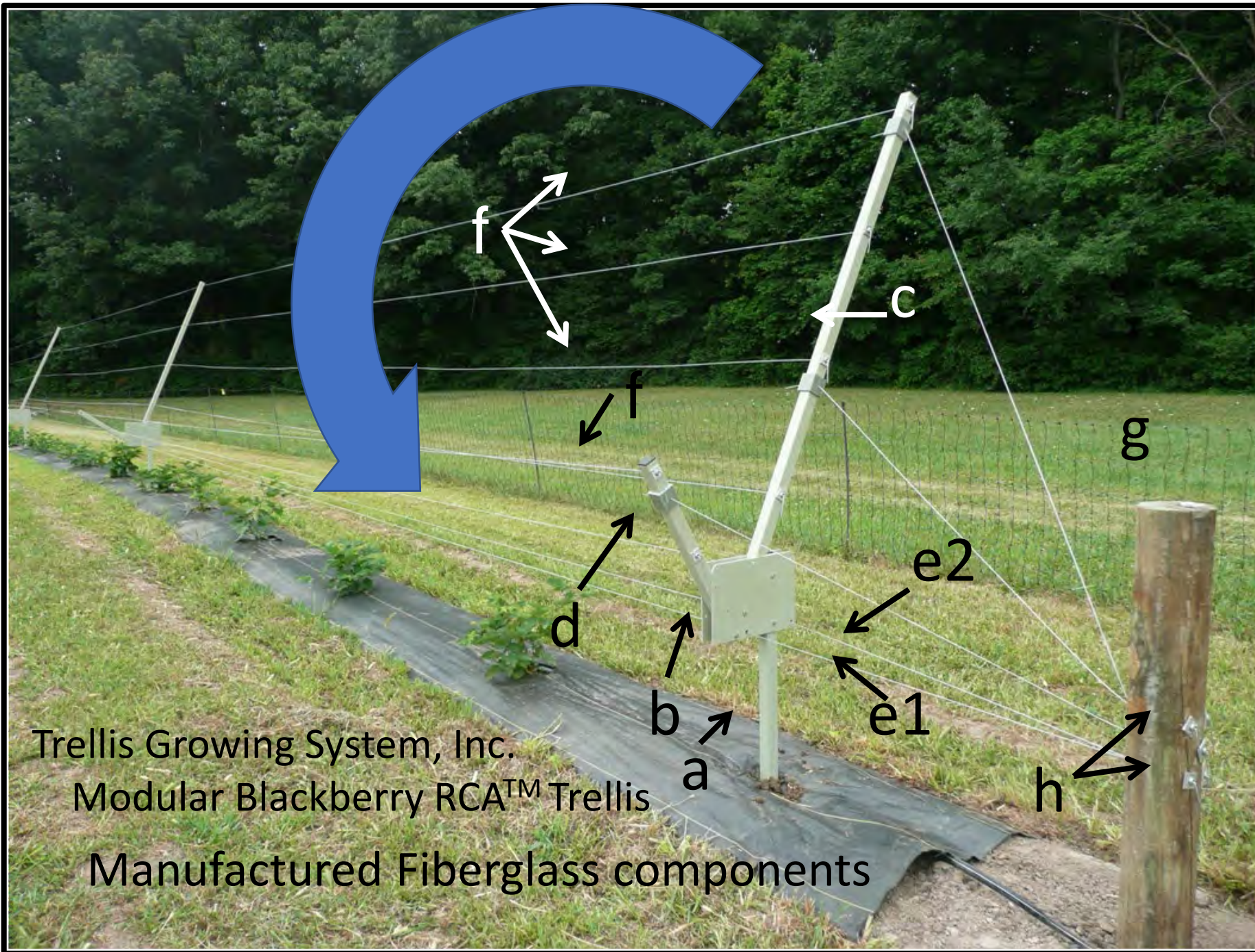




# Blackberry trellis and training systems

- 1. Winter protecting floricanes-fruiting blackberries in northern states**
- 2. Alternative primocane training technique for 'Prime-Ark Traveler' and 'Prime-Ark 45' primocane fruiting blackberry**

Fumiomi Takeda, Research Horticulturist  
USDA-Agricultural Research Service  
Appalachian Fruit Research Station  
Kearneysville, WV 25430



