


14

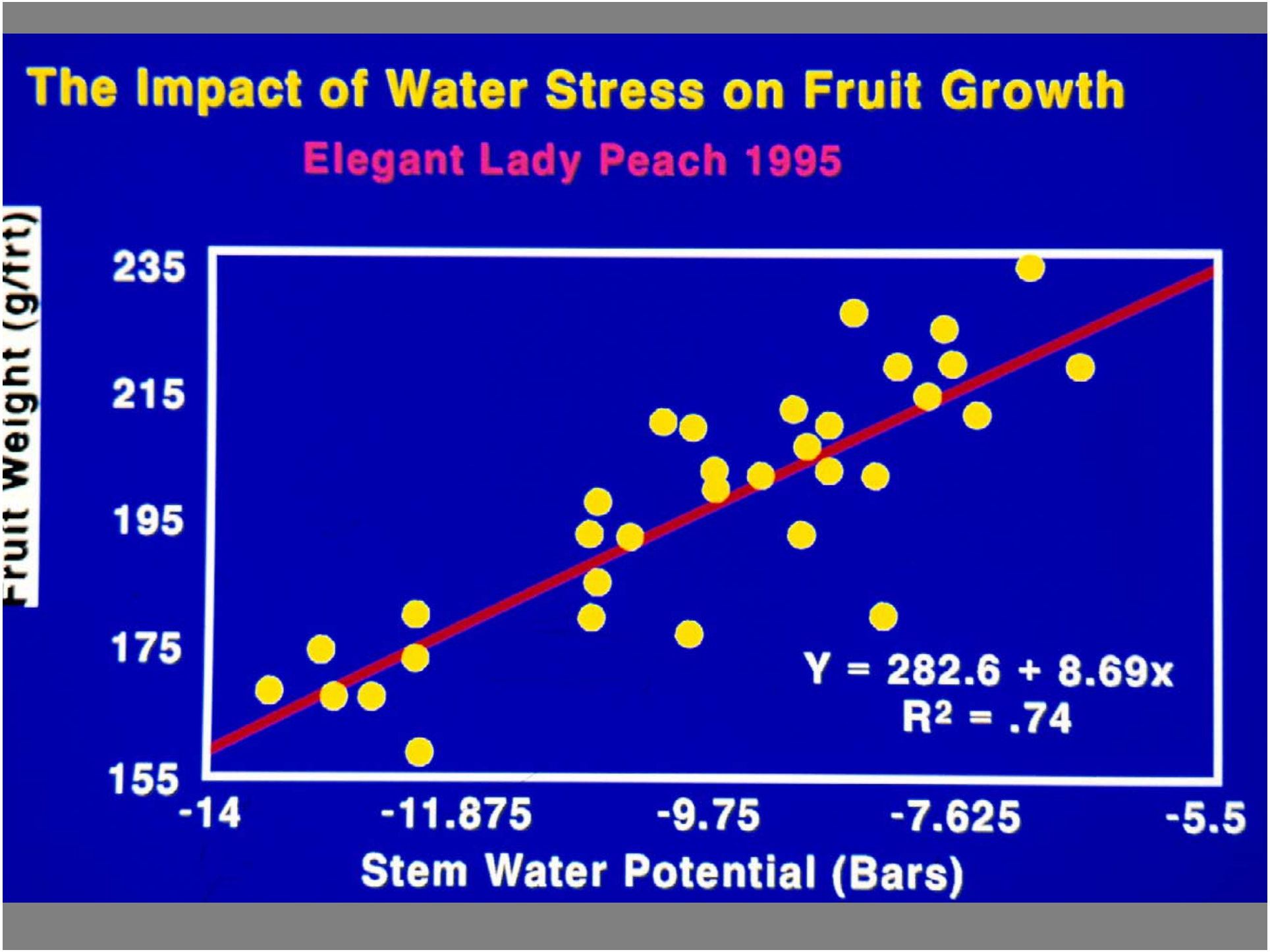











The Impact of Water Stress on Fruit Growth
Elegant Lady Peach 1995
Fruit Weight (g/frt)
235
215
195
175
155
-14
-11.875
-9.75
-7.625
-5.5
Stem Water Potential (Bars)
Y = 282.6 + 8.69x
R² = .74


