weeding is necessary during the early growth stages.
- Common pests: Stem weevil, leafhoppers, and aphids. Use neem-based pesticides and biological controls.
- Common diseases: Root rot and leaf spot. Apply fungicides and practice crop rotation.

### 7. Harvesting and Retting

- Mesta is ready for harvesting 120–150 days after sowing when plants start flowering.
- Plants are cut close to the ground, bundled, and retted in water for 2–3 weeks to separate fibers.
- After retting, fibers are extracted, washed, dried, and sorted for processing.

## **Conclusion**

Mesta cultivation is an eco-friendly and economically significant farming practice, providing an alternative to jute. Proper soil preparation, irrigation, pest management, and retting techniques ensure high-quality fiber production. Sustainable farming methods help improve yield and market value.

