



Fire Blight

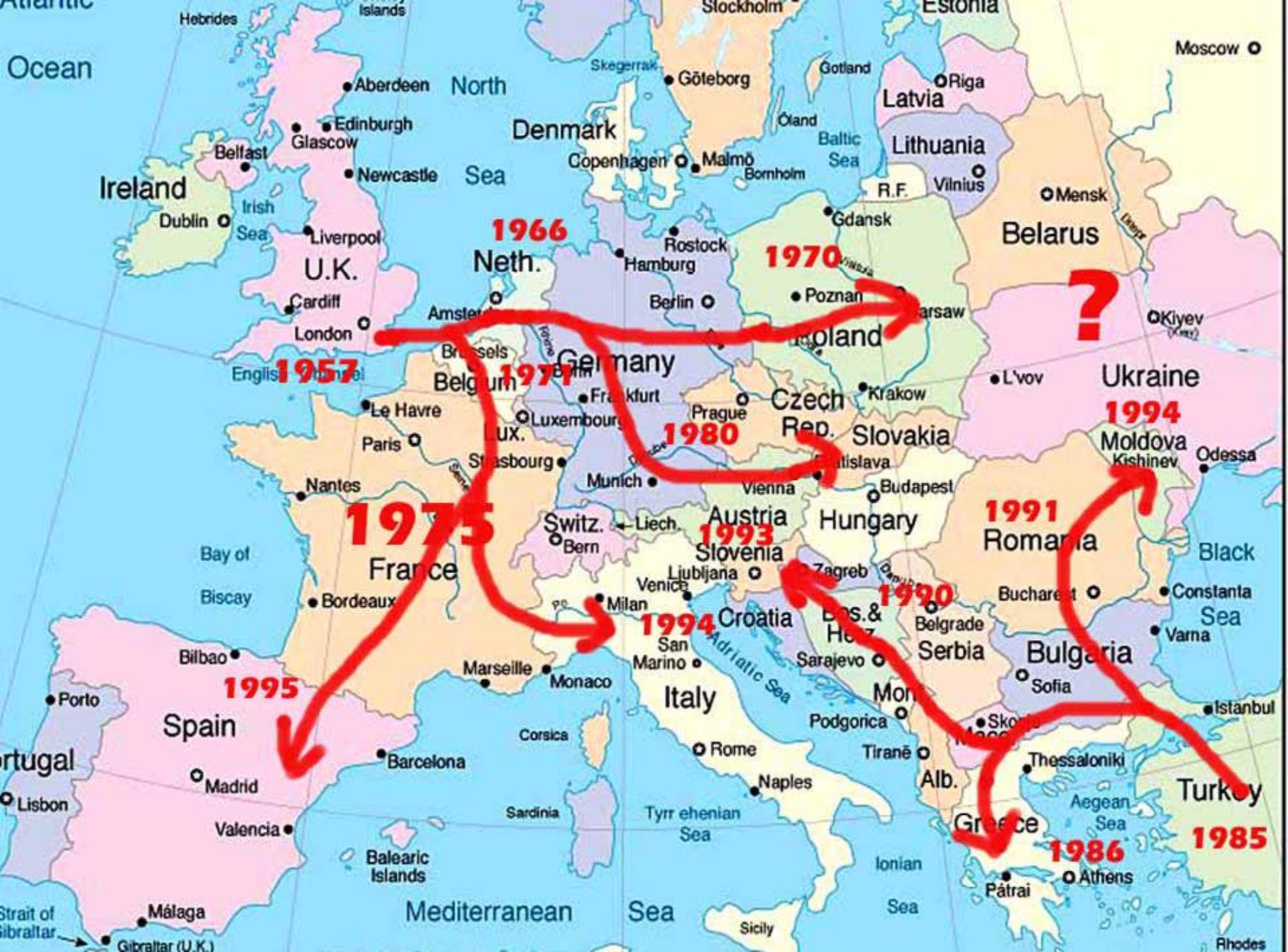
the Biology of Infection

Tim Smith, Washington State University





**BLACK
HAWTHORNE**









FLOWERS







April 7 Through May 28



**"Side"
Bloom**











May 12, 1998

MM106 -

4 CLUSTERS PER ROW