MF





















































NEMAGUARD


2 K146-43























Dwarfing Rootstocks

P. besseyi
P. tomentosa
Citation
GF 655-2
Damas 1869
Mr.S. 2/5

K 119-50
K 146-43
P30-135
Cadaman
Adesoto 101
VVA-1






RTKWEB


RTWV-1

















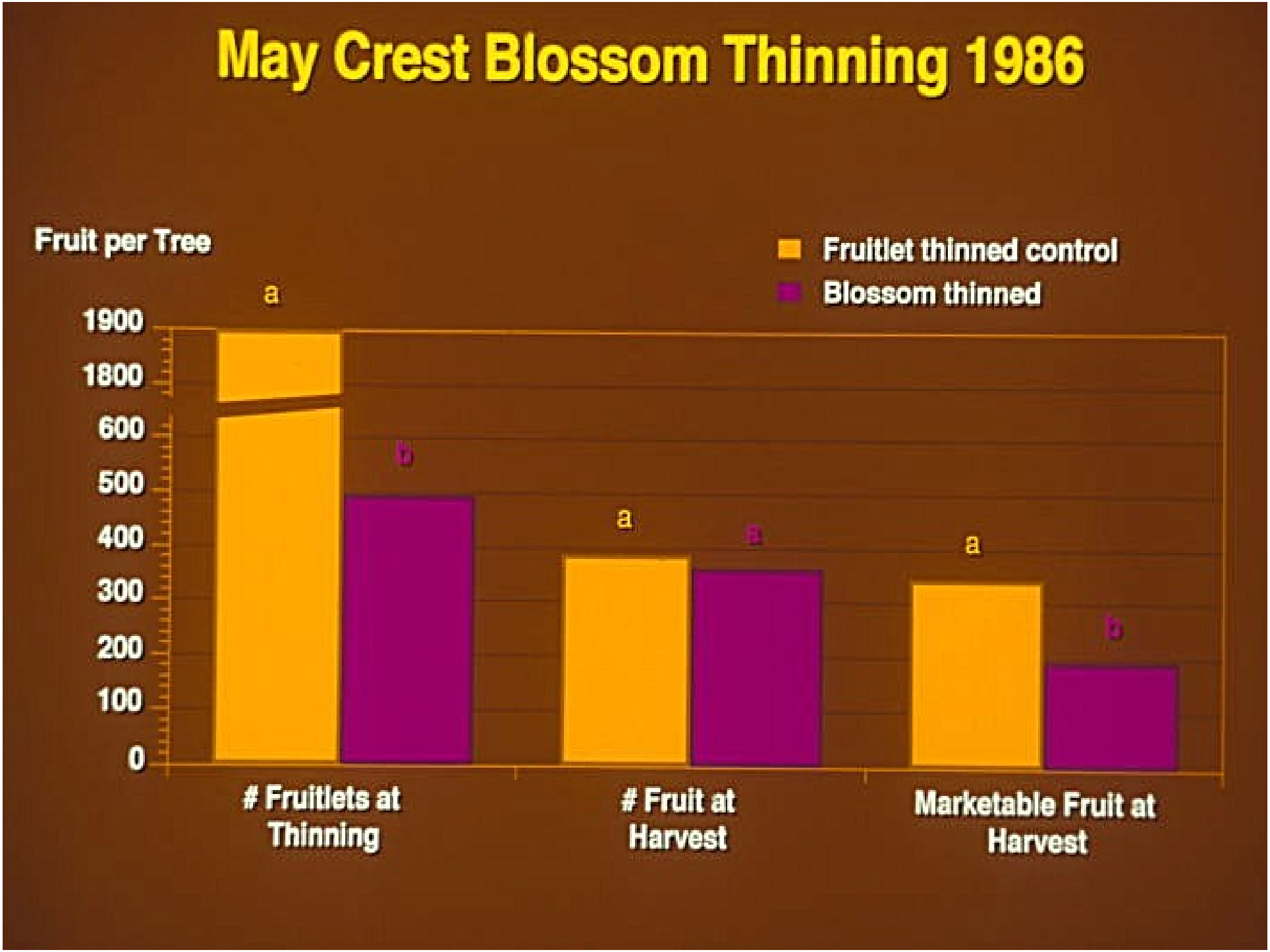




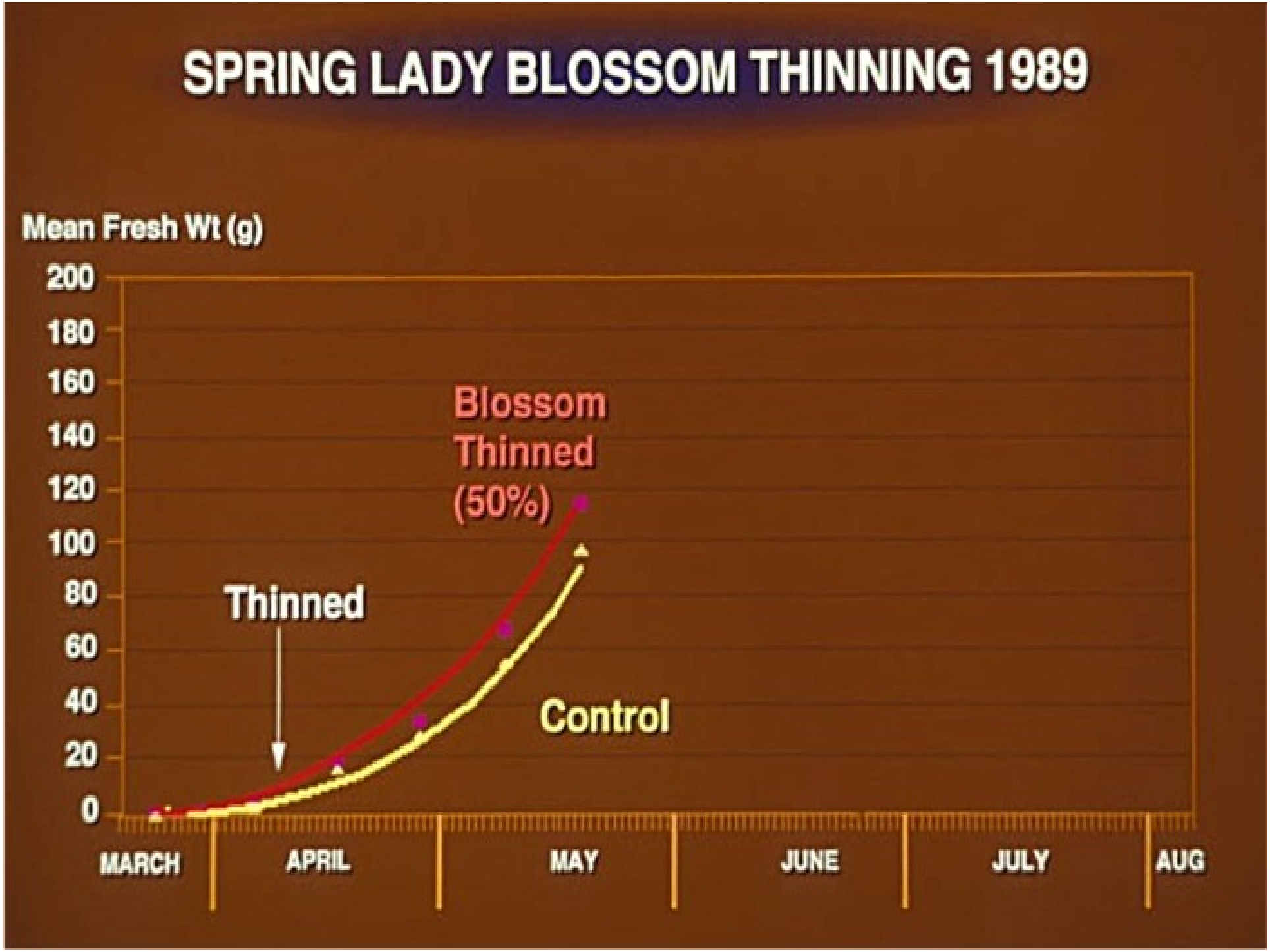


