Jowar Cultivation Guide

Introduction

Jowar (*Sorghum bicolor*), also known as sorghum, is an important cereal crop grown in arid and semi-arid regions. It is a drought-resistant crop and serves as a staple food in many countries. Jowar is used for human consumption, fodder, and industrial applications like biofuel production.

Steps of Cultivation

1. Variety Selection

- Choose high-yielding and disease-resistant varieties.
- Popular varieties include CSV-15, CSV-17, CSH-16, and Maldandi.

2. Soil Preparation

- Prefers well-drained sandy loam or clayey soil with a pH of 6.0–7.5.
- Plow the land 2–3 times to achieve a fine tilth.
- Apply organic manure or compost to improve soil fertility.

3. Sowing and Spacing

- Sowing is done from June to July for the Kharif season and from September to October for the Rabi season.
- Seed rate: 8–10 kg per hectare.
- Maintain a spacing of 45 cm between rows and 10–15 cm between plants.

4. Irrigation and Water Management

- Requires moderate irrigation, especially during germination and flowering stages.
- Avoid waterlogging as it can lead to fungal diseases.
- Drip irrigation is recommended for efficient water use.

5. Fertilization and Nutrient Management

- Apply nitrogen, phosphorus, and potassium fertilizers based on soil test recommendations.
- Organic fertilizers such as farmyard manure improve soil health.
- Micronutrients like zinc and iron enhance plant growth.

6. Weeding and Pest Control

- Regular weeding is necessary during the early growth stages.
- **Common pests:** Shoot fly, stem borer, and aphids. Use neem-based pesticides and biological control methods.
- **Common diseases:** Downy mildew, rust, and grain mold. Apply fungicides and ensure proper crop rotation.

7. Harvesting and Yield

- Jowar is ready for harvest 100–120 days after sowing.
- Harvest when grains are hard and dry to avoid losses.
- Yield depends on the variety and management practices, with an average of 25–40 quintals per hectare.

Conclusion

Jowar is a resilient and nutritious cereal crop with multiple uses. Proper soil preparation, irrigation, fertilization, and pest management ensure a high yield. Sustainable farming practices enhance productivity and profitability, making jowar an important crop for food security and fodder production.