

Dayneutral Strawberries



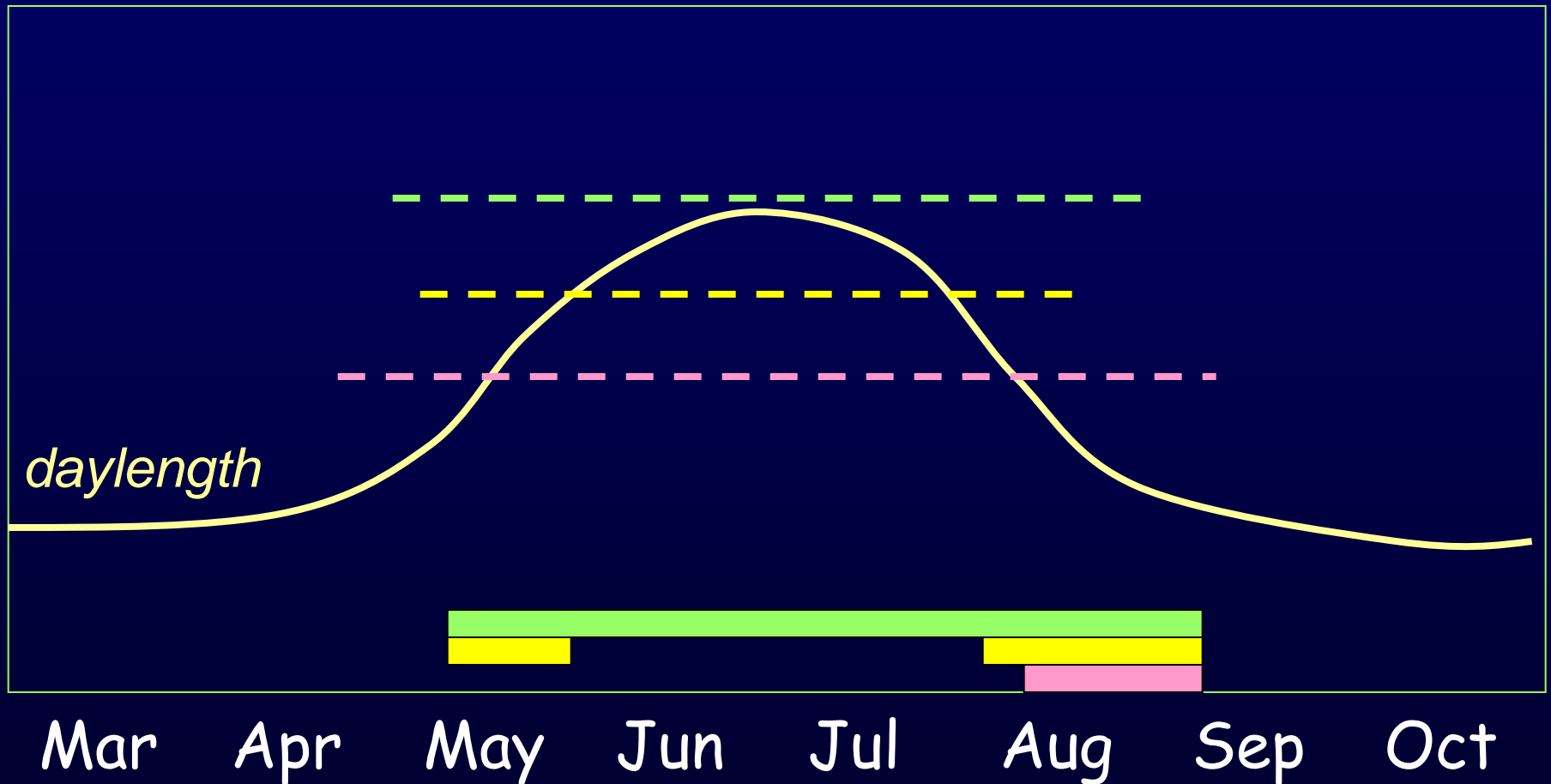
Becky Sideman, UNH Cooperative Extension
Small Fruits: Options & Opportunities – March 8, 2011

