

# 50 Years of Greenhouse Evolution

## Looking Back



## How has the greenhouse changed?

- Greenhouse structures
  - Greenhouse coverings
  - Benching
  - Containers
  - Growing media
- (We could spend a whole hour on each one!)



## Containers

Bare-root – without container  
Clay pots  
Compressed peat pots  
Plastic  
Styrofoam  
Packs, flats, plug trays  
Gro-bags, pellets, and “rubber dirt”  
Hydroponics (back to bare-root again?!?)

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## Growing Media

Composts and Native Soil mixes (manures as well)  
“John Innes” mixes – loam/peat/sand  
Cornell “peat-lite” mixes  
Special formulations for:

- Seeding
- General purpose
- Nursery
- Epiphytic (orchids, etc.)

The need for consistency  
and standardization evolved into  
an entire industry



## How about plant material?

- Number of species and cultivars
- Plant patents and trademarks
- Innovations in grafting and propagation
- Packaging and shipping
- Plant size and use
- Customer preferences



Global availability  
 Plant patents and trademarks  
 Transportation  
 Packaging  
 Sanitation/Inspection/Imports

### *Chemical usage over the decades*

Fertilizers  
 Pesticides  
 Plant Growth Regulators (PGRs)  
 Biocontrols of all types



### *Greenhouse Management*

Computerization  
 Automation  
 Climate control  
 Scheduling  
 Marketing

### *Now...*

What about the future?