M9 -

95 CLUSTERS / ROW

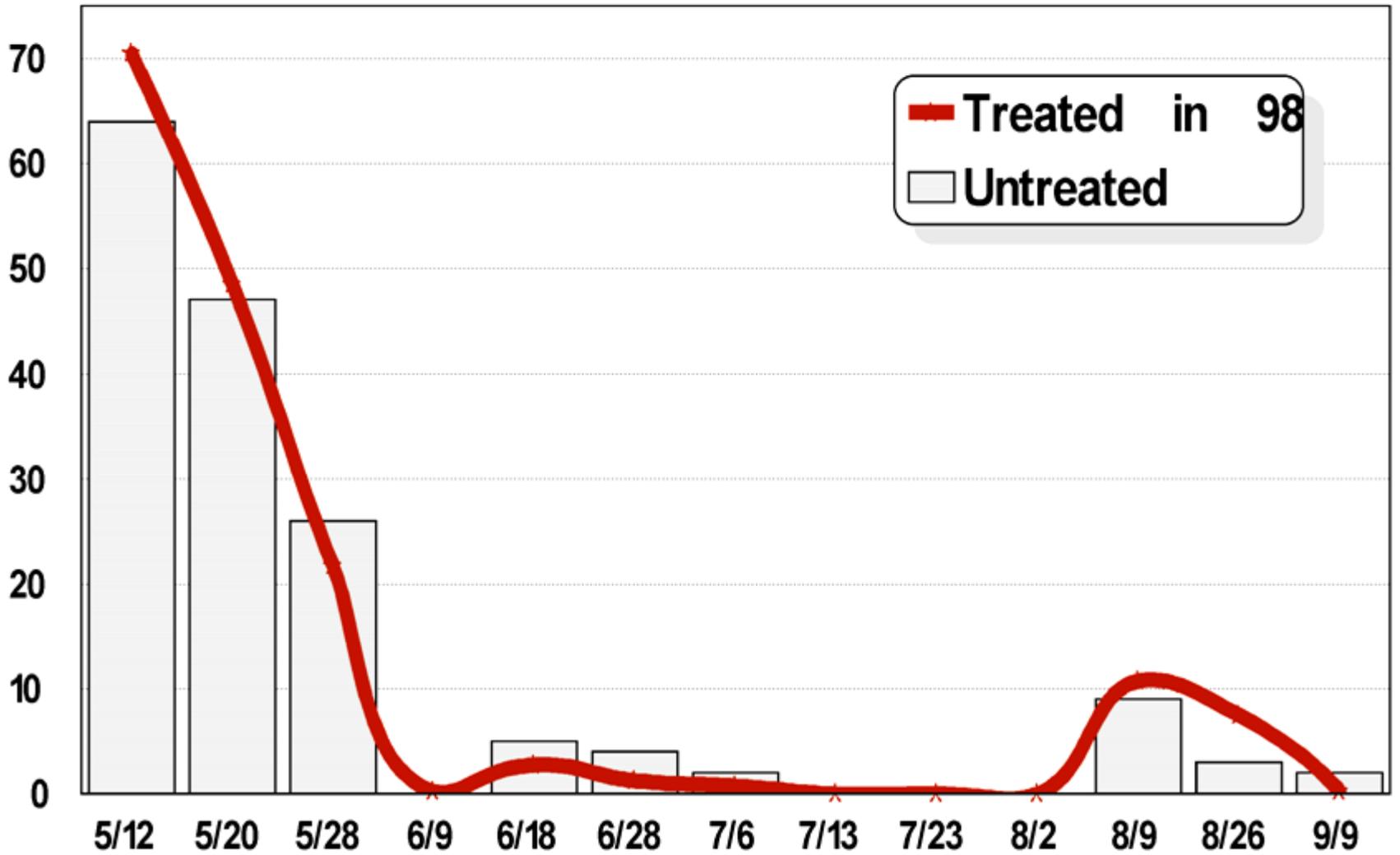
160 TREES / Row

"LATE
BLOOM"



Apogee and Bartlett Pear Secondary Bloom

1998 Applications, 1999 Blossom Clusters / 5 Trees



YEAR TOTAL: TREATED 164, UNTREATED 162



1st Season Bloom Date?







