

Fundamentals of Pepper Production



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Why Peppers?

- ▶ Value
- ▶ Productivity
- ▶ Demand
- ▶ Dependability
- ▶ Profit



Capsicum species

- ▶ **Capsicum annuum**
 - Bell peppers
 - Jalapeno
 - Serranno
 - Poblano
 - New Mexico/Anaheim chile
 - Sweet Frying peppers
 - Paprika peppers
 - Globally, many locally developed types



Capsicum species

- ▶ Beyond *C. annuum*
 - *Capsicum frutescens* (Tabasco)
 - *Capsicum chinense* (Habanero, etc.)
 - *Capsicum baccatum* (Aji, etc.)
 - Other wild species (*chacoense*, etc.)



Plant Fundamentals

- ▶ 5 Essential Elements
 - Light
 - Heat
 - CO₂
 - Water
 - Mineral Nutrients



Growing Peppers

- ▶ Stand Establishment
 - Direct-seed?
 - Transplant?



Direct-Seeding Peppers

- ▶ Bad idea?
- ▶ Expectations
- ▶ Equipment
- ▶ Seed placement
- ▶ Water and Fertility
- ▶ Soil conditions
 - Moisture
 - Temperature
 - Tilth



Producing Pepper Transplants

- ▶ Seed Quality
- ▶ Timing of Seeding
- ▶ Facilities for production
- ▶ Trays and Media
- ▶ Transplant size and age
- ▶ Water
- ▶ Fertility



Field Preparation for Peppers

- ▶ Site characteristics
- ▶ Soil Fertility
 - Ph
 - Fertilizer
- ▶ Soil Preparation
- ▶ Soil Moisture



Plasticulture for Peppers

- ▶ What is plasticulture?
- ▶ Peppers and plasticulture
- ▶ Plastic mulch
- ▶ Drip irrigation
- ▶ Row tunnels
- ▶ Hi tunnels



Stand Establishment

- ▶ Spacial arrangements
- ▶ Populations
- ▶ Setting Transplants
- ▶ Starter Fertilizer
- ▶ Transplant age



Pepper Crop Management

- ▶ Peppers are continuously flowering
- ▶ Fruit set
- ▶ Supporting fruit development
- ▶ Timely harvest is critical



Crop Management Issues

- ▶ Pest management
- ▶ Water management
- ▶ Fertility management



Weed Control

- ▶ Impact of weed pressure
- ▶ Control techniques



Insect Pests in Peppers

- ▶ Flea Beetles
- ▶ Aphids
- ▶ European Corn Borer
- ▶ Hornworms



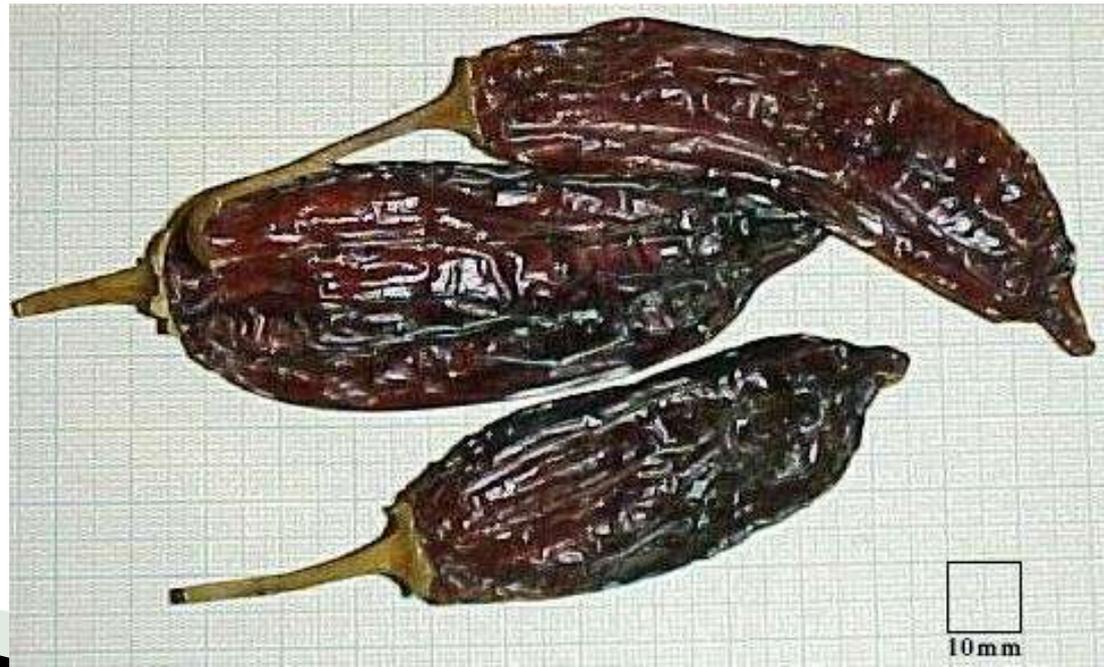
Pepper Diseases

- ▶ Bacterial Spot !!!!!
- ▶ Phytophthora fungal disease
- ▶ Blossom End Rot



Managing water

- ▶ Influence of water on flowers/fruit
- ▶ Irrigation choices
- ▶ Monitoring water status
- ▶ Following through on crop potential



Post-plant fertility management

- ▶ Supplemental nitrogen
- ▶ P&K
- ▶ Micronutrients
- ▶ Organic fertility management



Harvest considerations

- ▶ The season isn't over till the money is in your pocket!
- ▶ Harvest frequently to maximize yield
- ▶ Manage water right up to the end



Questions?



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