- Dayneutrals vs. June-bearers
- Varieties
- Plant Management
- Pest Management

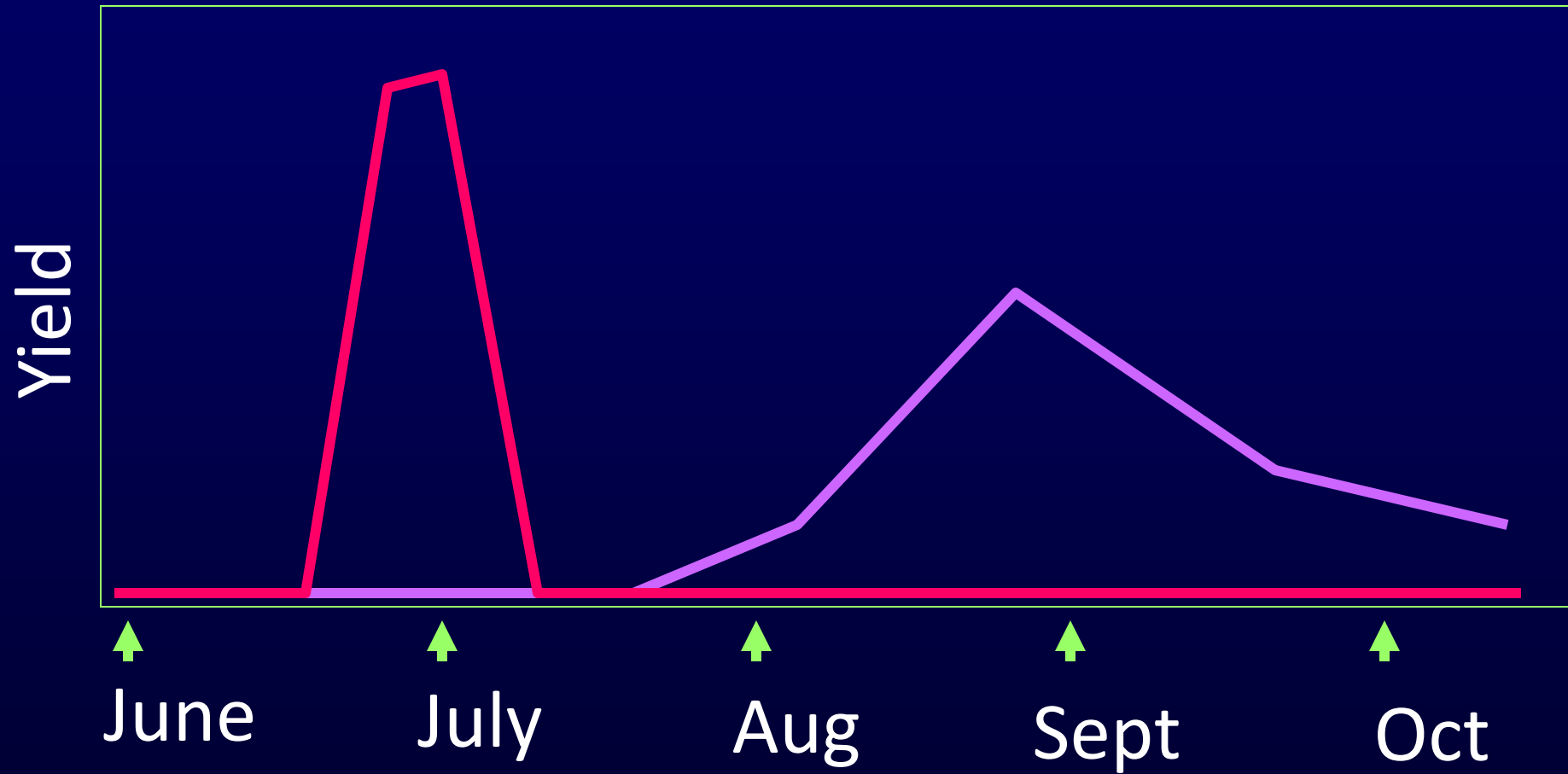
'June-bearers' – form flower buds in short days, 45-85F