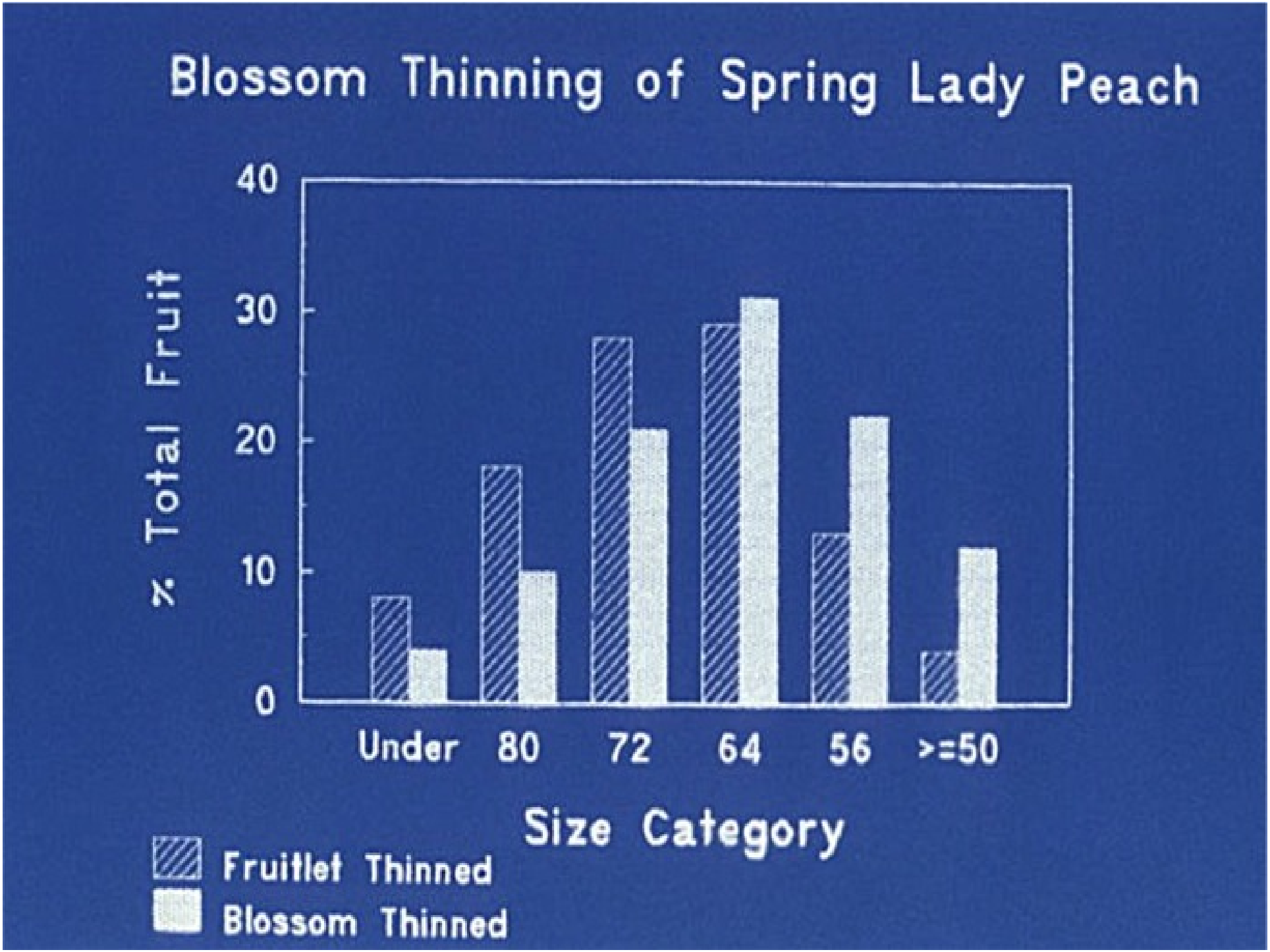


May Crest Blossom Thinning 1986



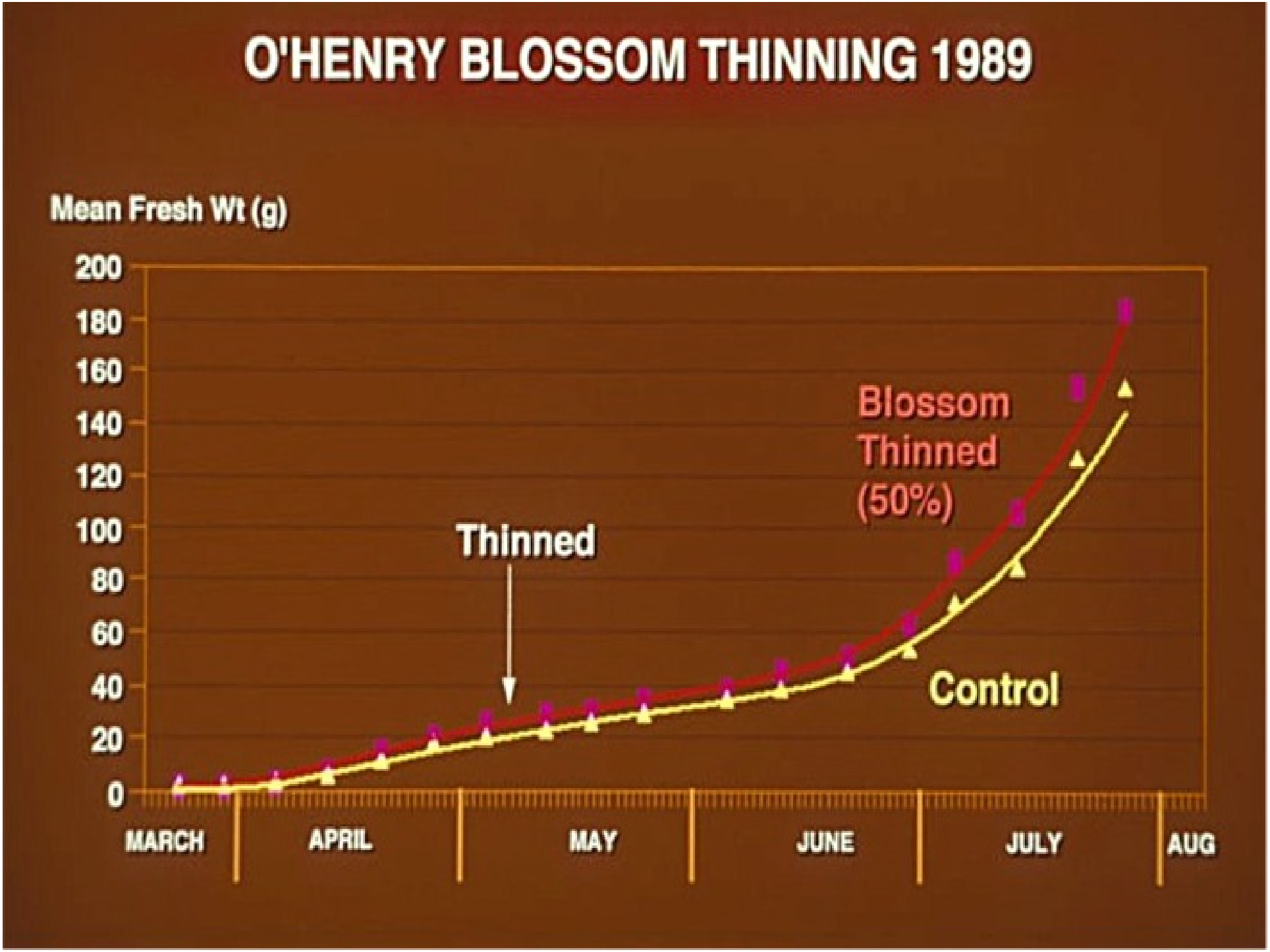



SPRING LADY BLOSSOM THINNING 1989
Mean Fresh Wt (g)
200
180
160
140
120
100
80
60
40
20
0
Blossom
Thinned
(50%)
Thinned
Control
MARCH
APRIL
MAY
JUNE
JULY
AUG


Blossom Thinning of Spring Lady Peach
% Total Fruit
40
30
20
10
0
Under 80
72
64
56
>=50
Size Category
Fruitlet Thinned
Blossom Thinned

Spring Lady Blossom Thinning - 1989

SIZE	$/box	CONTROL %	CONTROL $/acre	BLOSSOM THINNED %	BLOSSOM THINNED $/acre
under...	0	3	0	3	0
84	$3.05	18	433	10	241
72	$4.99	28	1287	21	965
64	$7.23	29	2172	31	2322
56	$9.86	13	1518	22	2569
48/50	$12.75	4	690	10	1725
40/42	$12.00	0	0	2	388
Total			$6,100		$8,210

