



# **Mid-Atlantic Grower Experiences with Honeycrisp**



# Grower Panelists

Zoe Milburn, Elkton, MD

Bennett Saunders, Piney River, VA

Joe Lerew, Lerew Orchards, York Springs, PA



# Zoe—Milburn Orchards

- 6 acres of Honeycrisp
- Preferred rootstock—G.11
- Market—U-pick and retail
- Major challenges—Lenticel breakdown/decay  
sunburn





# Bennett—Saunders Brothers Orchard

A photograph of five men walking through a cherry orchard. The trees are in full bloom with pink blossoms. In the background, a white house is visible. The men are dressed in casual work clothes, including shirts, jeans, and caps. One man is holding a small branch with blossoms.

3.5 bearing acres; 5 non-bearing  
Prefers B. 9 rootstock at 3 x 13 ft  
Market—Farm markets, city markets  
Major challenges—Bitter pit, rot, getting trees to fill space



# Joe—Lerew Orchards

- 32 acres of Honeycrisp
- Prefers M.26 rootstock at 6 x 16 ft
- Market—Fresh packed
- Major challenges – Bitter pit, getting 4 supervisors and 60 harvesters on same page for spot picking





**4 QUESTIONS**



# Site Selection and Pre-Plant Tips?





# Pre-Plant Considerations that have Long-Term Impacts






# Site Selection and Pre-Plant Tips



JAN 07 09:11 AM 1/12 LEREW BROTHERS 717-528-7345 P. 2

**PENNSTATE**  
  
 (814) 863-0841 Fax (814) 863-4560  
 Agricultural Analytical Services Laboratory  
 The Pennsylvania State University  
 University Park PA 16802  
<http://www.aal.psu.edu>

SOIL TEST REPORT FOR LEREW BROTHERS  
 1284 TOWN HILL RD  
 YORK SPRINGS PA 17372

DATE: 11/30/2006 TIME: 8:06:15 AM ANALYST: Adams FIELD NO: Tm-hill

**SOIL NUTRIENT LEVELS**

	Below Optimum	Optimum	Above Optimum
Soil pH	5.9		
Phosphate ( $P_2O_5$ )	435	lb/A	
Potash ( $K_2O$ )	475	lb/A	
Magnesium ( $MgO$ )	704	lb/A	
Calcium ( $CaO$ )	4585	lb/A	

**RECOMMENDATIONS FOR Apply-To Field**

Limestone: 4000 lb/A  
 Magnesium (Mg): NONE  
 Phosphate ( $P_2O_5$ ): NONE  
 Potash ( $K_2O$ ): NONE



# Other Details before Trees are Planted??





A close-up photograph of several white apple blossoms in full bloom, with yellow stamens and green centers. A single, unopened red and white flower bud is visible in the upper right. The background is a soft-focus green, suggesting foliage.

