

Advances understanding the relationship between flower-thrips and blueberries in Florida



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Flower thrips & blueberries

General information

- Small insects ~1mm long
- Usually yellow-cream color
- Feed and lay eggs in flowers
 - Petals
 - Ovaries
- From egg to adult in 15 days
- Present only during flowering period in blueberries



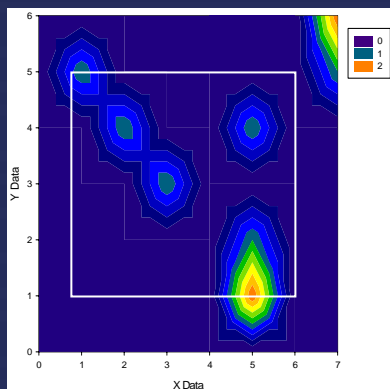
Flower thrips & blueberries

Sampling

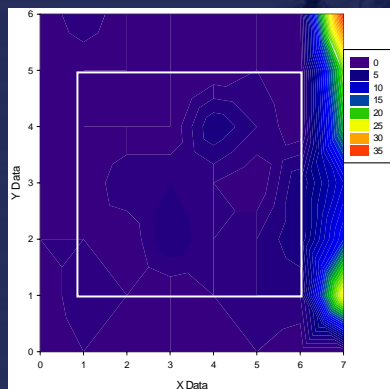


Flower thrips & blueberries

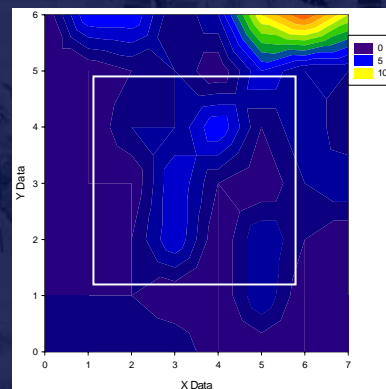
Dispersion behavior



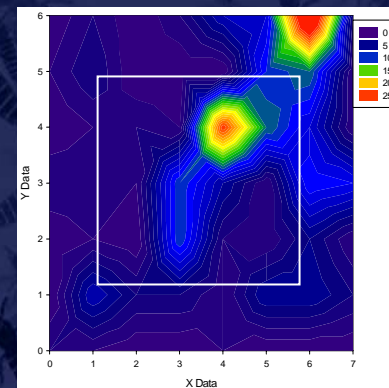
Day 1



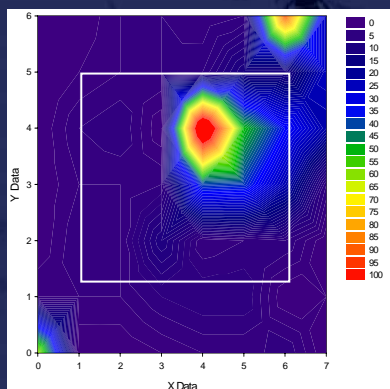