BACTERIA









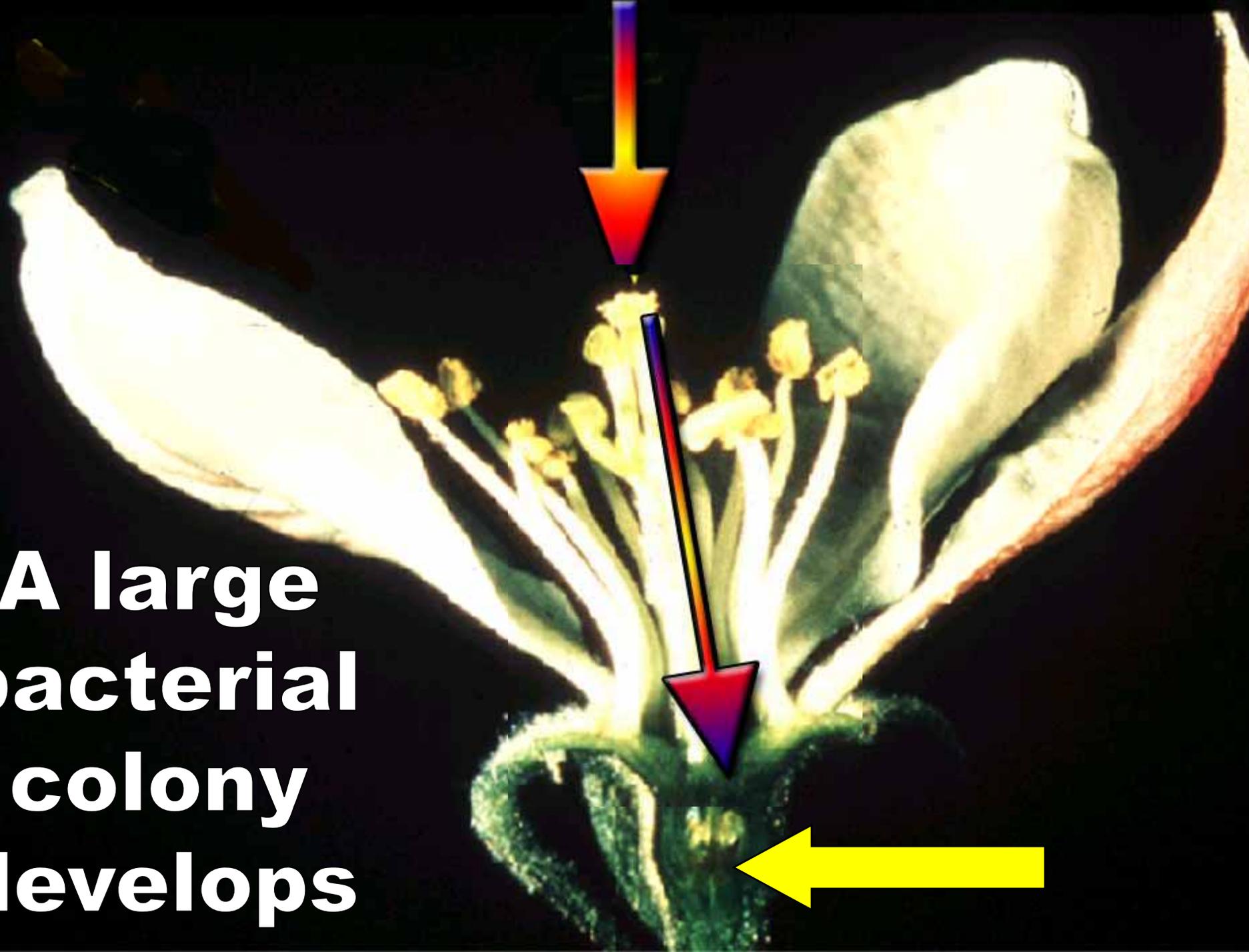


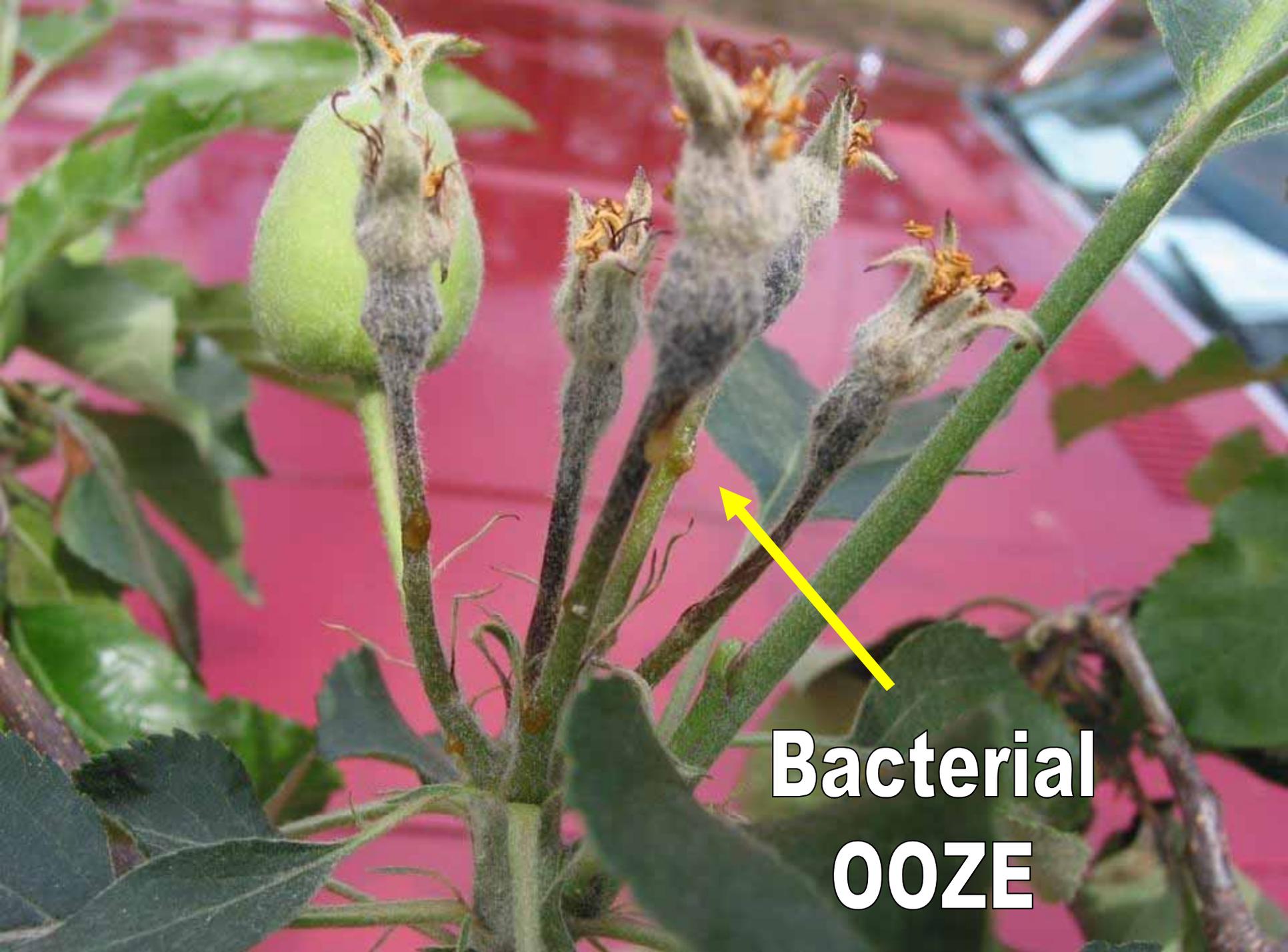


STIGMA SURFACE



**A large
bacterial
colony
develops**





**Bacterial
OOZE**



















Tree Nutrition:

**Fert. Level Had
Effect on Shoot
Blight, Not on
Blossom or Root**

Terrence Robinson - H.S. Aldwinckle









**Carry-over
to 2010?**





Sanitation





Bacterial Contamination







FIRE BLIGHT INFECTION RISK -F

Related to 4-Day Degree Hour Total

Potential Pathogen Presence	LOW	Caution	HIGH	EXTREME
No Blight in Area for Past Season	0 - 300	300 - 500	500 - 800	800 +
Blight in Your or Neighbors' Orchard Last Year	0 - 150	150 - 300	300 - 500	500 +
Active Blight is Now in Your or Neighbors' Orchard	0 - 100	100 - 200	200 - 300	300 +

The image features a large, irregularly shaped object with a mottled green and yellow color scheme, resembling a piece of aged paper or a large leaf. The texture is grainy and uneven. Overlaid on this object is the word "TEMPERATURE" in a bold, white, sans-serif font. The letters have a slight drop shadow, making them stand out against the background. The overall lighting is somewhat dim, with the central area being brighter than the edges.

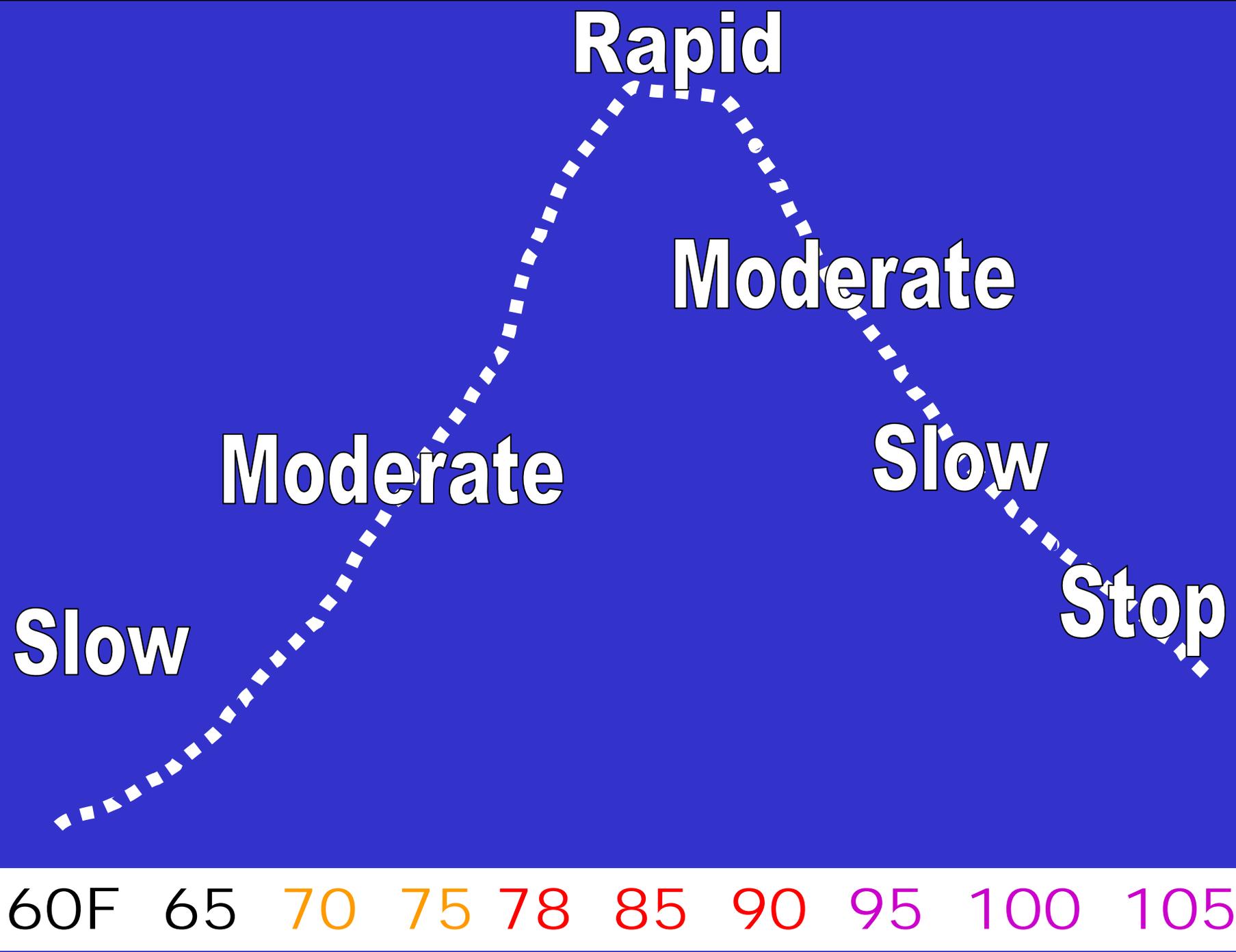
TEMPERATURE

Temperature

Over Time

Stigma tips viable

for about four days.



100

95

90

85

78

75

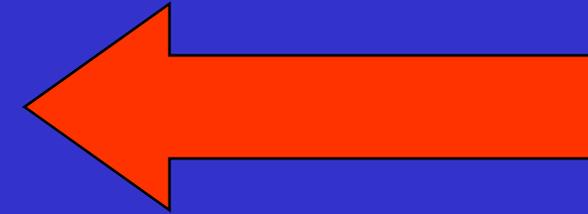
70

65

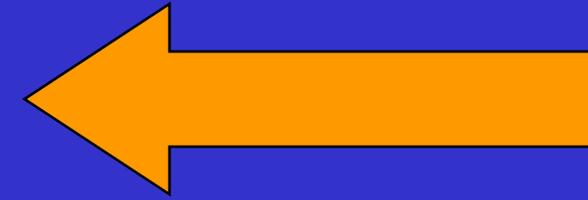
60F



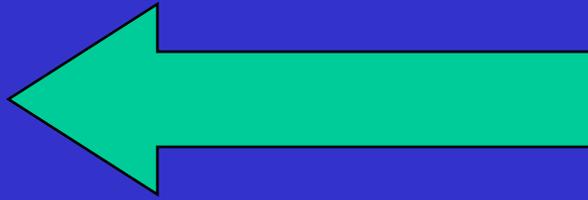
????????????????



*BLIGHT RISK
TEMPERATURES*



WATCH MODEL
FORECAST



NO WORRIES



MOISTURE



Flowers Wet?

No Blight

Blight



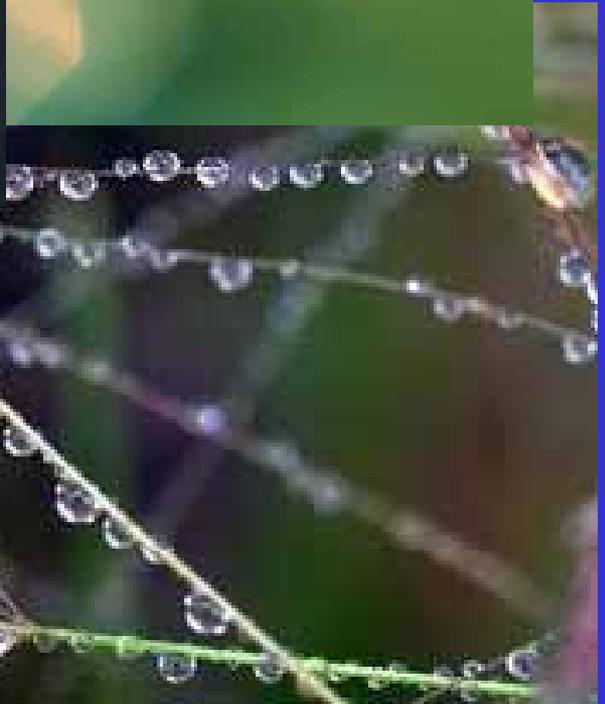


2?