'Everbearers' - form flower buds under slightly longer days

'Dayneutrals' form flower buds independent of daylength



Dayneutral strawberries vs. June bearers



Day-Neutral Strawberries

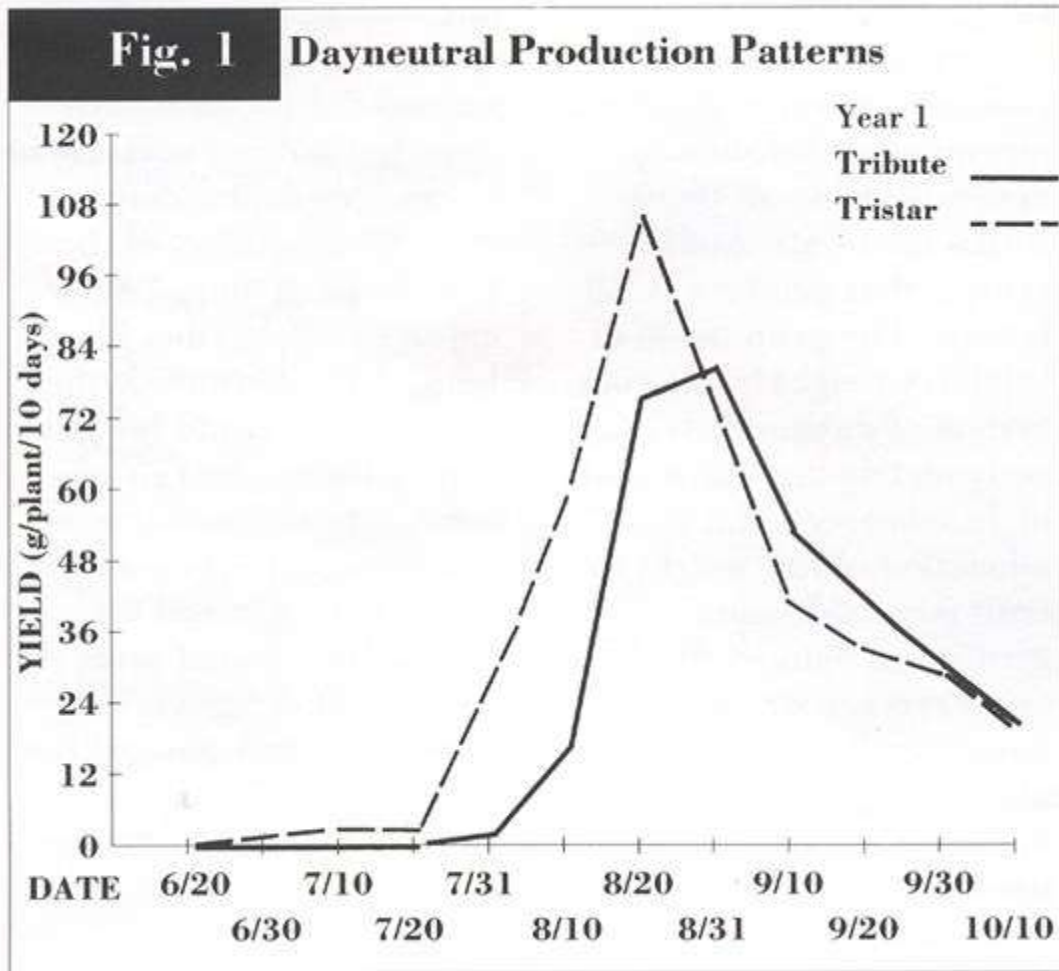
Flower & fruit throughout summer

Runners form during summer



Aug 22

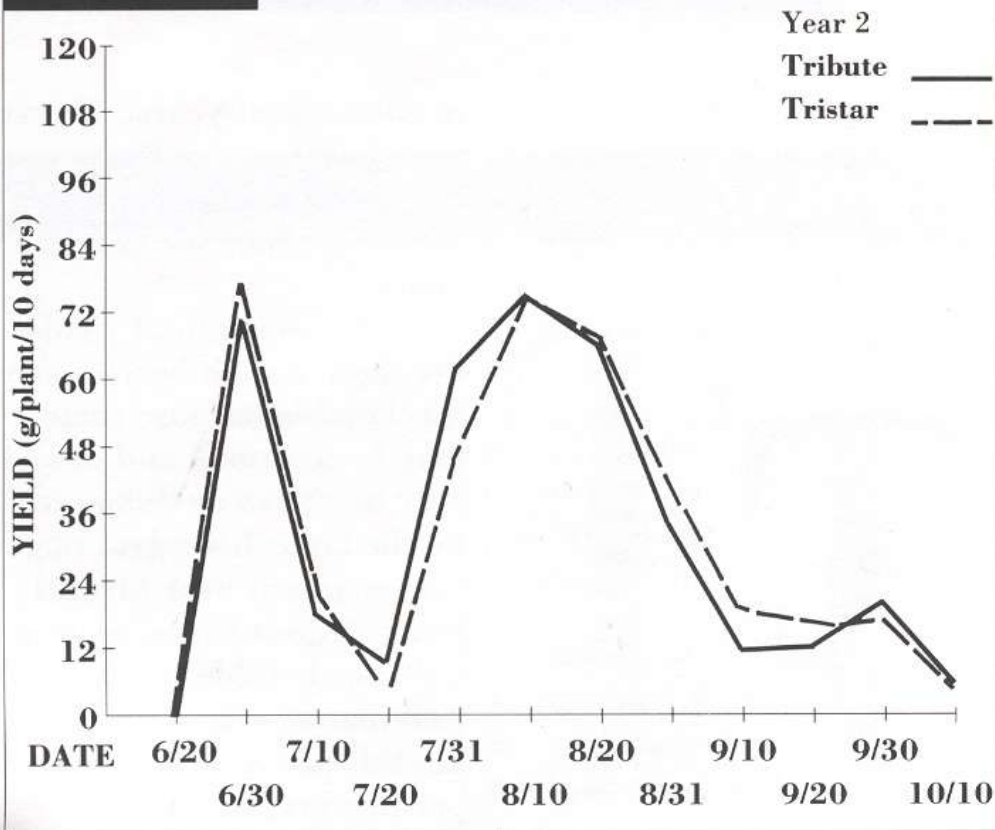
Year 1 - production



Source: Dayneutral strawberry production guide, M. Pritts

Year 2 - production

Fig. 2 Dayneutral Production Patterns



Total yield similar to June-bearers: 10-20,000 lbs/acre

Source: Dayneutral strawberry production guide, M. Pritts

Day-Neutral Strawberries

- Can be grown as perennials
- Very short bed life (2-3 yr.)
- Yield ~ 1/2 June-bearers
 - harvest over 6-8 weeks
- Little to no renovation possible (flowering all summer)
- Pest control is difficult
- Recommended alternative: grow as annuals



