

Cornell Cooperative Extension

Advancing Strawberry Production in the Northeast: Update on Findings

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Advancing Strawberry Production in the Northeast Grant (2020 – 2023)

Research:

- Impact of overwintering treatments on June-bearing strawberries
- Utility of low tunnels for June-bearing strawberries
- Survey of strawberry production practices in the Northeast

Education:

- Revise Strawberry Production Manual
- Strawberry outreach at regional conferences and grower meetings

Project Team

David Handley



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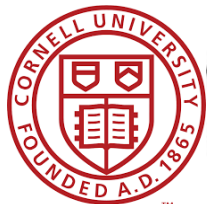
University of
New Hampshire



Kaitlyn Orde



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Grower Survey: Snapshot of Strawberry Production in the Northeast



158 growers
who currently
grow and sell
strawberries in
the “greater
northeast”
region

Retail, PYO June-bearing strawberries still predominate production

	Types of strawberries grown		
Region	June-bearing	Day-neutral	Both
Mid-Atlantic	82%	7%	11%
Southern New England	92%	4%	4%
New York	74%	15%	12%
Northern New England	83%	5%	12%
Ontario & Quebec	71%	21%	7%

June-bearing varieties – Tried & True

>50%

Jewel

>20%

AC Wendy

AC Valley Sunset

Cabot

Cavendish

Chandler

Earliglow

Honeoye

>20% trialing

Malwina

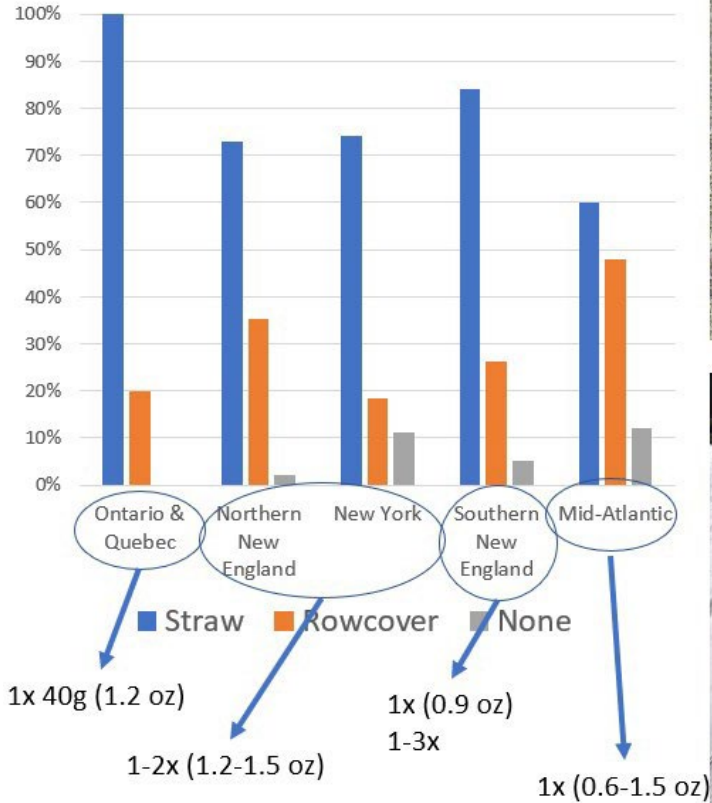
Rutgers Scarlet

Flavorfest

Annapolis – ONT/QUE

Allstar – Southern New England

Winter Protection



More frequent use of row covers in Mid-Atlantic, least in New York

Which winter protection materials result in greatest yield?