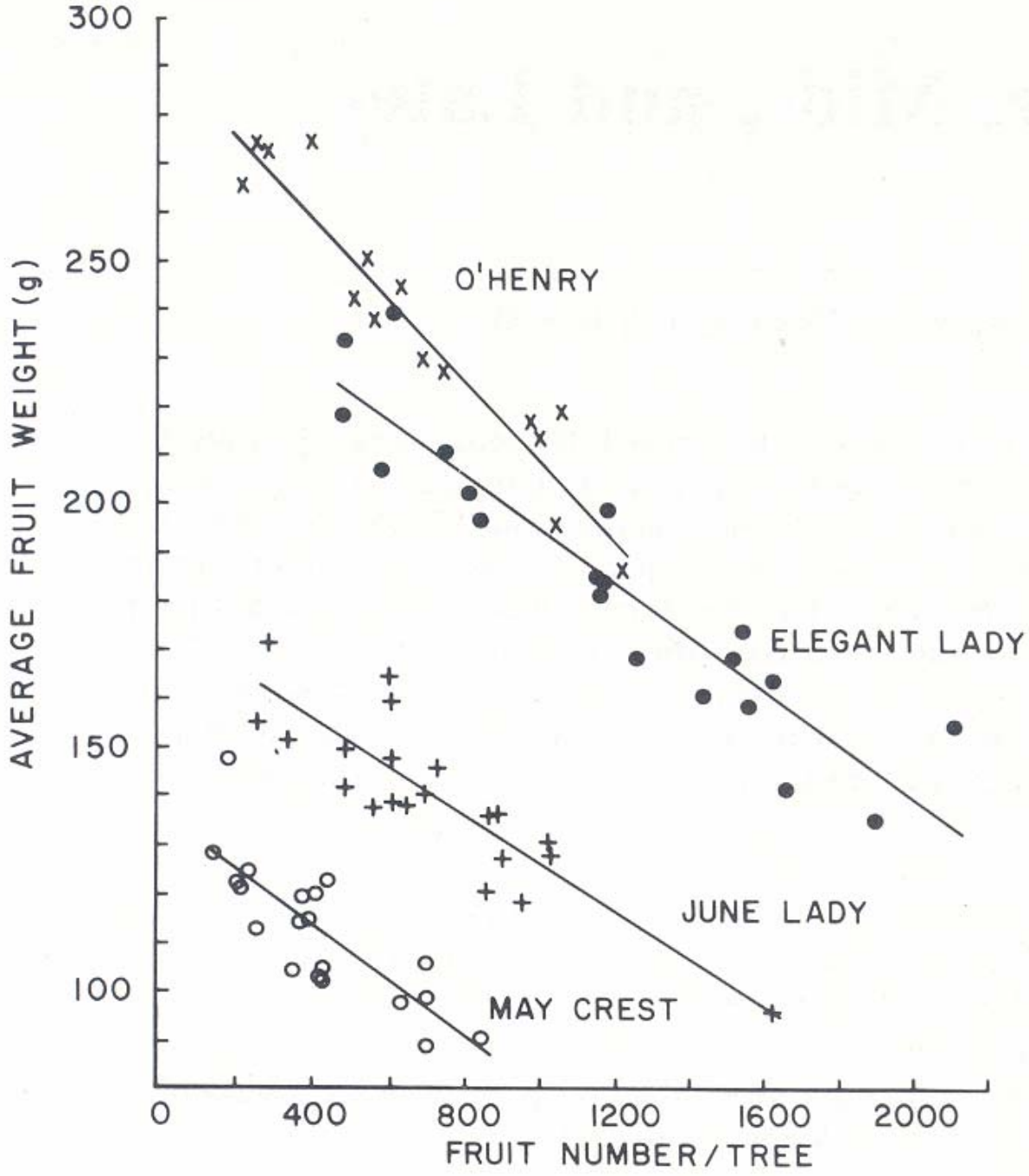

O'HENRY BLOSSOM THINNING 1989
Mean Fresh Wt (g)
200
180
160
140
120
100
80
60
40
20
0
Blossom Thinned (50%)
Thinned
Control
MARCH
APRIL
MAY
JUNE
JULY
AUG