# **Keys to Success: Planting to Full Bearing?**



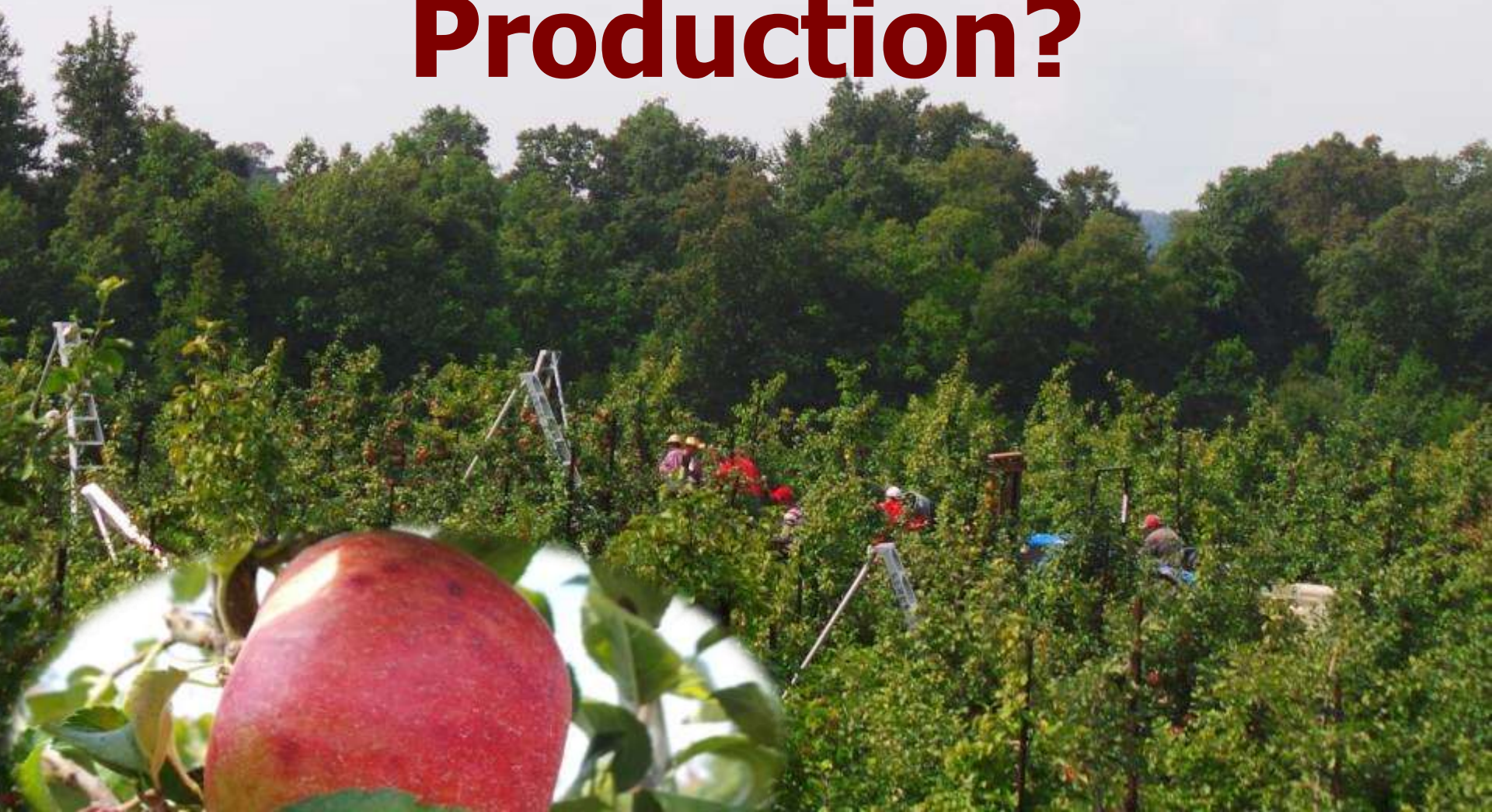
## Planting to Full Bearing

- Plant early
- First 3 years - Grow the tree!
- Maintain a strong central leader