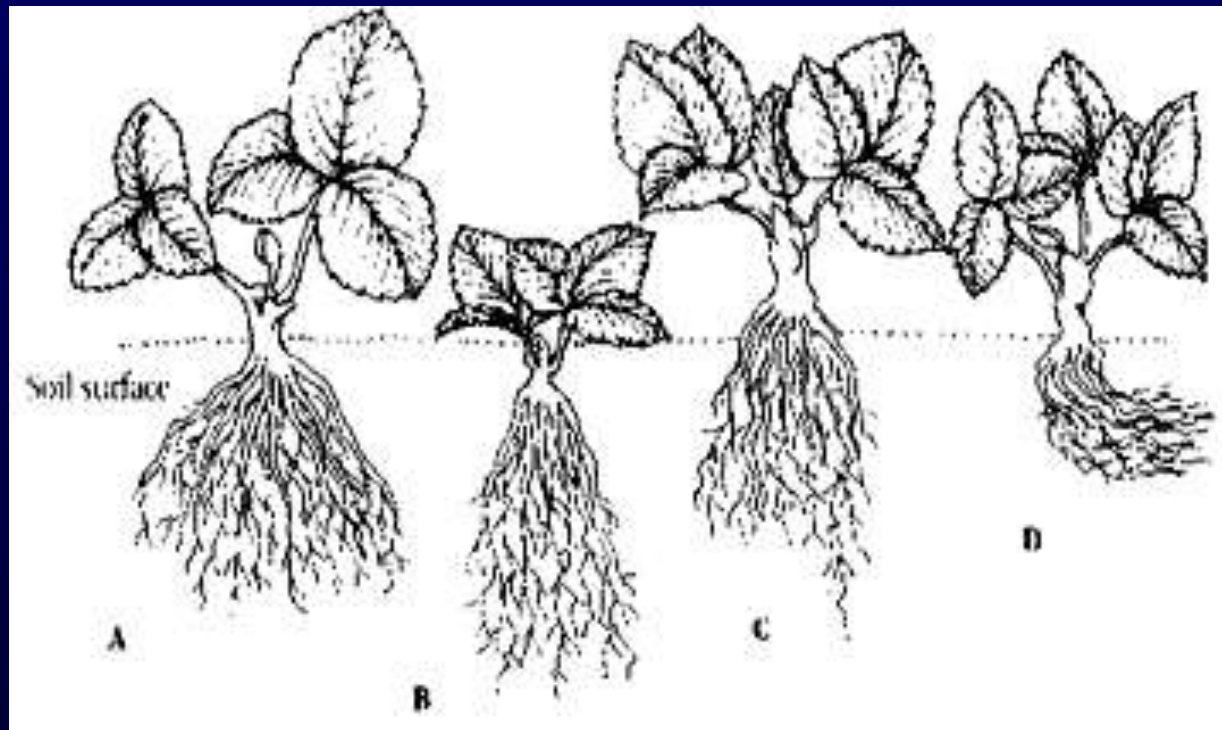
Day-Neutrals as Annuals

- Plant in May
- Use raised beds (6-10")
- Med-High density planting
 - 8-10" spacing, double rows 12" apart
 - (26-32,000 plants/acre)
- Mulch immediately
 - straw, shavings
 - plastic: black, white on black