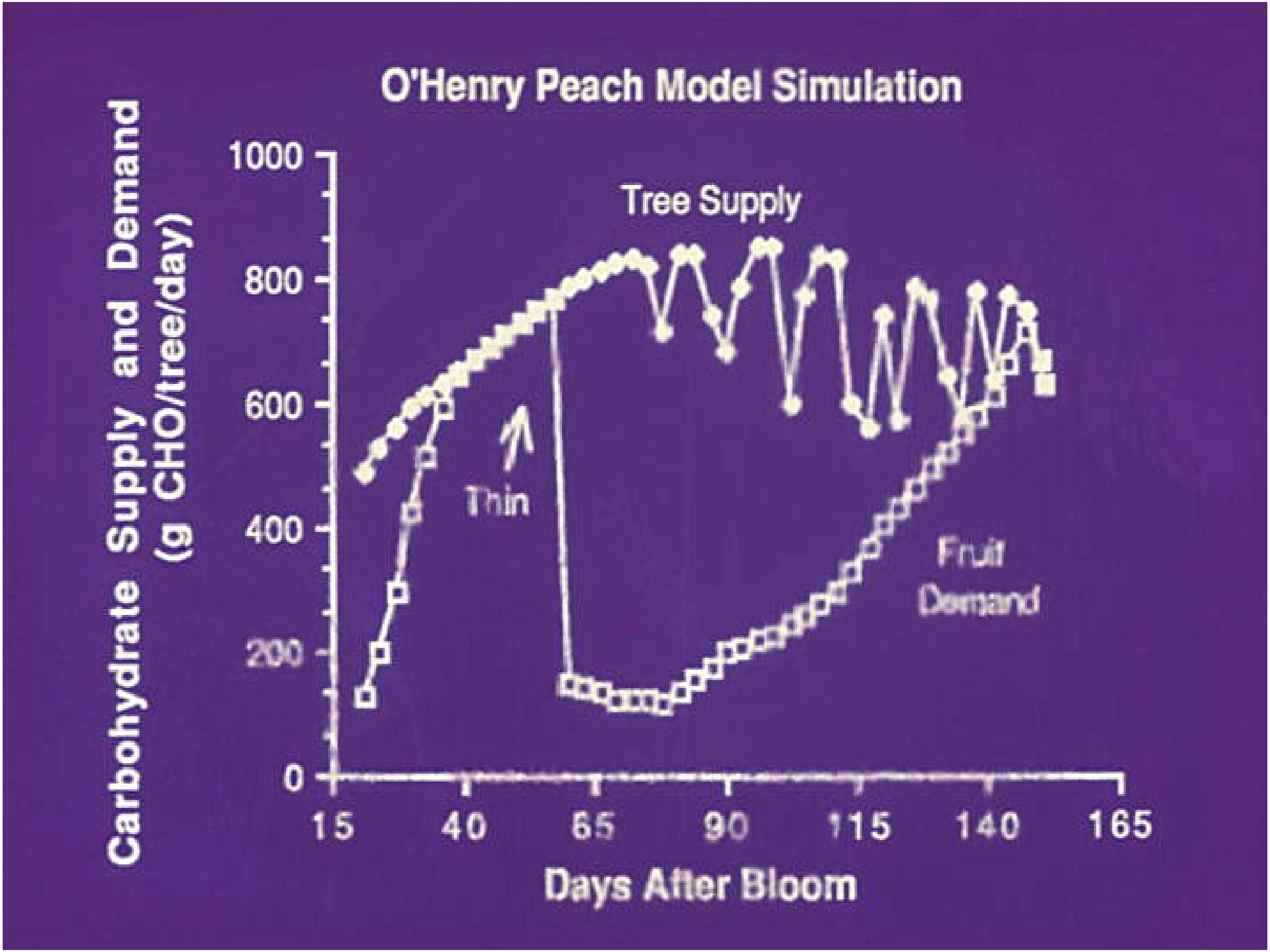
O'Henry Blossom Thinning - 1989

SIZE		CONTROL		BLOSSOM THINNED	
	$/box	%	$/acre	%	$/acre
under...	0	3	0	3	0
72	$5.04	3	165	2	132
64	$6.13	7	631	6	505
56	$7.55	28	3513	21	2638
50	$8.43	32	5011	23	3648
48	$8.43	22	3552	25	4097
40/42	$12.07	7	1818	19	5188
36	$10.30	.1	27	1	323
30/32	$14.00	0	0	1	252
Total			$14,717		$16,783






300
250
200
150
100
AVERAGE FRUIT WEIGHT (g)
O'HENRY
ELEGANT LADY
JUNE LADY
MAY CREST
0
400
800
1200
1600
2000
FRUIT NUMBER / TREE


O'Henry Peach Model Simulation
Carbohydrate Supply and Demand
(g CHO/tree/day)
1000
800
600
400
200
0
Tree Supply
Thin
Fruit
Demand
15
40
65
90
115
140
165
Days After Bloom