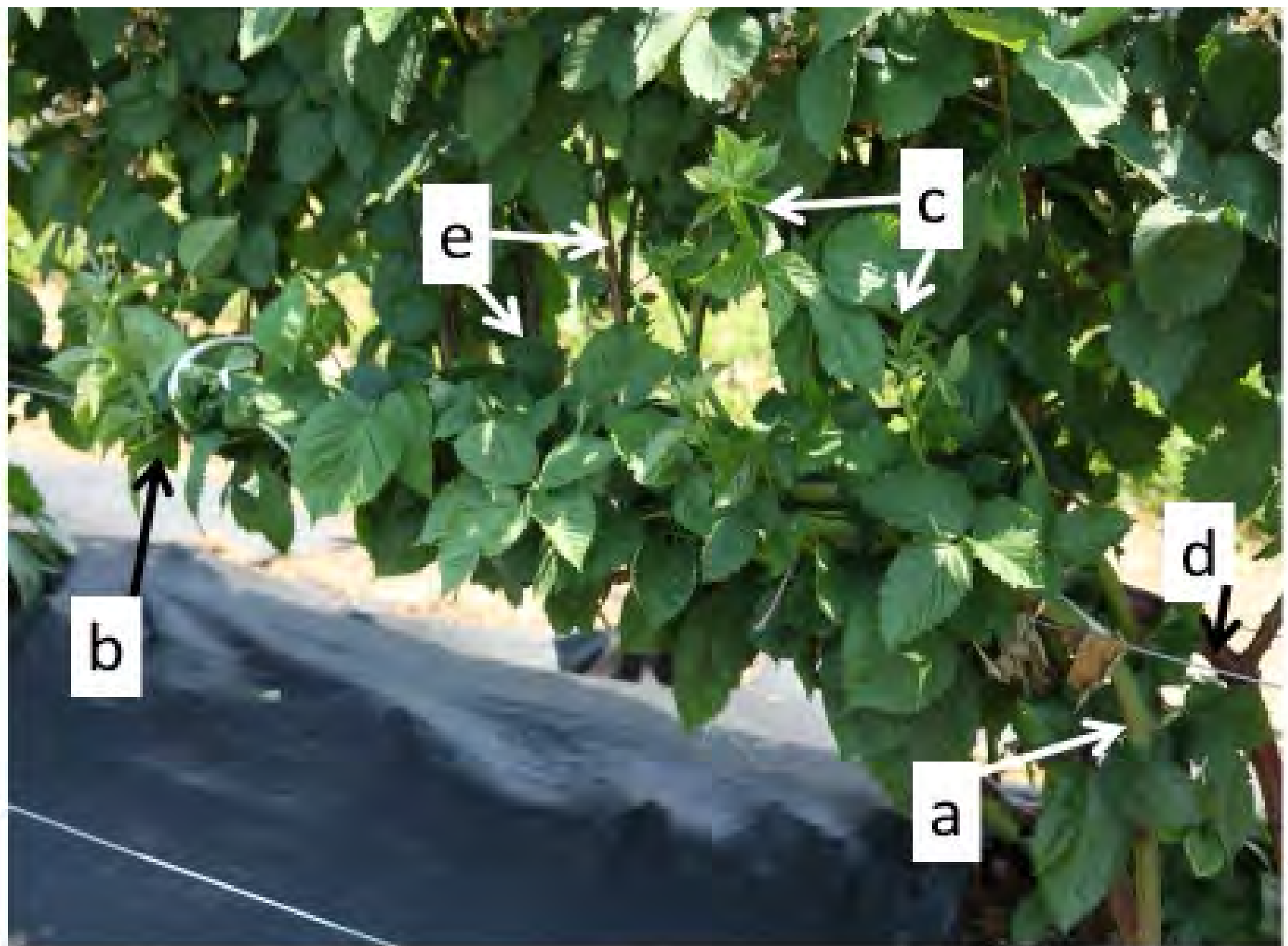
# Traditional floricanes fruiting cultivars:

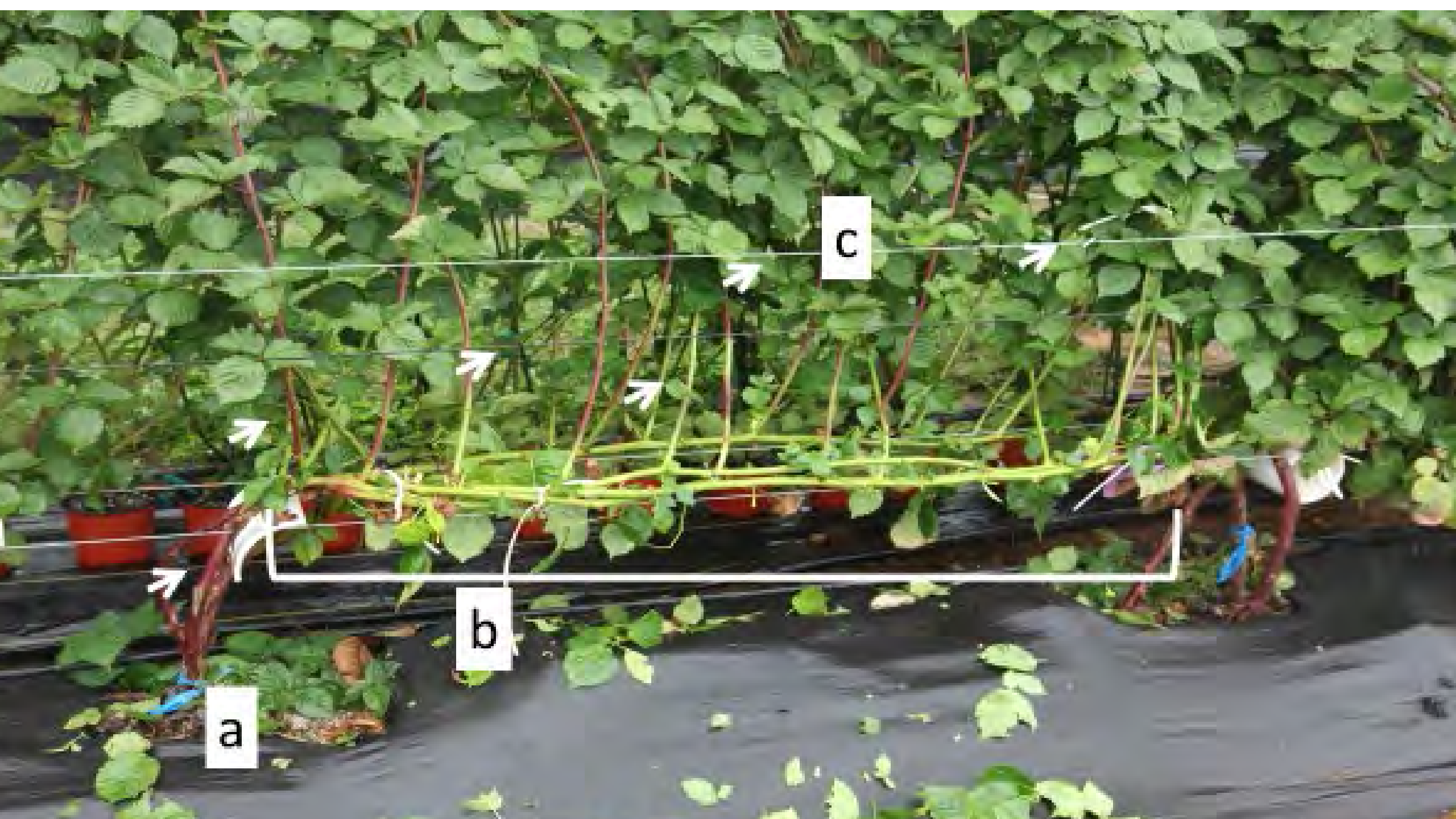
- Two-year life cycle
- Primocanes from perennial root system in year 1.
- Canes overwinter
- Flower and fruit on wood (floricanes) following season











c

b

a

















# Triple Crown Yield

	Clusters/Plant (no.)	Yield (lbs.)
2013	<b>332</b>	<b>34</b>
	Range: 325 to 340	Range: 14.2 to 16.8
2014	<b>309</b>	<b>30</b>
	Range: 219 to 398	Range: 27 to 33