Overwintering Material Evaluation Field Experiment

Tested six treatments:

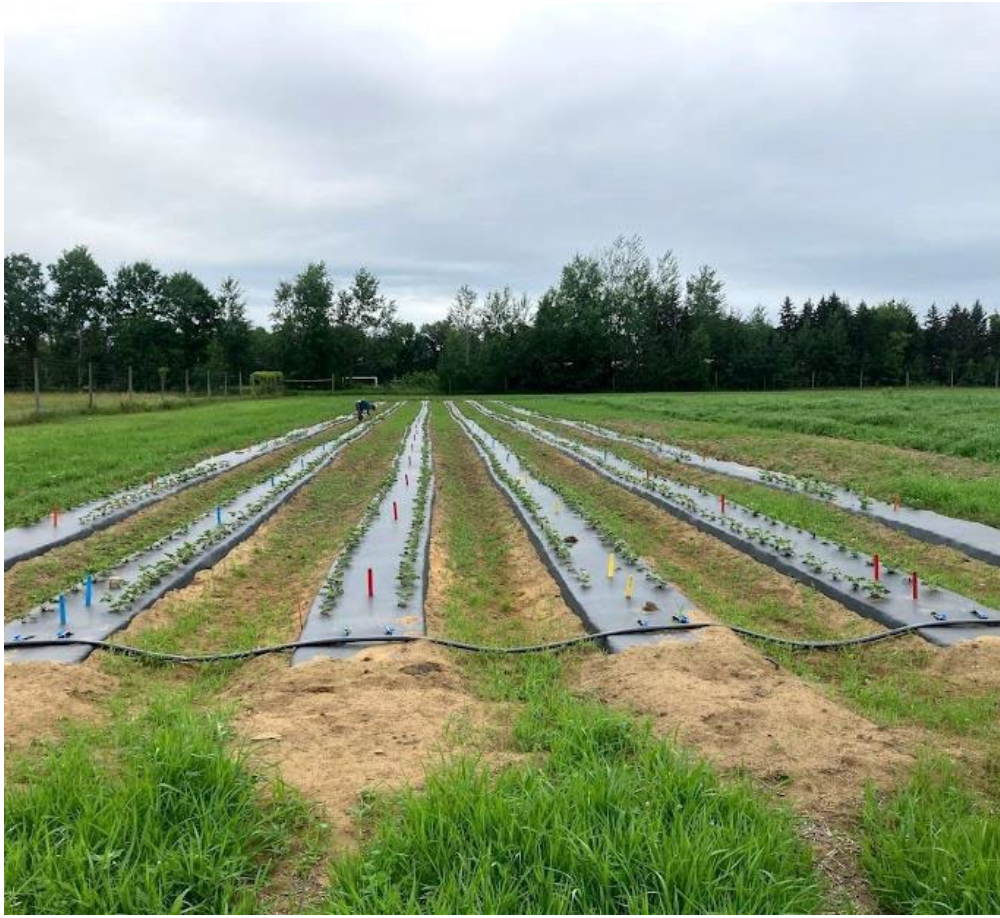
- Bare ground
- Straw
- Pro 30 (0.9 oz)
- Pro 30 x 2 staggered spring
- Pro 30 x 2 staggered fall and spring
- Pro 40 (1.2 oz)



Overwintering Material Experiment

- Two sites: Willsboro, NY & Durham, NH
- Three varieties: AC Wendy, Allstar, AC Valley Sunset
- Plasticulture with landscape fabric
- Planted in May/June, harvested one year
- Four replicates per cover treatment
- Plot = 12 ft bed (24 plants)





Data collection

- Temperature underneath covers
 - Air
 - Soil (crown level)
- Bloom timing
- Plant health scores
- Marketable yield
- Unmarketable yield



Conclusions

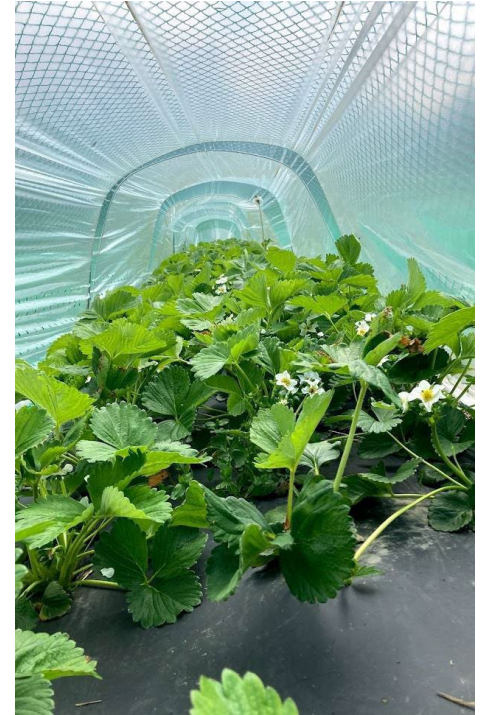
- Thicker cover = greater yield
- Straw and double row cover treatments highest yielding
- Highest productivity for 3 of 4 farm 'seasons' was double row cover with staggered removal
- Straw was 2nd best performer
- Light transmission through row cover hastens bloom, frost damage
- High frequency unmarketable berries in NY due to tarnished plant bug!