# **Specialized Management at Full Production?**

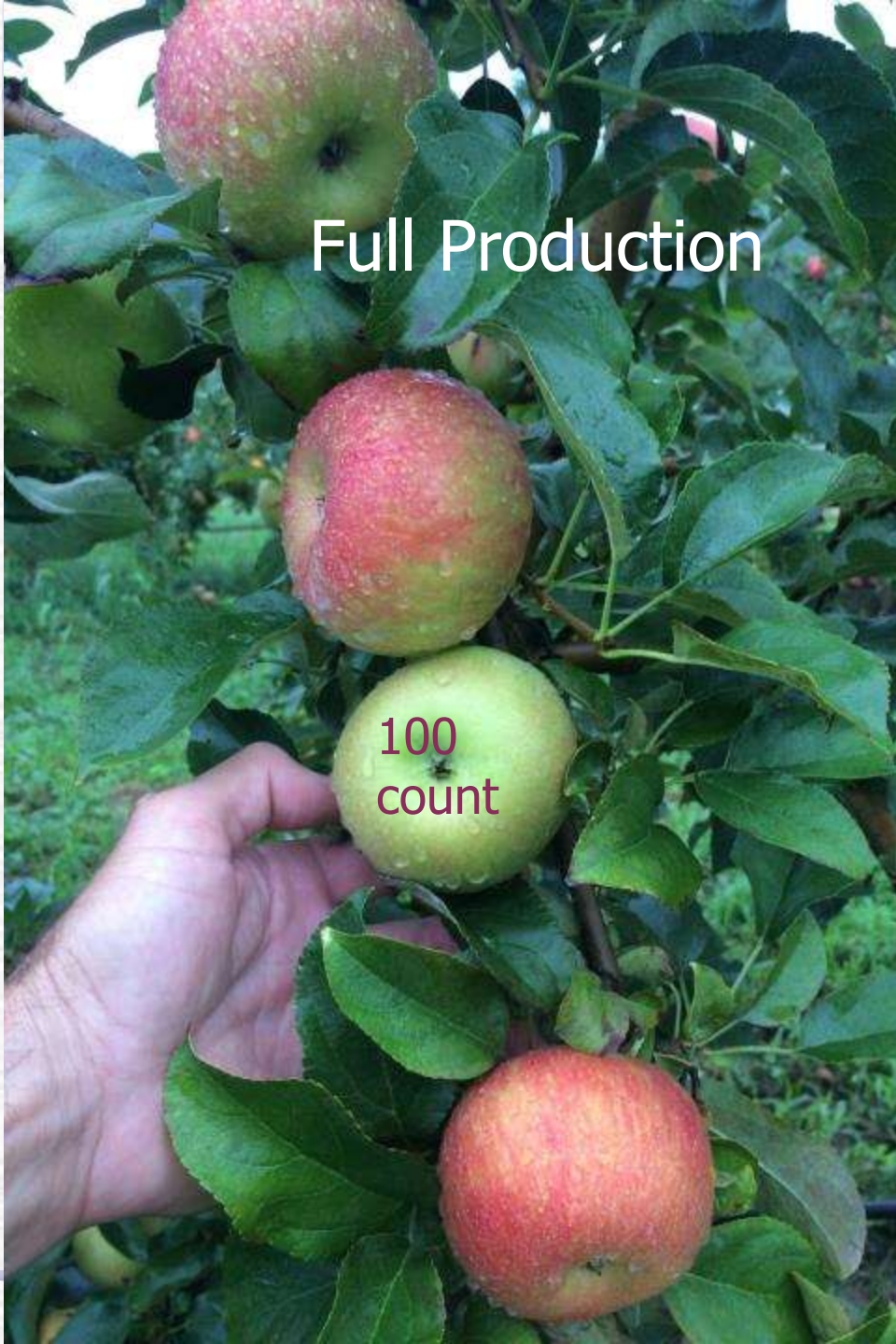




# Weekly Spray Program “Just” for Honeycrisp

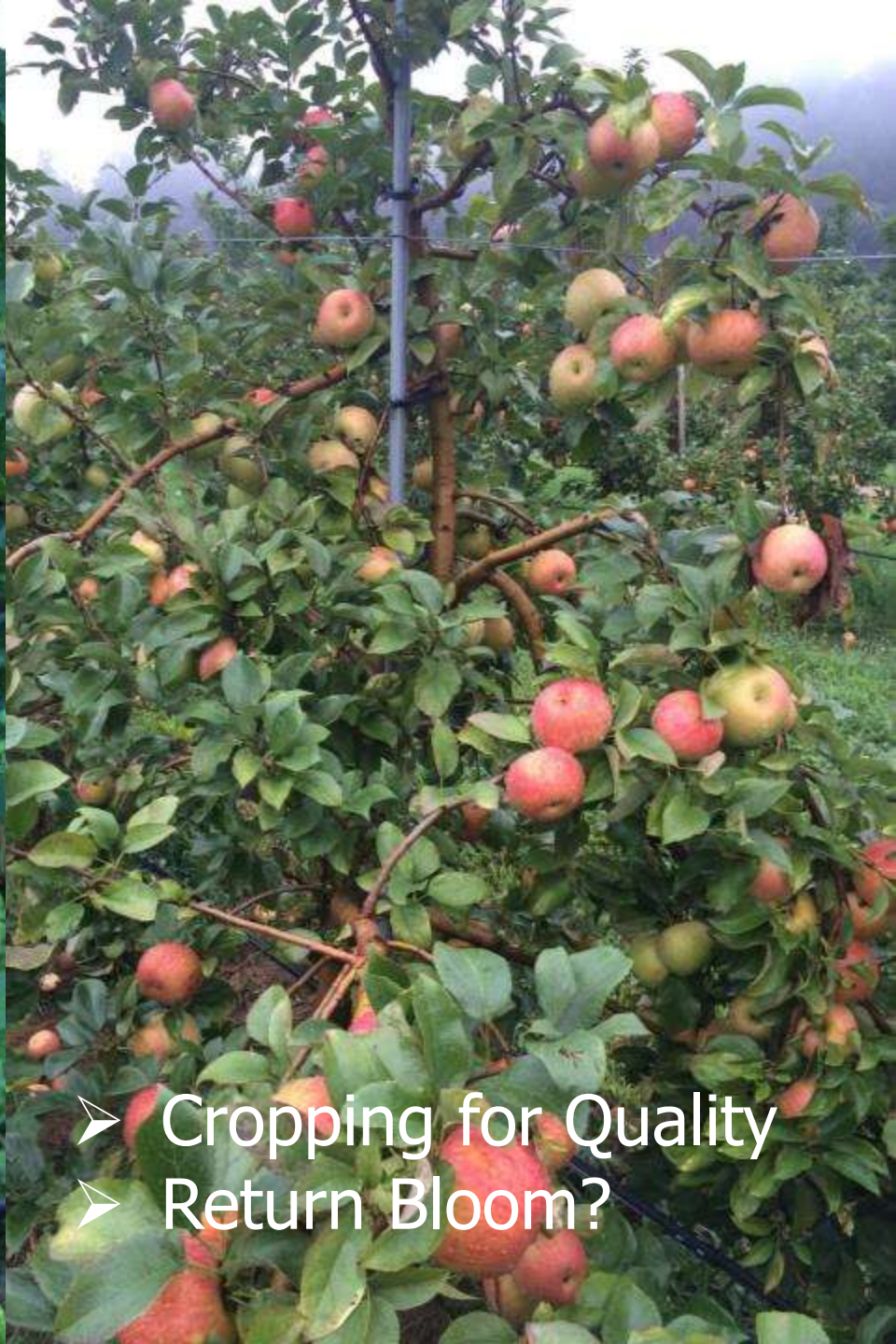






Full Production

100  
count



- Cropping for Quality
- Return Bloom?





- Pruning for balance
- Strategic chemical/ hand thinning
- 8 lbs actual Ca/season for improved N+K+Mg/Ca ratios

#### Pre-Harvest Fruit Analysis Report

Grown:	LEREW BHD	Received Date:	7/1/2015
Growth Stage:	Apple Fruit Pre Harvest	Lab number:	A526
Sample ID:	CLOVER DALE	Submitted by:	
		Reported Date:	8/5/2015
Number of Fruit:	12	Degree Brix:	13.1
Gross Weight (g):	3169.16	Avg Density g/ml:	0.813
Avg. Fruit Size (g):	175.8		

Nutrient Content	"Ca" (g) Basis
	mg/100g
Nitrogen	21.46
Phosphorus	19.57
Calcium	3.58
Magnesium	5.39
Potassium	115.18
Boron	0.48
Manganese	0.65
Copper	0.04
Zinc	0.02
Iron	8.08
Sulfur	2.47

N	K	P	Ca	Mg
Actual	Actual	Actual	Actual	Actual
Target	Target	Target	Target	Target

Calcium levels actually taken up by the fruit during the season. Calcium levels of 1.5 after stage 1 would be an idealized minimum for best storage ability.

Zinc, Magnesium and Boron levels are best treated on a full-year basis and potassium levels. It generally takes several years of attention to achieve levels of Zinc and Magnesium if they are strongly deficient.

Comparisons between samples must take into account sampling history, soil quality/fertility, crop load, fruit size, maturity, leaf quality, vigor and overall tree health.

Nutrient Ratios	N + Mg / Ca	32.09
Ca / B	8.88	30 / Ca
N / B	45.84	
Ca / Mg	6.73	N / P
P / S	4.38	3.95

Actual	Target	Acceptable	Warning



# Harvest and Handling?





# Harvest and Handling









- Assessing maturity along with marketable red color (4 supervisors, 60 harvesters, 5 picks)
  - Care to prevent bruising ( $\frac{3}{4}$  full bin)
  - Drop control before and during harvest







**Discussion?**