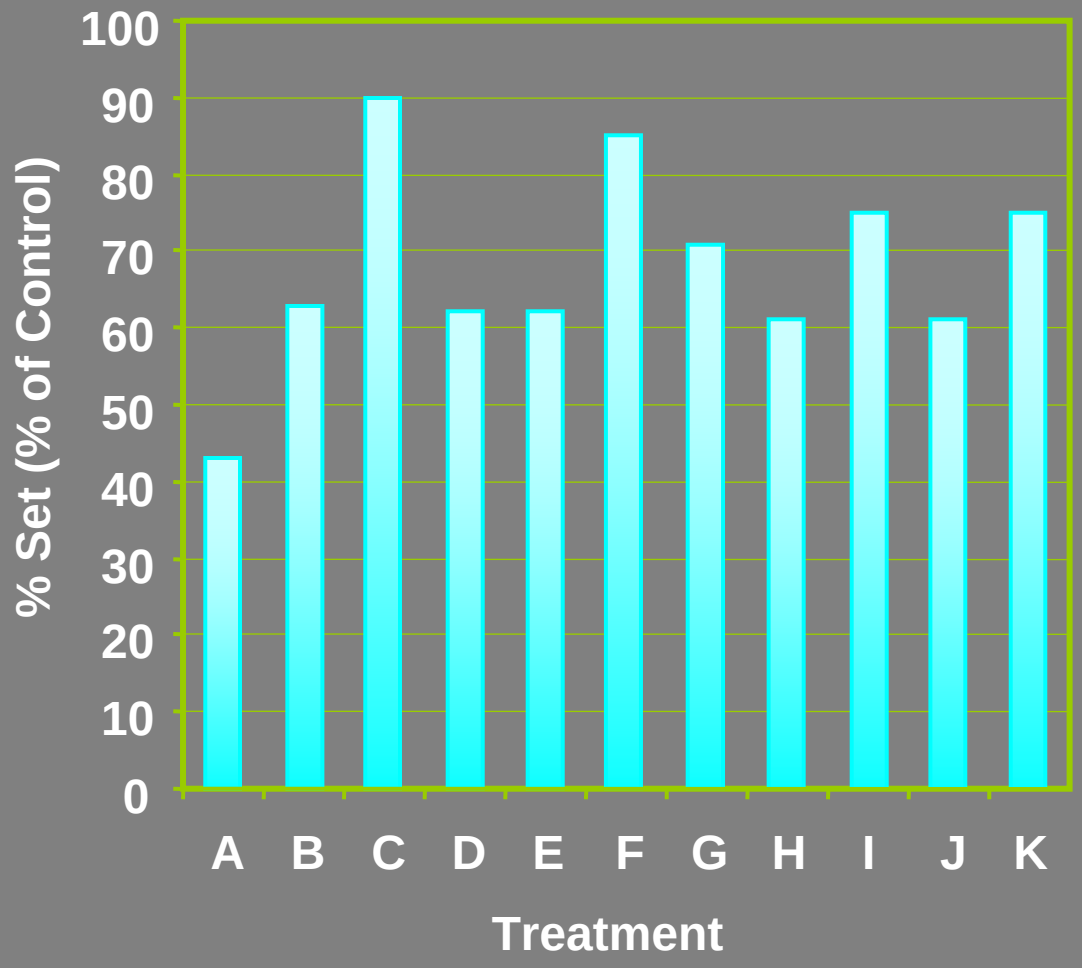
Chemical Blossom Thinner

Fatty Acid Amine Polymer

Armothin = Entry

Chemical Blossom Thinning Using Armothin (Entry)

Commercial Peach and Nectarine Orchards - 1996 - 98



A	96 Spring Lady	2.5%
B	97 Crown Princess	2%
C	97 Sparkling June	2%
D	97 Loadel	2%
E	97 O'Henry	2%
F	98 Mayglo	2.5%
G	98 Spring Bright	3%
H	98 Loadel	3%
I	98 Summer Diamond	3%
J	98 Summer Lady	3%
K	98 Carnival	3%

Summer Diamond Nectarine Chemical Thinning

	Control	3% Armothin
% Fruit Set High (>9')	**50.6**	**34.4** (68%)
% Fruit Set Low (<9')	**48.3**	**25.6** (53%)
Hand Thinning (minutes/tree)	**56.4**	**41.9** (74%)

O’Henry Peach Chemical Thinning

	Control	2% Armothin
Hand Thinning (minutes/tree)	14.8	10.7
Yield (kg/tree)	37.9	37.8
Avg. Fruit Wt. (g/fruit)	142.0	146.7