Low Tunnel On-Farm Demonstrations

Research question: Do low tunnels influence June-bearing strawberry yield and quality?

- NH data: Low tunnels increase strawberry yield in shoulder season, increase quality through protection from precipitation
- Four participating farms in NY & NH
- Three low tunnels
- Compared berries harvested in tunnels and adjacent rows
- Recorded growers' impressions



Low Tunnel Construction



40' long (30' harvested)
Hoops 39.5" tall x 46" wide
Anchored at ends with posts
Clear perforated film



Farm A

2021 - 2022

- Eastern NY
- Certified organic
- Plasticulture
- 'Chandler'
- Netting for deer exclusion
- No drip irrigation
- Retail



Farm B

2021-2022

- Eastern NY
- Conventional
- Matted row
- 'Dickens'
- Drip irrigation
- Retail & PYO



Farm C

2021 (very rainy)

- Central NH
- Conventional
- Wide matted row
- 'AC Valley Sunset'
- Drip irrigation
- Retail & PYO

Conclusions

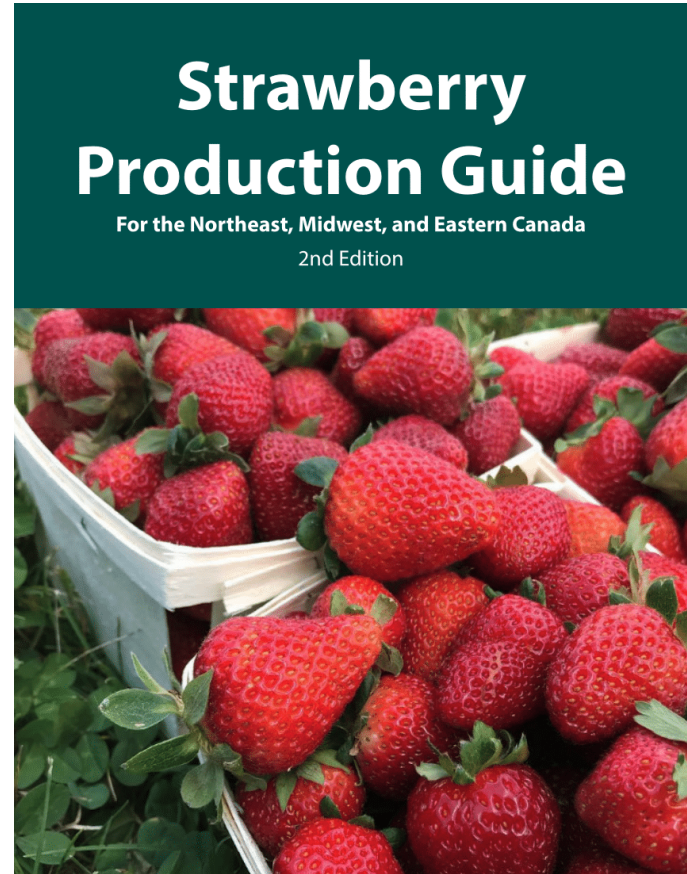
- Low tunnels can improve JB strawberry yield during rainy years (less Botrytis)
- Logistics can be challenging
 - Set up and tear down labor \$\$\$
 - Boom sprayer clearance
 - Dubois system not compatible with wide beds
 - Cannot straddle rows to harvest
 - Use with row cover or netting complex

Growers had overall positive response to tunnels as a complementary system to open field



Stay tuned!

