

## High Tunnel Strawberry Basics



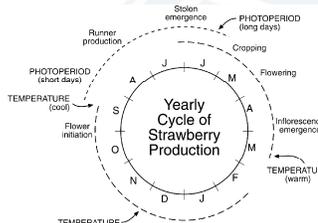

Dr. Brent Black  
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## Strawberry: Types

- June Bearing (short day)
- Ever Bearing (long day)
- Day Neutral (day length insensitive)



**Yearly Cycle of Strawberry Production**

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## Methods of frost protection

- Winter mulch (bloom delay)
- Sprinklers (not here)
- Tunnels

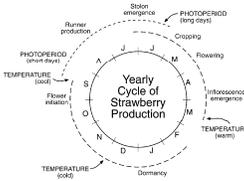




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## Annual Hill - Cold climate adaptation

- Timing of planting is critical
- Goal: 4 to 6 branch crowns
- No runners
- Early planting results in excessive running
- Late planting = insufficient branch crown formation

**Yearly Cycle of Strawberry Production**

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## Tunnel System

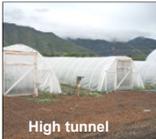



- Unheated (not a greenhouse)
- Walk-in size
- a.k.a. "cold frame"



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## Managing temperatures

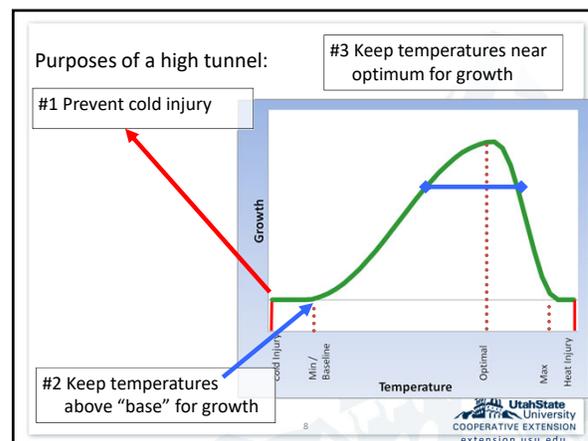
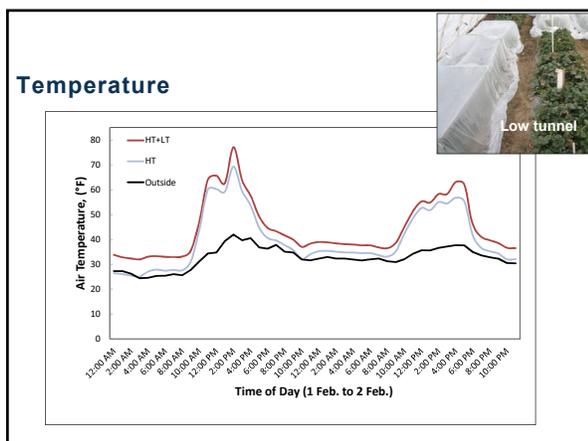









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### Tunnel Setup

- Raised beds
- Drip tape irrigation
- Black plastic mulch
- Plant spacing: 12" apart, alternate row

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### Tunnel Systems

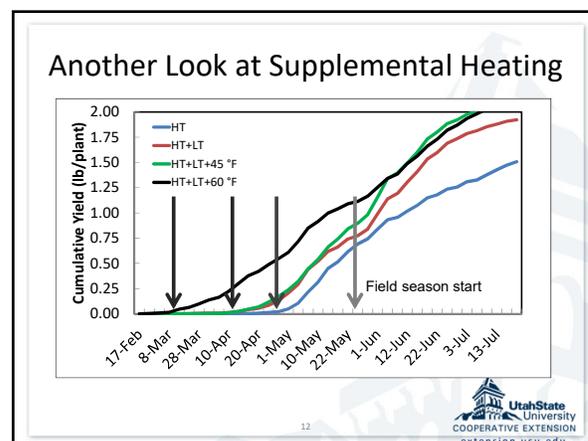
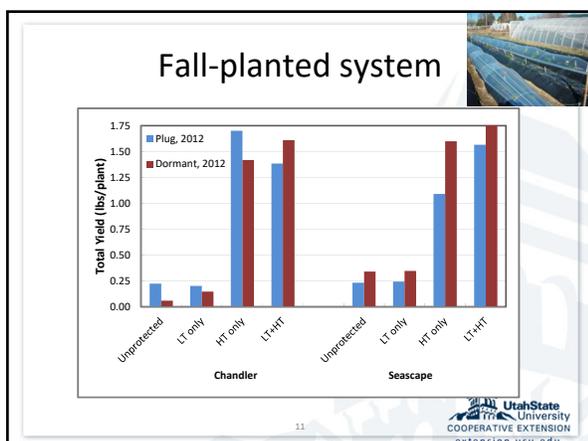
#### Early Spring Production