Hours

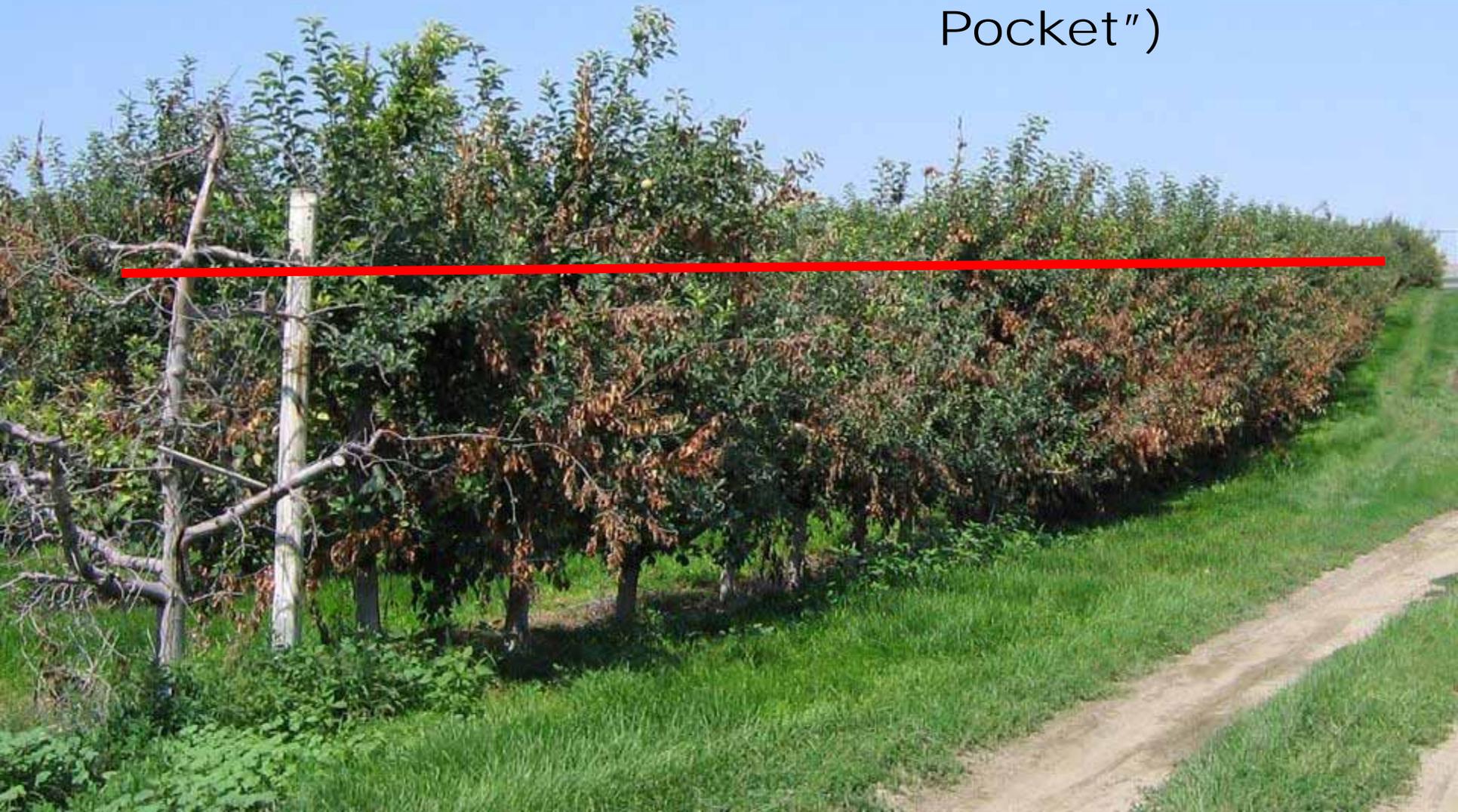
of

Wetness?



2006 S. Basin Cripps

Heavy Dew in
LOW Area ("Frost
Pocket")











CAN WE CONTROL FIRE BLIGHT?

YES

WILL WE CONTROL BLIGHT?