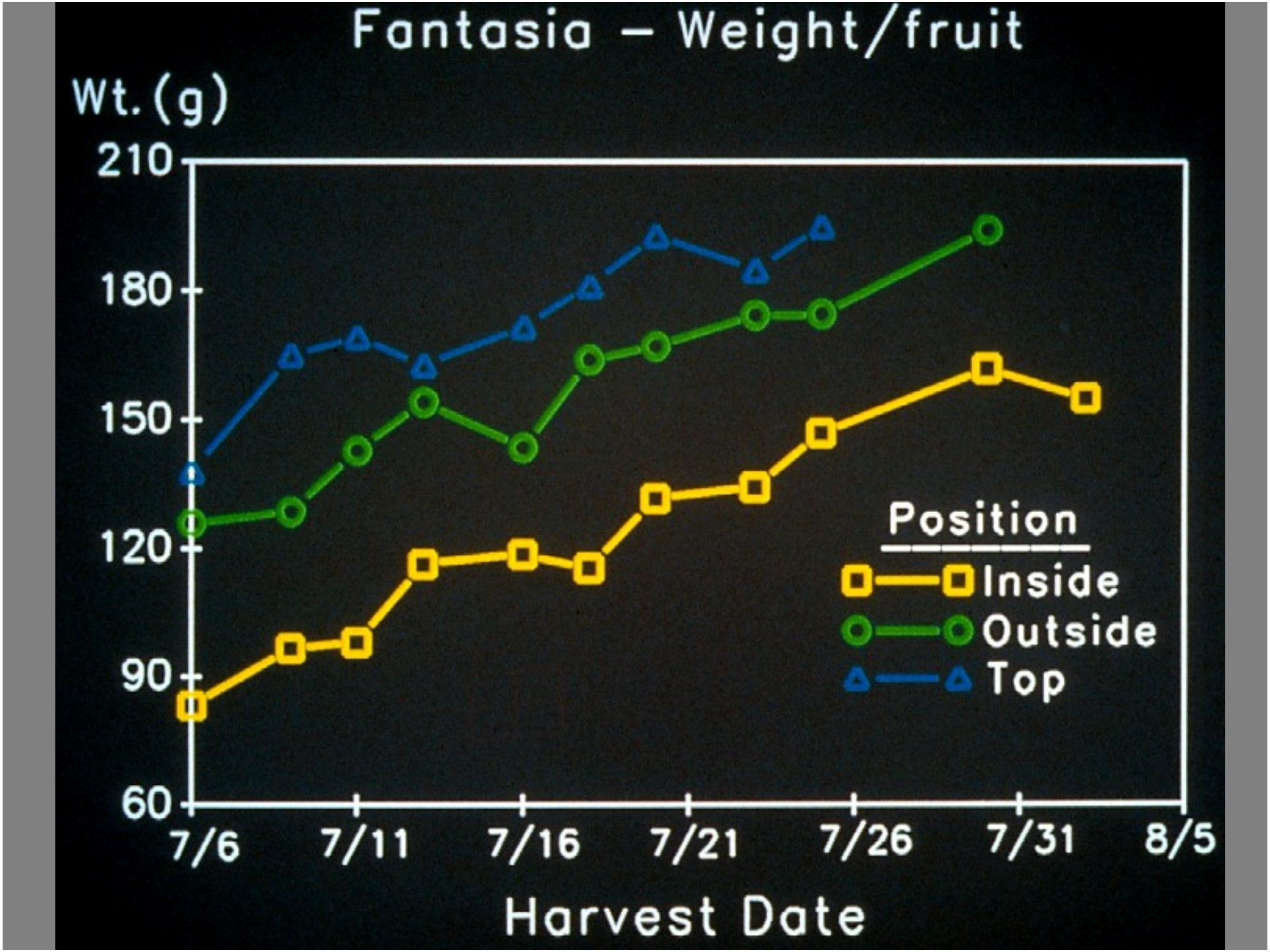


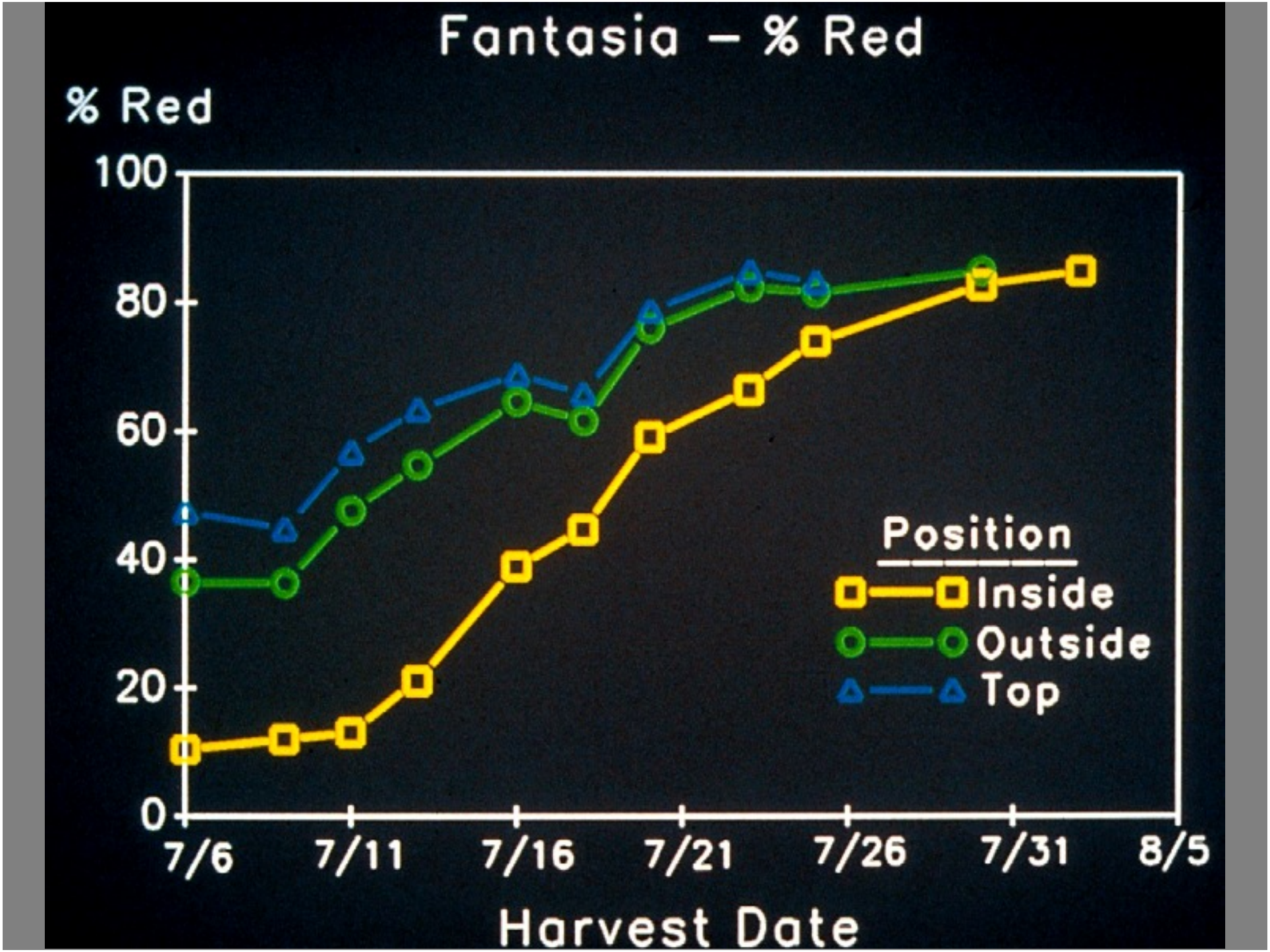


Chemical Blossom Thinning Using Armothin (Entry)

1. Avoid early ripening varieties
2. Take into account the health and vigor of the trees.
3. Account for orchard-to-orchard, tree-to-tree and within tree variability.
4. Use on varieties that generally set heavily and don’t produce many doubles or other defective fruit.




Fantasia – Weight/fruit
Wt. (g)
210
180
150
120
90
60
7/6
7/11
7/16
7/21
7/26
7/31
8/5
Harvest Date
Position
Inside
Outside
Top


Fantasia – % Red
% Red
100
80
60
40
20
0
7/6
7/11
7/16
7/21
7/26
7/31
8/5
Harvest Date
Position
Inside
Outside
Top