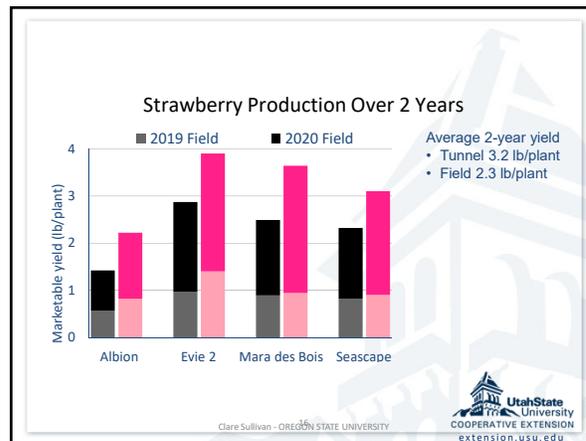
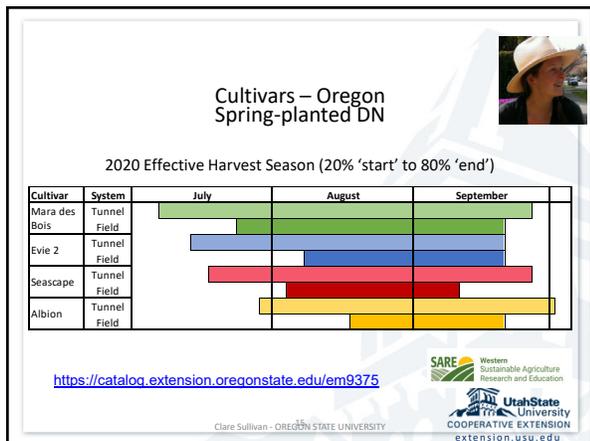
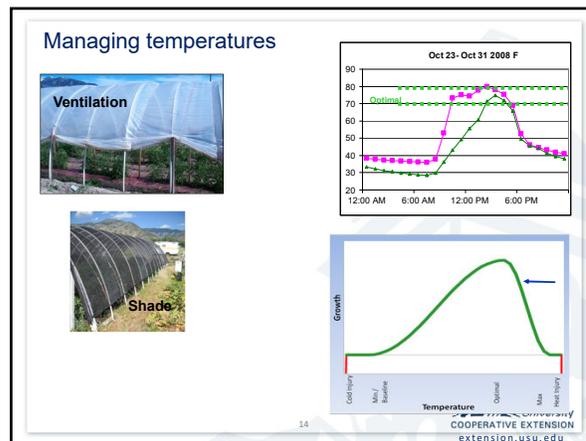
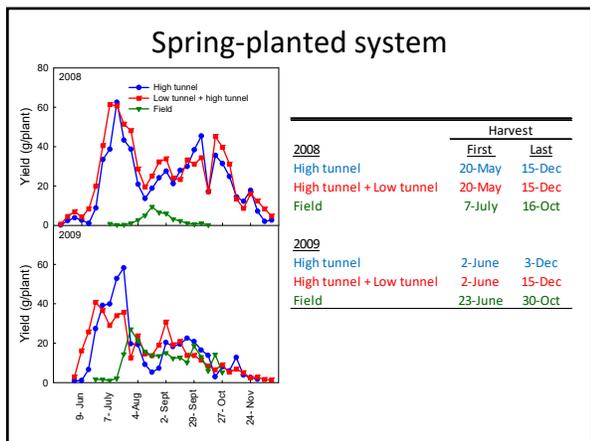
- Fall planted (Sept 1)
- June-bearers
- Plug plants
- Winter care
  - Runner and flower removal
  - Temperature management
- Earlier spring production

#### Fall Production

- Spring planted
- Day neutrals
- Dormant plants
- Summer care
  - Runner removal

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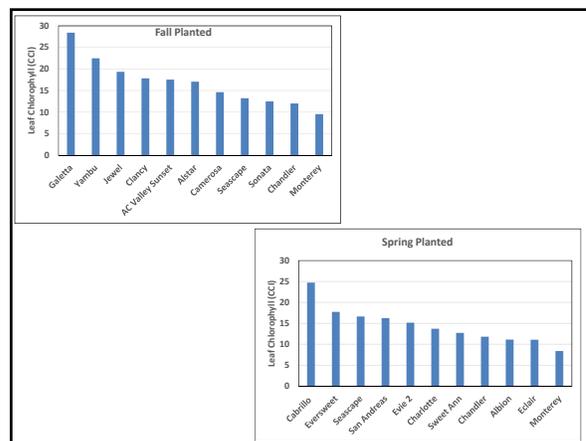
### CULTIVAR TRIAL FOR ORGANIC MANAGEMENT

Strawberry cultivars best adapted to organic management

- Nitrogen uptake efficiency
- Alkaline soil tolerance
- Disease resistance

USU Student Organic Farm  
Red Acre Farm, Cedar City

SARE Western Sustainable Agriculture Research and Education



## Cultivars – New Mexico



**Strawberry Cultivars for the Intermountain West – Research Report**

Elaine Magallon and Robert Reed  
Utah State University

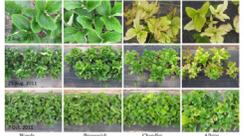
Shirley Ann and Robert Flynn  
New Mexico State University



**Table 3. Leaf color SPAD measurements\* before chelated iron application.**

Cultivar	Color Rating
Wendy	37.4
Brunswick	34.4
Honeyoye	33.8
Clancy	32.4
Kent	31.3
Annapolis	31.2
Jewel	31.0
Cavendish	30.9
Earliglow	30.9
Ovation	30.7
Cabot	30.1
L'Amour	27.7
Mesabi**	23.9
Darselect	22.7
Chandler	15.5
Allstar	11.7

\*Leaf color was measured with a SPAD-502 chlorophyll meter. High numbers indicate more green color and lower numbers less green.  
\*\*Mesabi has genetically yellowish leaves.



Wendy Brunswick Chandler  
Figure 3. Strawberry leaf color before and after treatment with chelated iron (FeEDDHA at 20L) + FeEDDHA was applied on August 7 and 15.

## Additional Reading [www.tunnel.usu.edu](http://www.tunnel.usu.edu)



**Day-neutral Strawberry Production in Central Oregon**

Oliver Salinas, Brent Black, Amanda Davis and Mark Secker



**Temperature Management in High Tunnels**

Brent Black



**High Tunnel Strawberry Production for Early Spring Harvest**

Elaine Magallon, Brent Black, and Robert Reed



**High Tunnel Strawberry Production for Late Fall Harvest**

Elaine Magallon, Brent Black, and Robert Reed