Planting Depth



Alabama Cooperative Extension Service

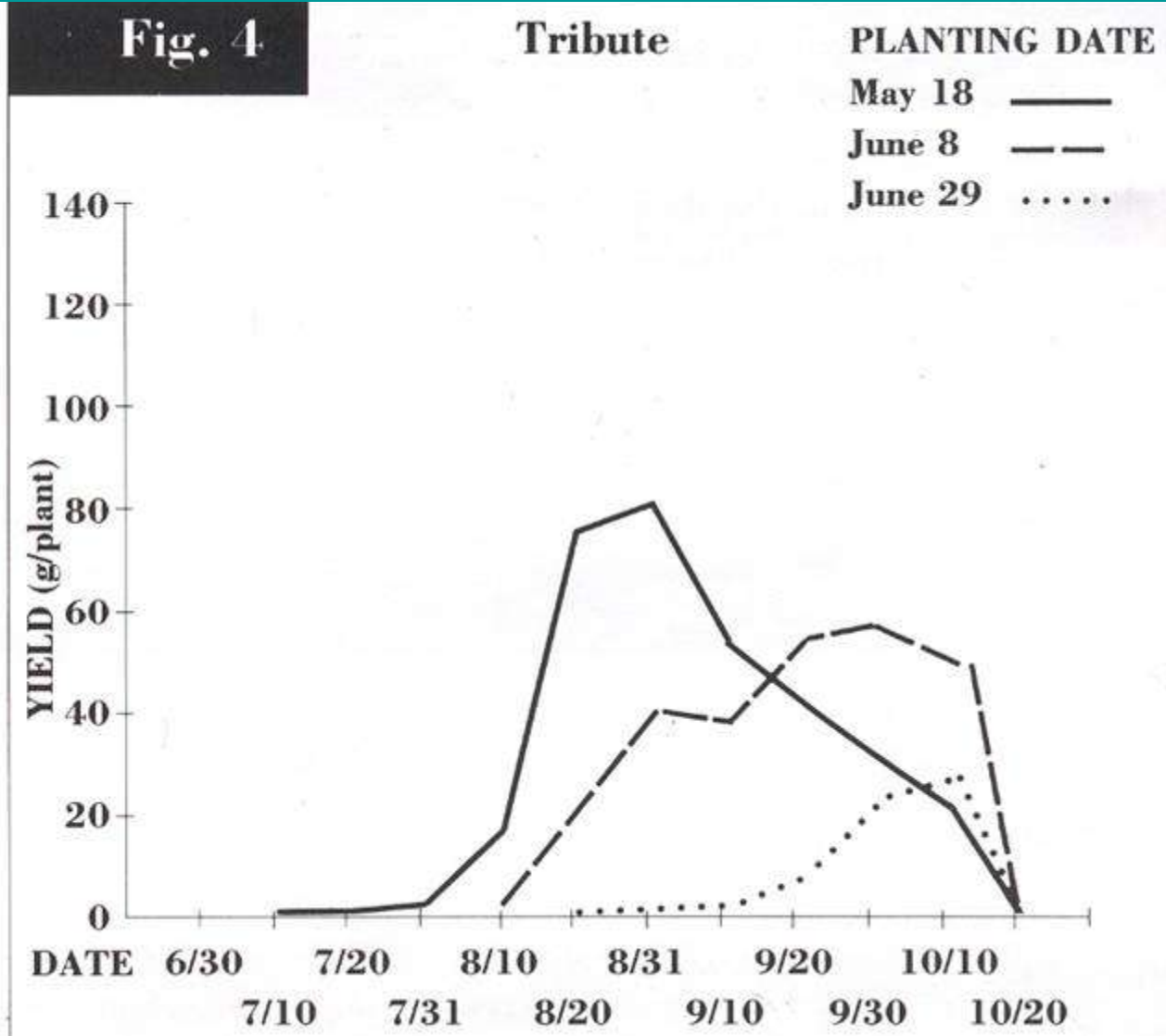


After planting

- Pinch flowers 1st 4-6 weeks
 - encourages plant growth
- Remove runners
- Harvest late July
until frost
- Plow under OR
try to overwinter