Revised version of
**Strawberry
Production
Guide**
available for free
download



Acknowledgements

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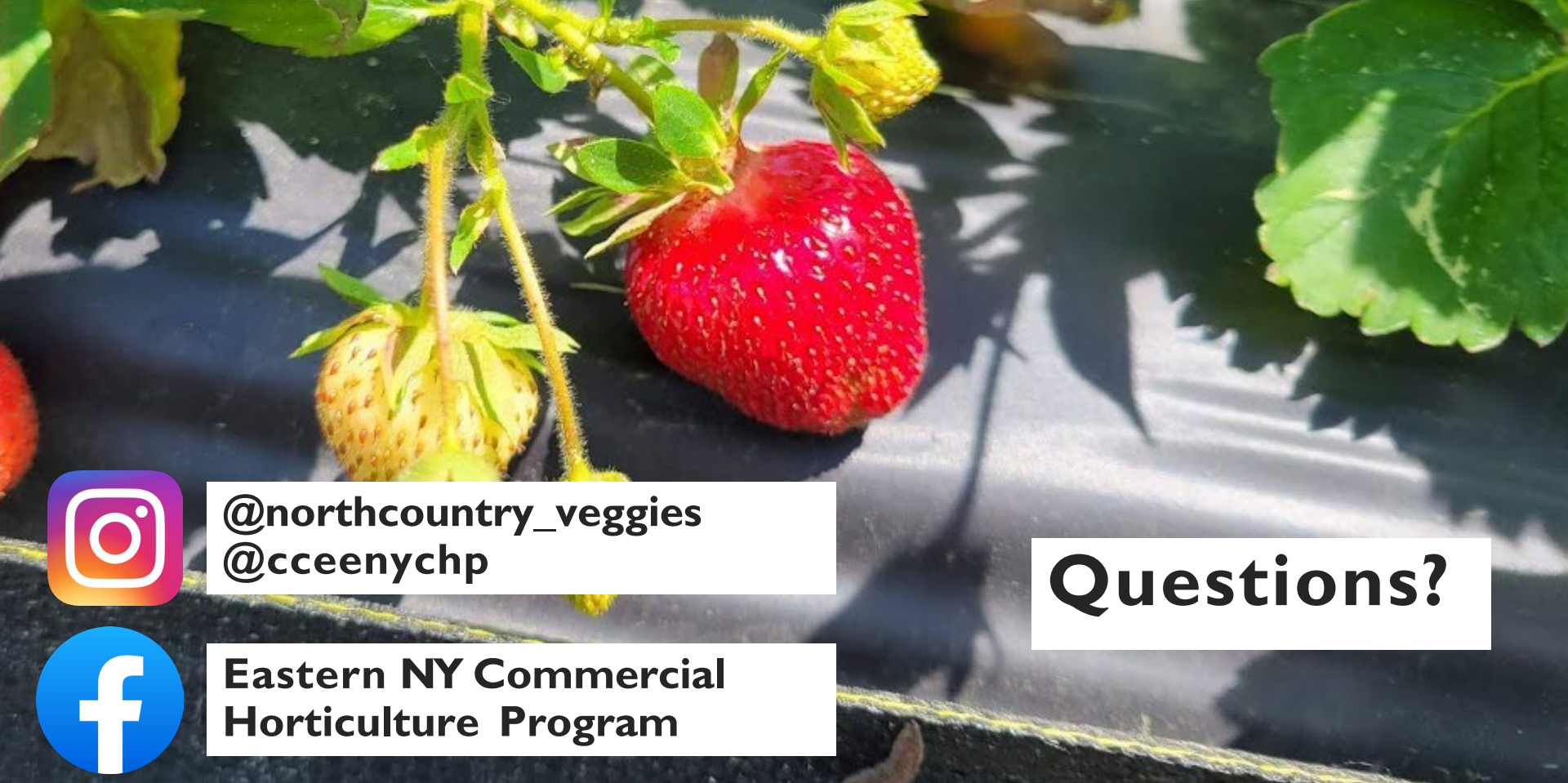
- Andy Galimberti
- Natasha Field
- Jennifer Stanton
- Cole Trager

Low tunnel farm hosts

University of New Hampshire

- Kaitlyn Orde
- Woodman Farm staff
- Shiloh Favreau





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**Eastern NY Commercial
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Questions?