#### **Specialty Cut Flowers**

Growing, Fertilization, Insect and Disease Control, Water, Heat, Light



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#### **Production Considerations**

- Site Selection
- Planting\*
- Irrigation\*
- Pest management\*
- Fertilization\*
- Refrigeration
- Equipment
- Wind Protection and Support\*
- Post Harvest Care
- Lighting\*



## Pest Management

- Weeds
- Insects
- Diseases
- Deer

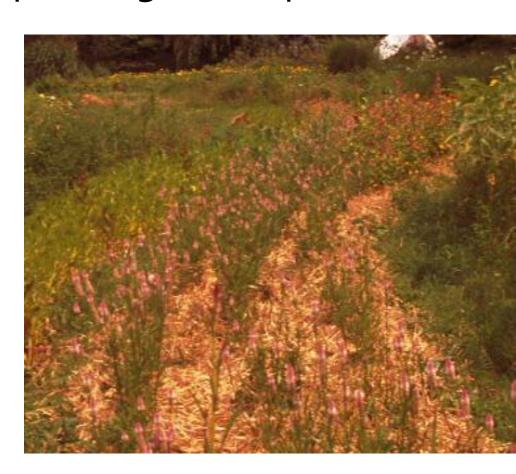


## Weed Management

Best option: well prepared planting bed w/plastic

and straw mulch

- Pre-emergent herbicides
  - Note: Give out table
- Post-emergent herbicides
- Flame Weeding





## Wick Stick for postemergent materials





## Insect Management

Insecticidal Soap

Horticultural Oils

Carbamate: Sevin

Malathion

Neem Extracts





### Other soft insecticides







## **Slug Control**



EscarGo: Gardens Alive

### Disease Management

- Primary diseases:
  - Powdery Mildew
  - Downy Mildew
  - Botrytis (Gray mold)
  - Root rots



Powdery Mildew on Dahlia

## Some primary disease management

materials



Chlorthalonil AKA: Daconil Funginex.....



Phosphonic Acid AKA: Topaz, ProPhyte, Phostrol



Copper AKA: Champ, Tenncop, Phyton 27, Kocide 2000...

## Root borne disease management

- Crop rotation
- Sanitation
- High Quality potting media
- Disease free seeds and starts
- Careful irrigation
- Tricoderma hazarium T-22
  - Plant Shield



### **Deer Control**

- Scare devices
- Low electric fence
- 7.5-10′ fence
- Slant Fence
- Dogs with electric collars
- Repellants



#### Fertilization

- Annuals: Balanced fertilizers fed regularly
  - **20-20-20, 10-10-10, 5-10-10**
  - Constant feed 100+ppm
- Perennials: Feed at dormancy and again at break of dormancy
  - High P for best blooms
- Most cuts perform best at pH of 6.2-7.0
- Don't feed woodies until fully dormant

## Wind & Rain protection

- High Tunnels
- Windbreaks
- HortoNova mesh



## **Planting**

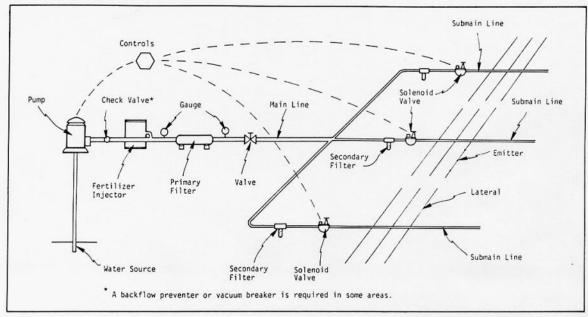
- Spacing
- Method
- Plug size
- Succession
- Season



## Irrigation

- Drip is best!
- Strongly suggested
  - Affects yields
  - Required for good stems
  - Affects quality
  - Timing is critical

Figure 7. Trickle Irrigation System Components





# Lighting



Sunrich Orange 1 week apart



## **Sunflower Planting Date Trial**



Sunrich Orange planted 1 week apart Date 9/8/08

## **Cutting Beds**



## Where to get information

- Growing for Market Magazine
- Penn State Statewide Trials:
  - SE Research Farm, Landisville
- Assoc. of Specialty Cut Flower Growers
  - ASCFG
- Supported by a grant from NE-SARE

#### Thank you!

Your questions, comments and rebuttals are welcome!

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#### Lisianthus Balboa Rose

