Field Grown Cut Flowers

Production systems
- Row cultivation
- Beds

Soil/bed Preparation
- Take soil samples
- Incorporate fertilizers, etc.
- Amend soil
- Beds 2.5 to 4 ft. wide, 100-200 ft. long
- Aisles 3+ ft.
- Mound beds 4-8 in.
- Posts and netting

Soil samples
- Divide field into sampling units
- Collect 15-20 subsamples per unit
- Zig-zag pattern
- Collect soil from surface to 6 in. deep
- Mix subsamples together and select sample

Fertilization
- Soil test
- Adjust pH, optimum 6.0 - 7.0
- Apply general fertilizers or specific nutrients
- Apply prior to planting and/or during production
- Apply nutrients
  - Granular
  - Liquid (injector)
  - Organic

Plant materials
- Production season - summer only or year-round
- Annuals (summer and ‘winter’)
  - One planting
  - Multiple plantings
- Biennials/perennials
- Trees, shrubs, vines
**Field Establishment**
- Directly sown seed
- Transplants
- Divisions
- Bulbs, corms, dormant roots
- Containerized plants

**Summer Annuals**
- One harvest per planting
- Multiple to season-long harvest per planting

**One Harvest Annuals**
- Plant every 2-4 weeks
  - Temperature and photoperiod effects will result in variable crop times
- Pinching
  - Leave 4 to 8 nodes (pinch low), pinch when plants are young
- Sunflower, celosia

**‘Goldburst’ Sunflower**

**‘Forest Fire’ Celosia**

**Multiple Harvest Annuals**
- Plant every 4-8 weeks
- Pinching
- Zinnia, gomphrena, celosia, cosmos, rudbeckia
**Winter Annuals**
- Multiple fall planting dates
- Fall and spring planting
- Direct seed and use transplants
- Pinch
- Row covers
- Mulches
- Larkspur, bachelor buttons, sweet william

**Perennials**
- New plantings to supplement old plantings
- Pinch/cut back
- Row covers
- Mulches
- Greenhouse/cold frame forcing

**Woody Cuts**
- Cut early, store and force before or after regular season
- Take advantage of cultivar and microclimate variations

**Maximizing Space**
- Combine winter annuals and summer annuals
- Combine winter annuals and first season perennials
- Interplant slow growing woodies with annuals (one year) or perennials (several years)
- Plant woodies in ‘difficult’ areas

**Spacing**
- Increasing number of plants/ft² of bed:
  - Increases yield per ft²
  - Increases profit per ft²
  - Increases stem length on some species
  - Decreases yield per plant
  - Decreases air circulation
Weed Control

- Preplant tillage
- Sanitation
- Cultivation and hand pulling
- Mulch
  - Black plastic
  - Green organic
  - Organic by-products

Weed Control

- Chemicals
  - Pre-emergent
  - Post-emergent
- Flame weeding
- Geese, guinea fowl, etc.

Irrigation

- Hand watering
- Overhead sprinklers
- Drip

Overwintering

- Remove annuals and fallen leaves
- Prune diseased parts, etc.
- Do not cut plants back until midwinter or early spring
- Mulch
- Irrigate

Comments, Questions.....