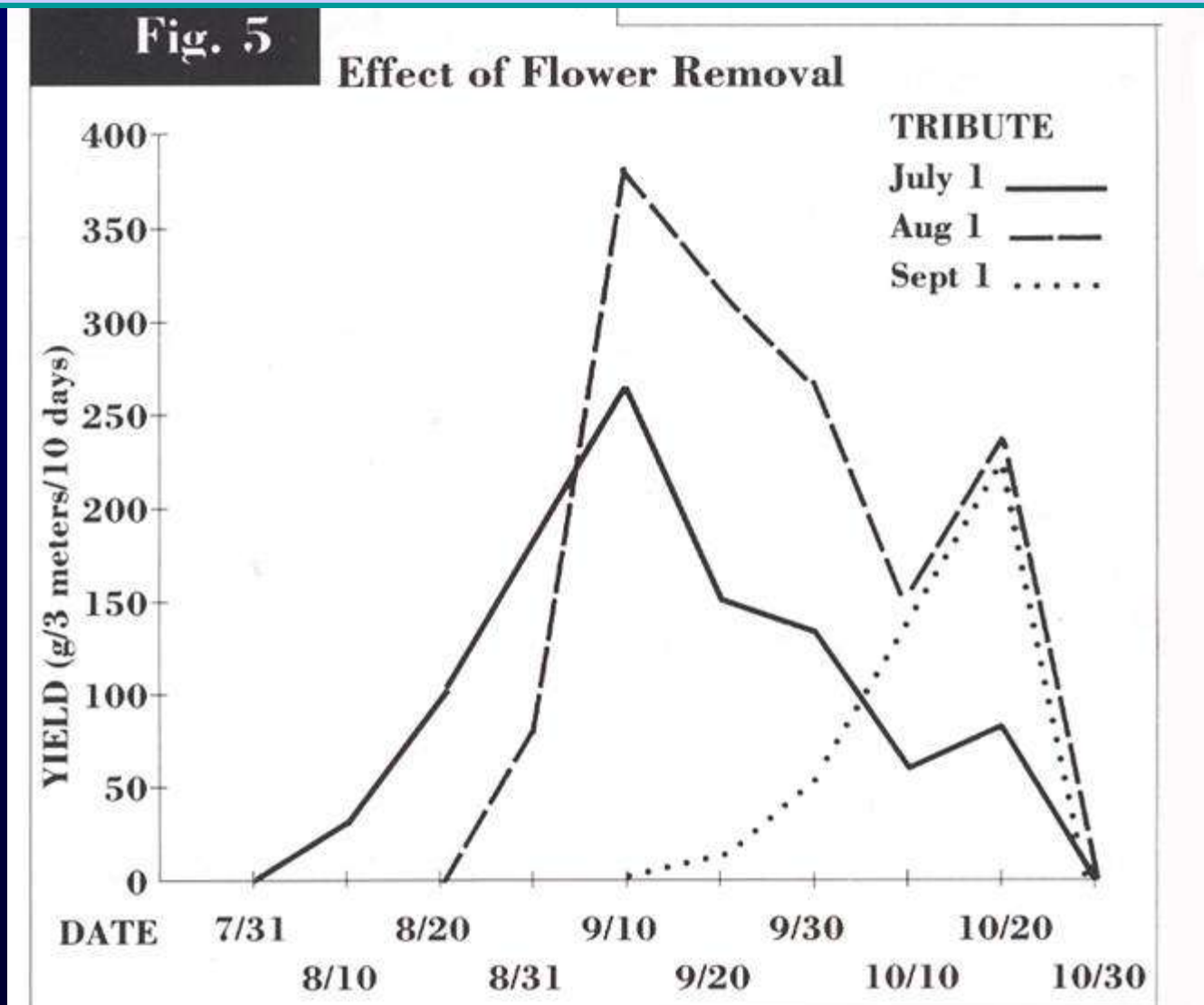


Important: Plant early



Source: Dayneutral strawberry production guide, M. Pritts

And remove flowers for 4-6 wks



Source: Dayneutral strawberry production guide, M. Pritts

Fertility

PLANTING YEAR:

- Slow release fertilizer *OR*
- Weekly fertigation:
 - 5-6 lbs N/acre and 2 lbs K/acre

Organic fertilization will require experimentation.

Tissue testing may be helpful



Overhead Irrigation System



- **Benefits**
 - Rapid water application
 - Plant cooling if temperatures exceed low 90's
 - Frost control
- **Vs. Drip – less water used**



- Heat >85F

Variety Selection

·OLD EVERBEARERS: Ozark Beauty, Ft. Laramie, etc.

·‘Older’ DAYNEUTRALS: Tribute, **Tristar**

·NEW DAYNEUTRALS: **Seascape**, Everest, Diamante, Evie2, Albion, Flamenco



In UMaine research plots, Albion has been too late to give good yields, although quality is very good. Evie-2 has had high yields, but fair quality, and Seascape has emerged as high yielding and high quality.





Haygrove Tunnel, Four Corners Farm,
S. Newbury VT. July 27.

Pest & Disease Management

Tarnished Plant Bug

Spider Mite

Botrytis/Gray mold

Anthracnose

Gray mold – *Botrytis cinerea*



Anthracnose – *Colletotrichum* spp.



5407876

Photo: University of Kentucky, John Hartman

Botrytis/Gray mold

Anthracnose



- Keep fruit harvested.
- Minimize overhead irrigation, or wet conditions
- Several fungicides listed in the guide.
 - ROTATE, and select those with short days to harvest!