Day 3



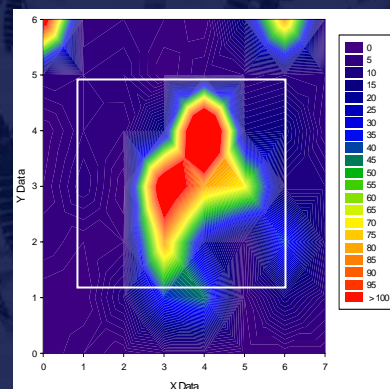
Day 5



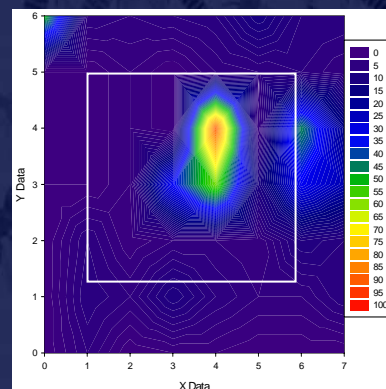
Day 7



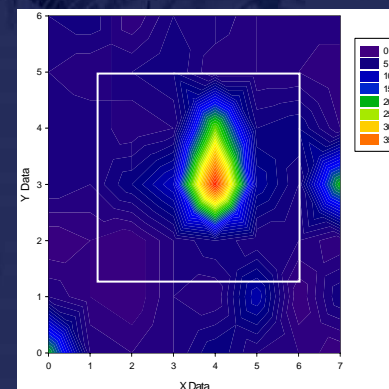
Day 13



Day 15



Day 17

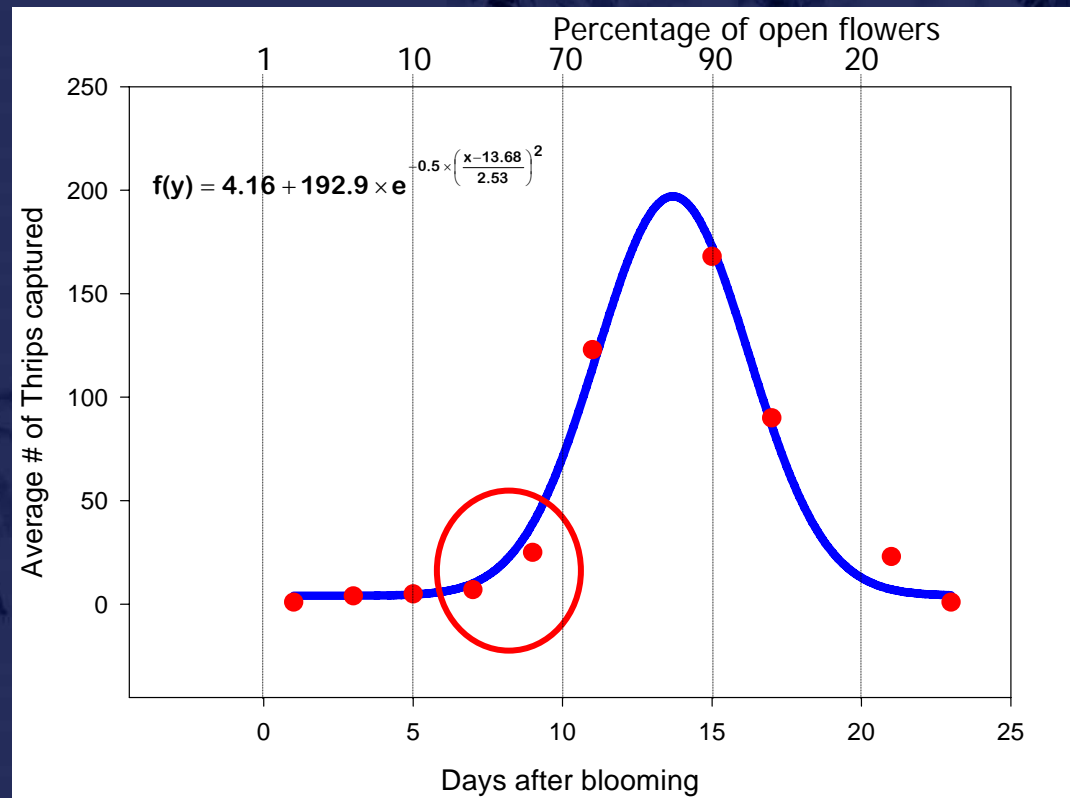


Day 21

Dispersion



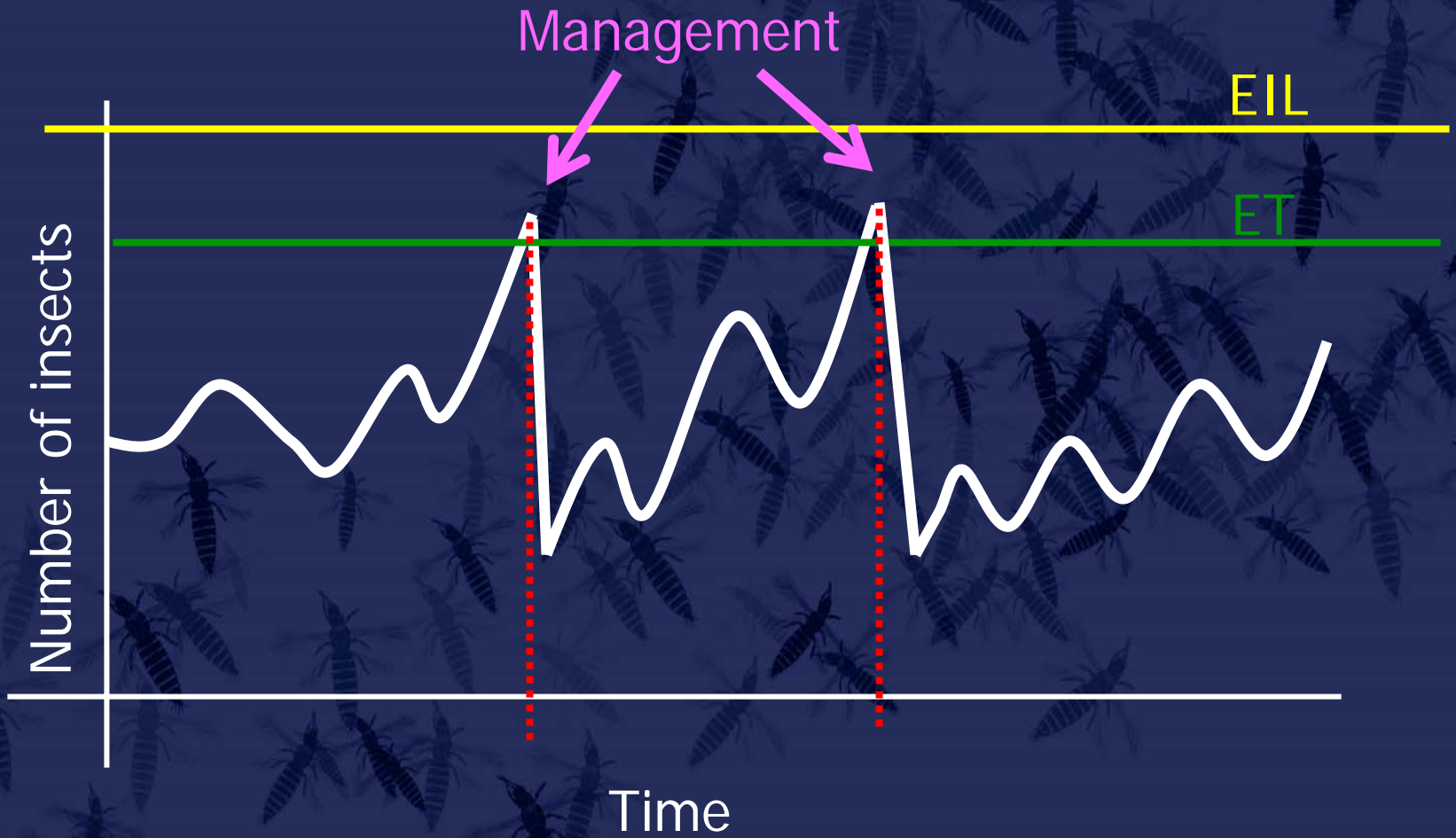
Size of thrips populations in relation to flower phenology



