

Deformity in blackberry fruits: Is it lygus bug?



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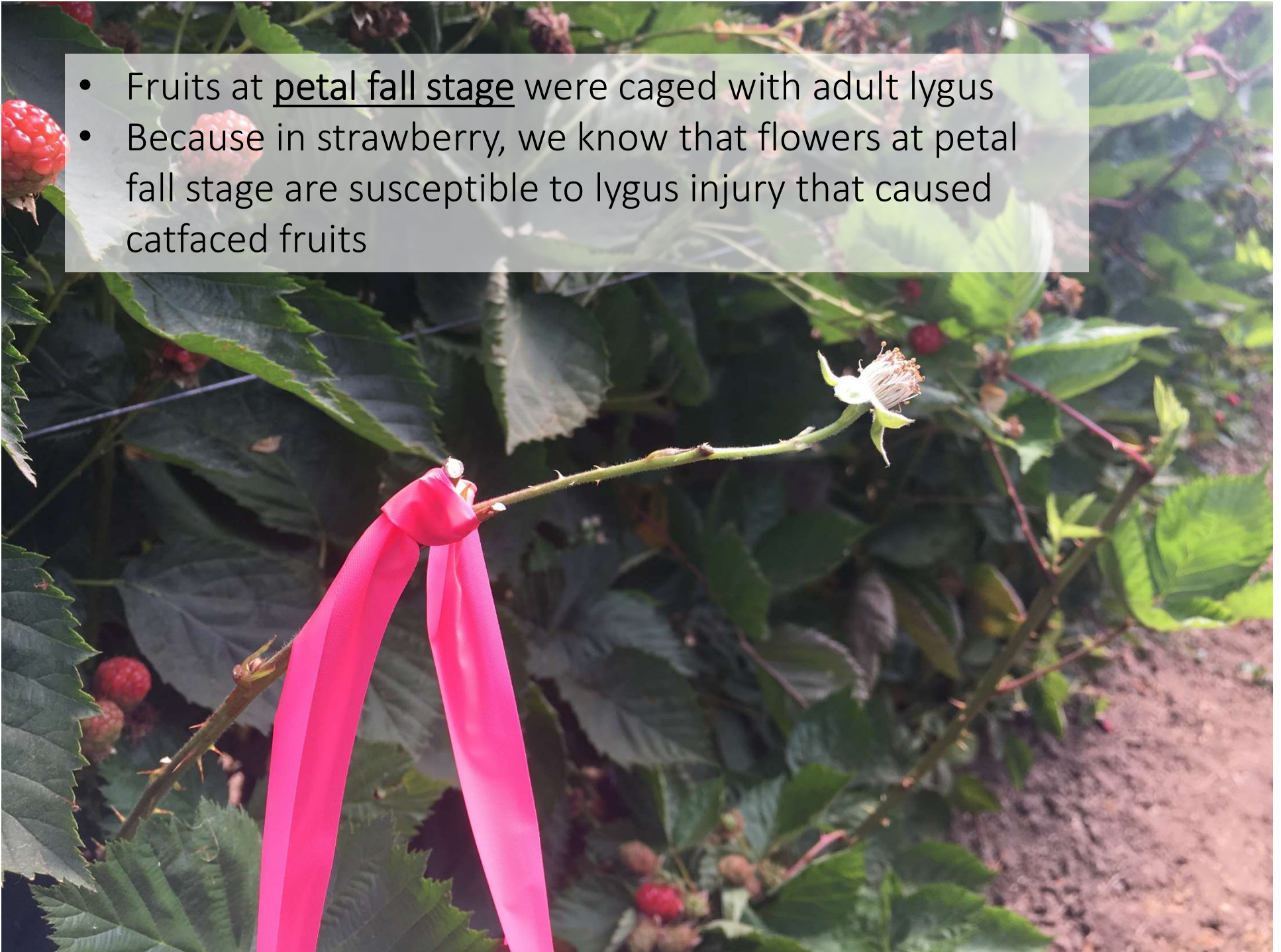


Objective

To determine if the blackberry fruit deformity is related to lygus bug feeding



- Fruits at petal fall stage were caged with adult lygus
- Because in strawberry, we know that flowers at petal fall stage are susceptible to lygus injury that caused catfaced fruits