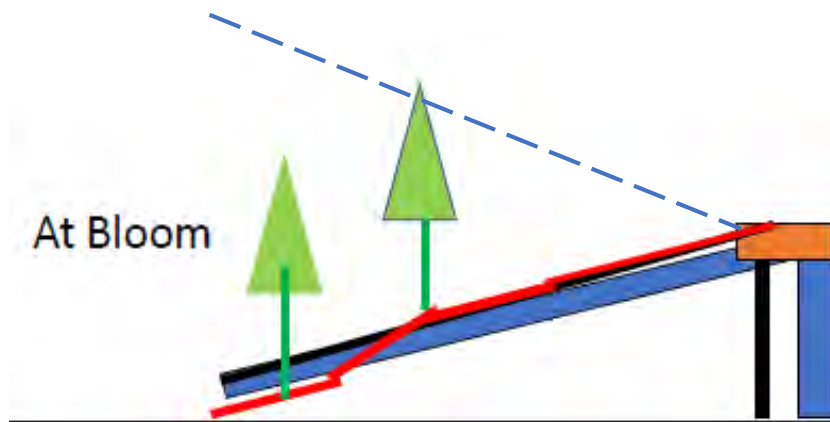




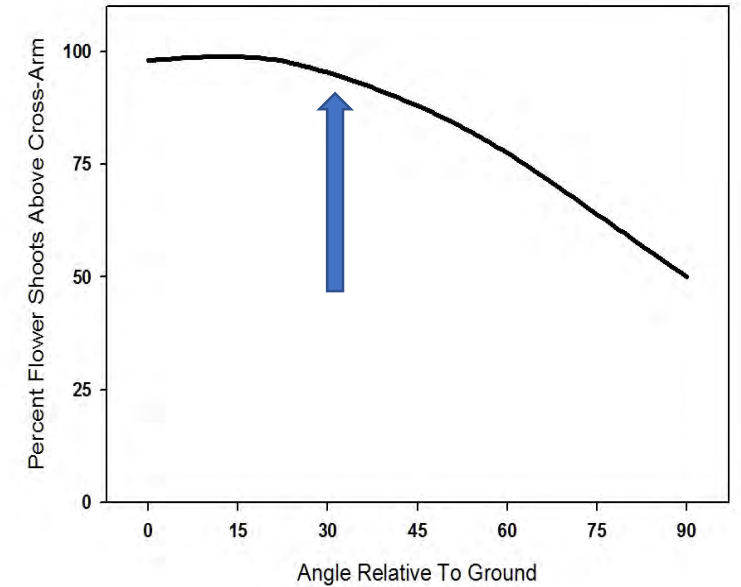
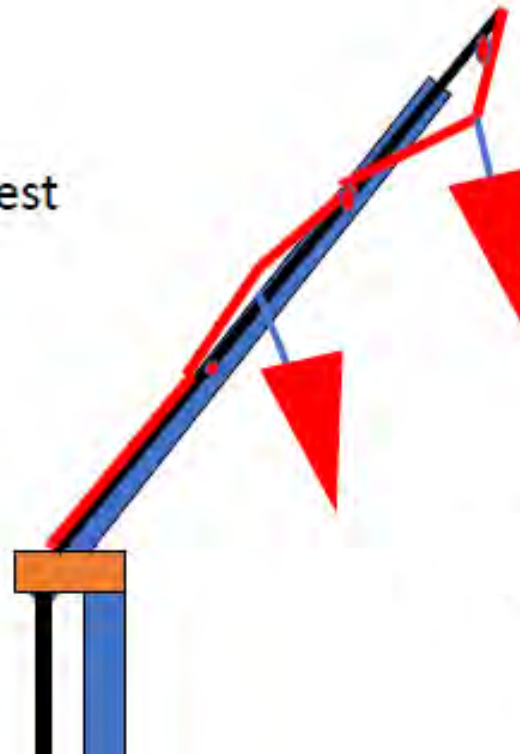
**Promote all flower inflorescences to grow upward.**

**After rotating the cross-arms up and over, flower and later fruit clusters are now on one side of the plant.**

**Importance of having lateral canes oriented horizontally at bloom**



At harvest





Recommended  
additional inputs to  
RCA trellis:

Tie-back wire





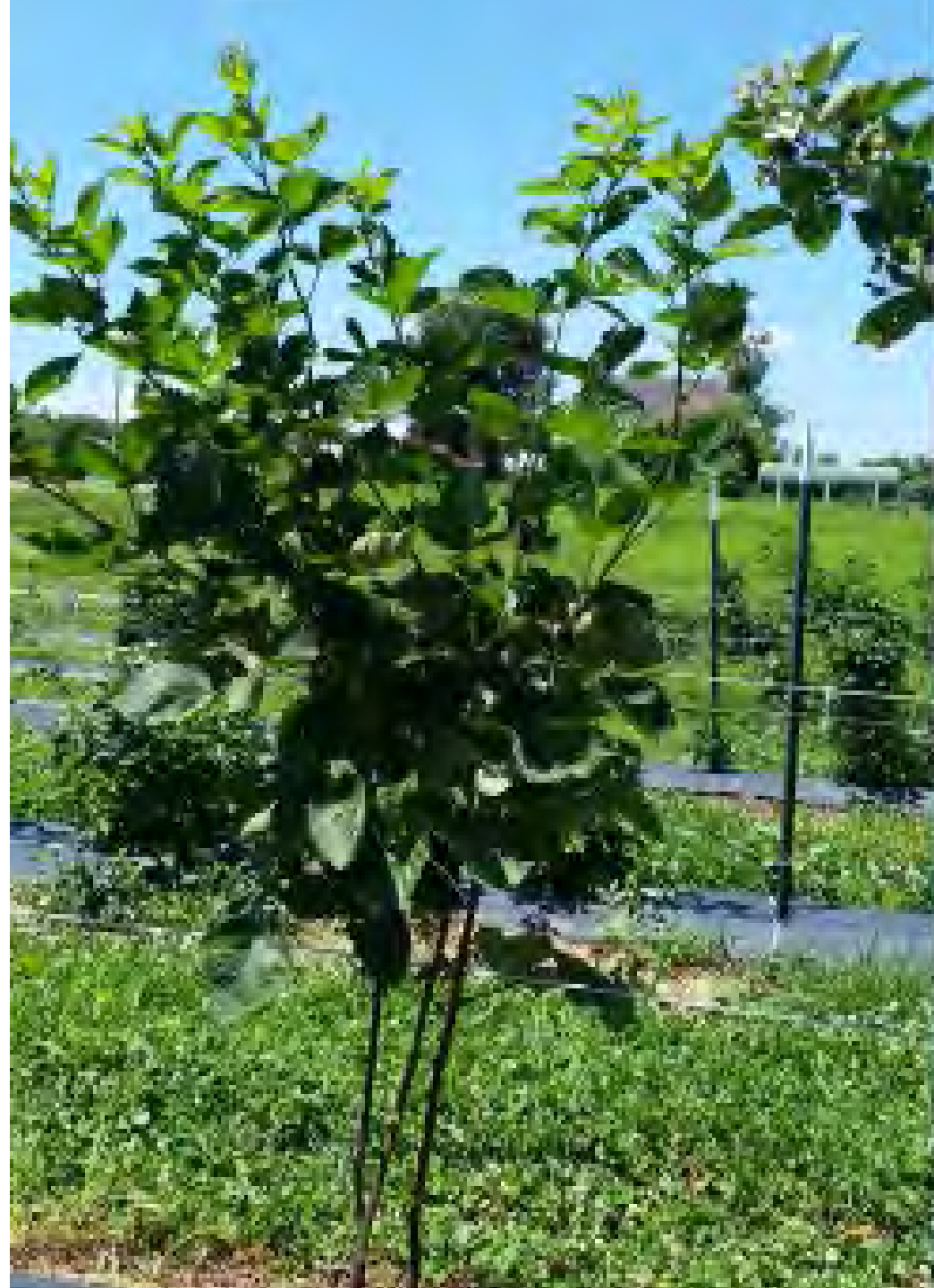
Problems with using standard cane training on the RCA trellis

Install larger flange plate →



# Primocane-fruiting Blackberry

- Generally trained to grow straight up
- Hedged in early summer to promote branch canes



**Alternative Method: Would modification of primocane training system developed for the RCA trellis work for PF blackberry?**

**‘Triple Crown’**

**primocanes  
trained on RCA  
trellis**





What happens when upright primocanes are bent and trained to grow horizontally?



# Would defoliation help?





# Primocane bending training method and leaf removal show potential!





Flower shoot development is increased by bending primocanes of PF raspberry plants.



# Outcome of alternative primocane training system:

- Plant density is 50% of standard system
- Canopy is less dense
- Fruit at similar and manageable picking height
- Ease of picking
- More fruit per primocane
- Change in initial harvest and peak harvest dates and harvest duration

Additional research:

No complete primocane management system

Collecting data on summer/fall and  
spring/summer primocane initiation

Data on labor

Conduct economic analysis

Cost for trellis component will be higher

# Questions?

Contact information

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