$$R=0.9908; F = 107.8; df = 3,9; P < 0.0001$$

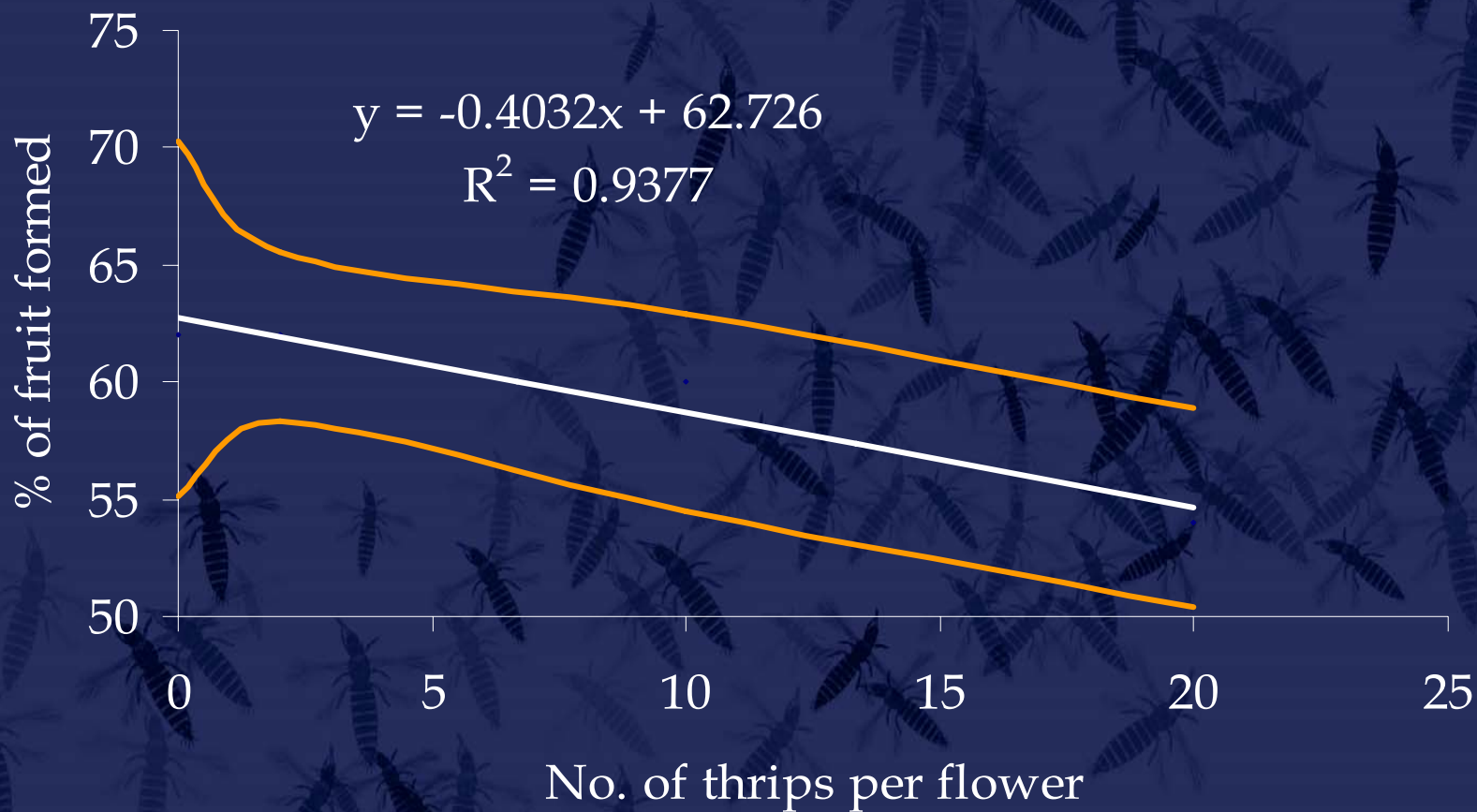
Flower thrips & blueberries

E.I.L.