Experiments

Trial 1 and 2

- Five treatments: 0, 1, 3, 5, 10 adult lygus bug per cage
- 15 replications
- Caged when fruits were at petal fall
- Exposed for one day

Trial 3

- Four treatments: 0, 3, 5, 10 adult lygus bug per cage
- 10 replications
- Caged when fruits were at petal fall
- Exposed for 4 days

Trial 1



Undamaged fruit



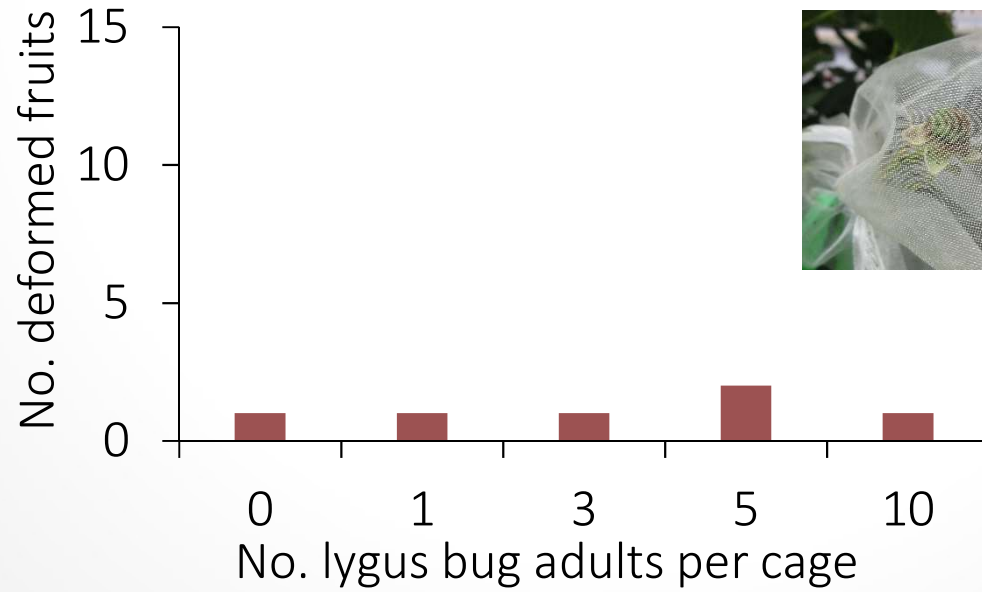
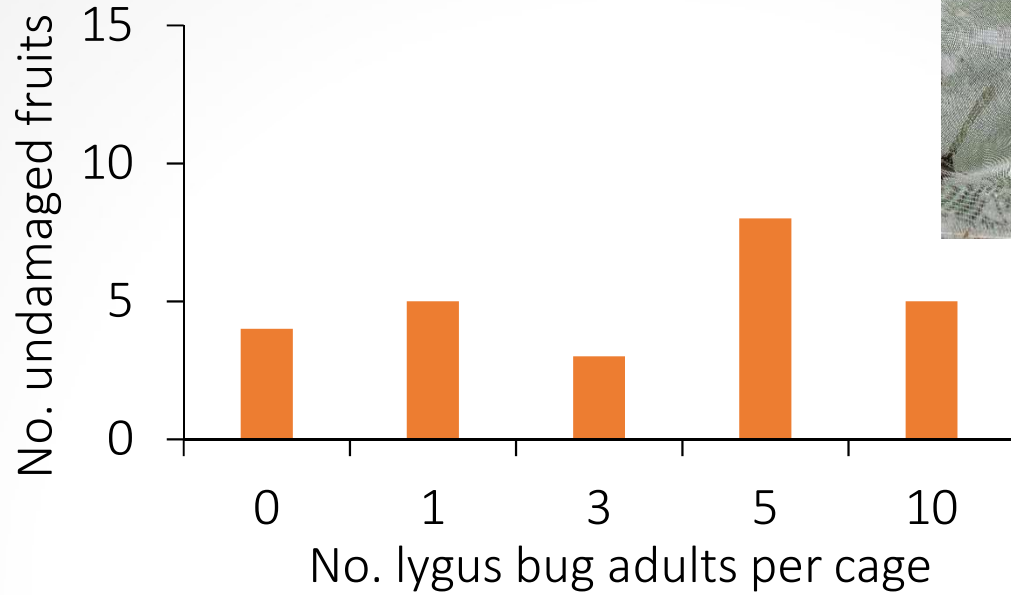
Undeveloped fruit