Tarnished plant bug

- Take precautions to protect pollinators!
- Pay attention to: Days to harvest, Effects on beneficials, and Odor

Danitol (2) – hard on beneficials

➡ Brigade (0) – hard on beneficials, Restricted

Dibrom (1) - Restricted

Thionex (4), Malathion (3), Cythion (3) – many DTH

Pyganic (0) – for organic growers, but LOW efficacy

➡ Assail (1) – more targeted than pyrethroids

➡ Mycotrol (0)– *B. bassiana*, biocontrol

Two-spotted spider mite

- Avoid stress: Drought, Dust, Excess Fertility
- Encourage predators (limit insecticides!).
- Biocontrol w/ predatory mites (?)
 - *Neoseiulus fallacis*

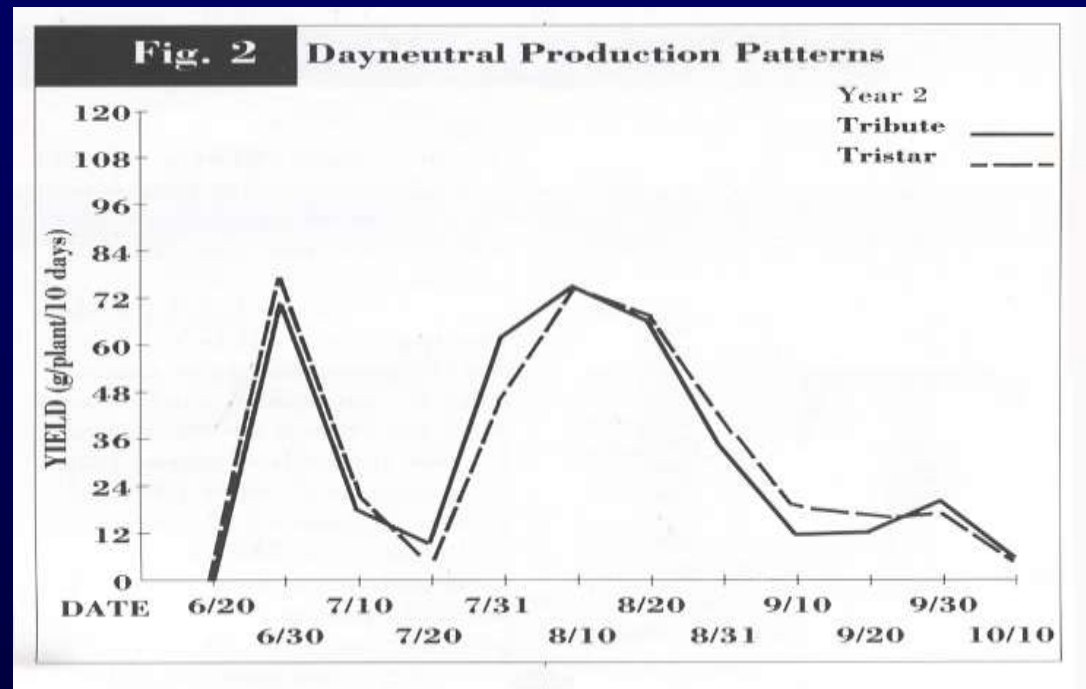


Photo: OMAFRA

If you overwinter dayneutrals:

- **Apply 3” mulch in late fall**
 - **Pine needles, clean straw**
 - **or heavy duty rowcover**
- **Be prepared for spring frost protection**
 - **Overhead irrigation**

Mow at first petalfall to sacrifice June crop for fall crop



Caution: Quality in yr2 is less good;
smaller & softer

Resources:

Cornell Berry Diagnostic Key

<http://www.fruit.cornell.edu/berrytool/index.html>

Dayneutral Strawberry Production Guide (1989):

<http://ecommons.library.cornell.edu/handle/1813/3275>

Dayneutral Strawberries: Off-season opportunities (2009)

http://www.newenglandvfc.org/pdf_proceedings/2009/DNStrawOSO.pdf