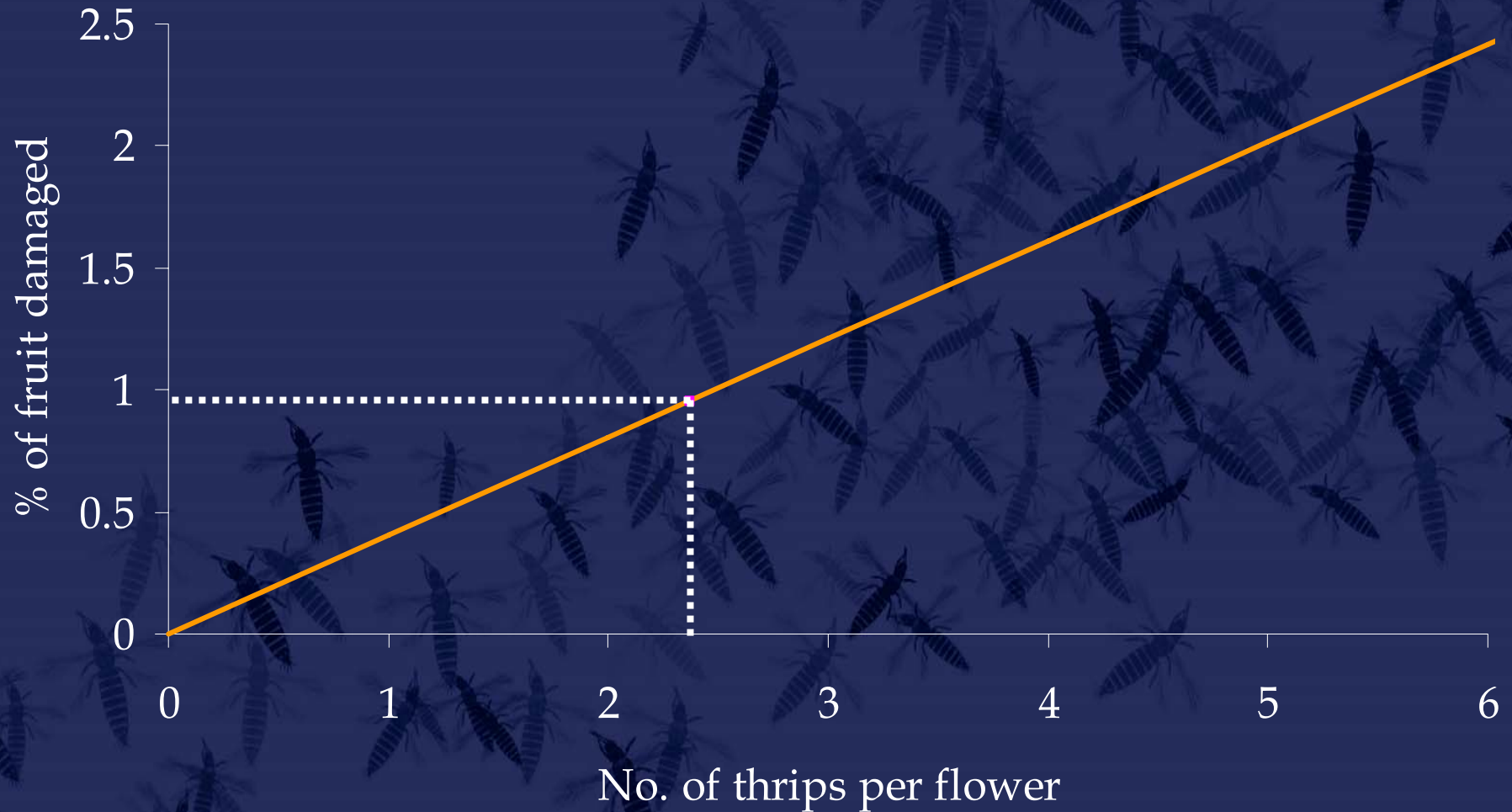
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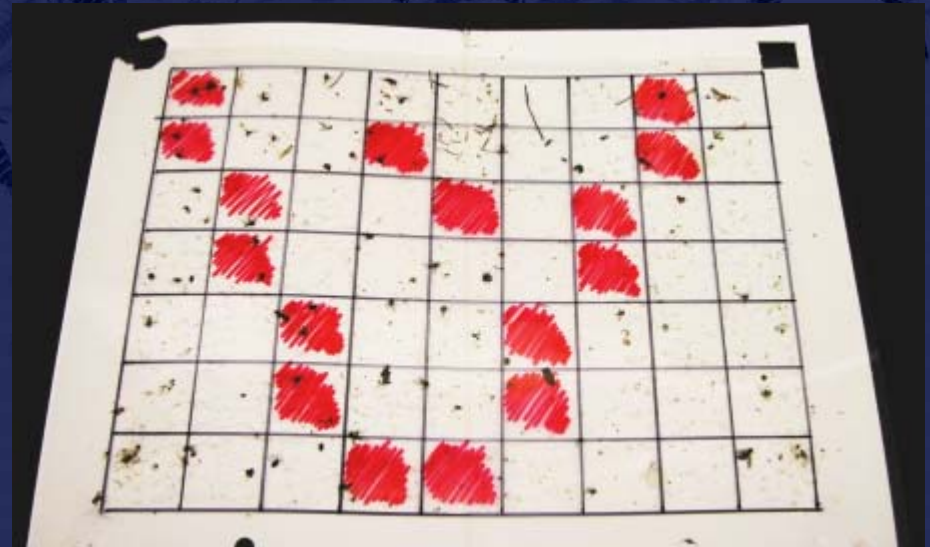
Flower thrips & blueberries

E.I.L.

EIL = 3 thrips / flower at flower opening

30 thrips / 10 flowers

Traps = 107 thrips in 16/63 of a trap
421 thrips/trap



- White sticky traps and flower sampling are the best monitoring methods for flower thrips
- Thrips are present in blueberry fields for about 25 days from flower opening to 'petal fall'.
- 7 days after bloom initiation the hot spots are defined.
- Once the hot spots are defined the population growth is exponential for the next 10 days until 'petal fall' starts.
- The ELI is about 3 thrips per flower at the start of the flowering period or 400 thrips per trap

Acknowledgements

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