Deformed fruit



Undeveloped fruit

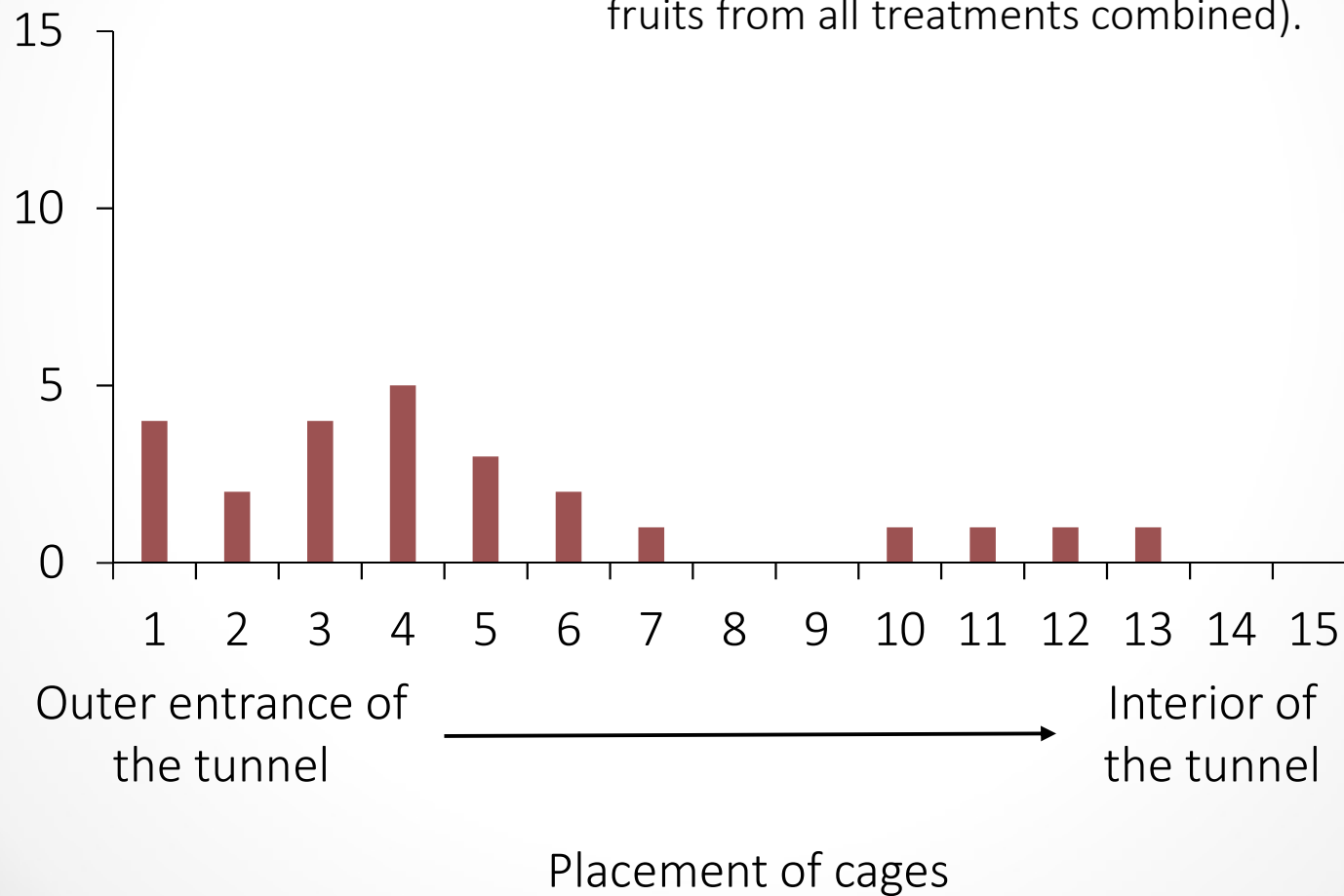


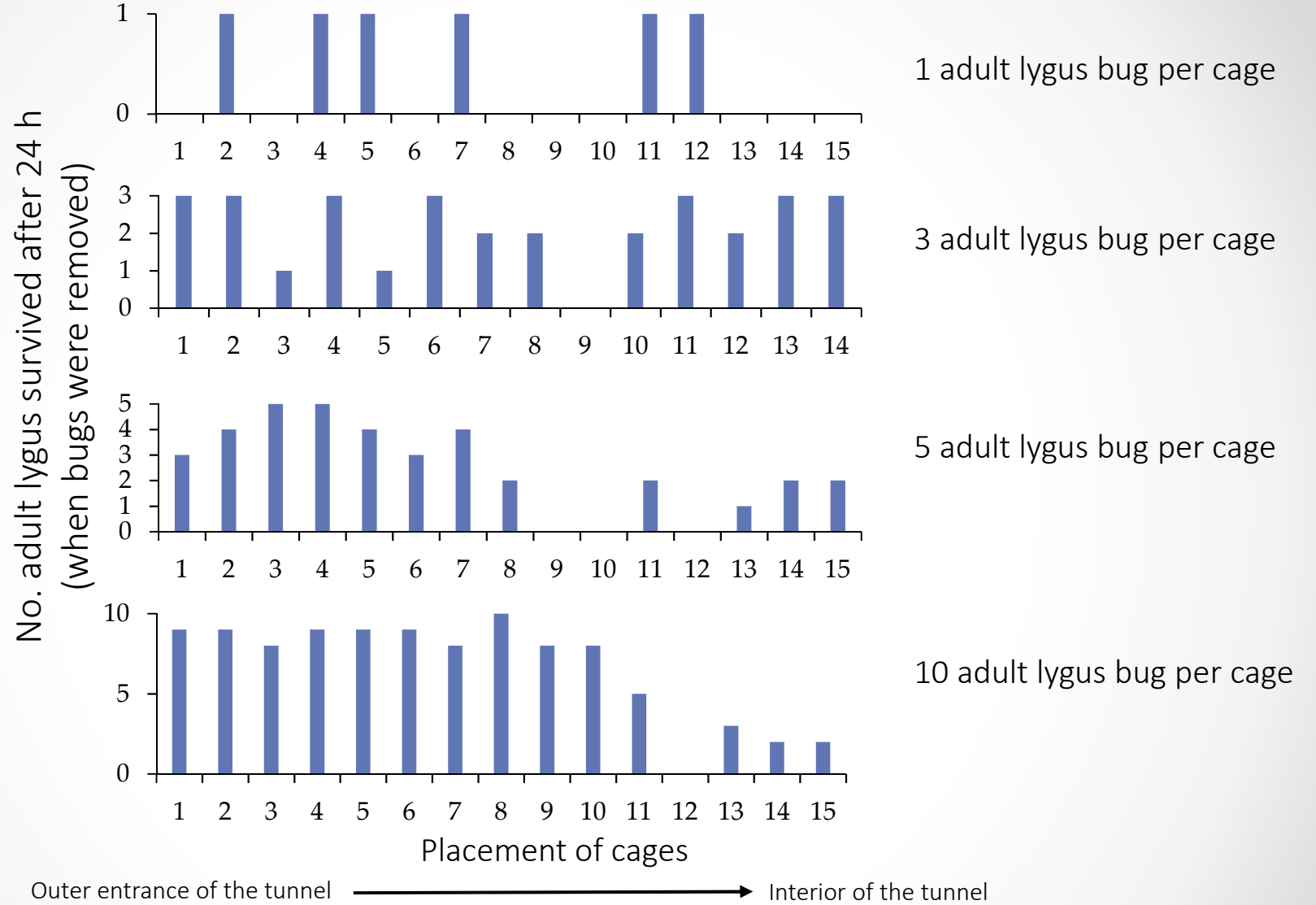
Most of them were damaged or undeveloped

Pattern of fruit damage

No. undamaged fruits

The pattern as we moved into the tunnel (all fruits from all treatments combined).





Trial 2



Dead

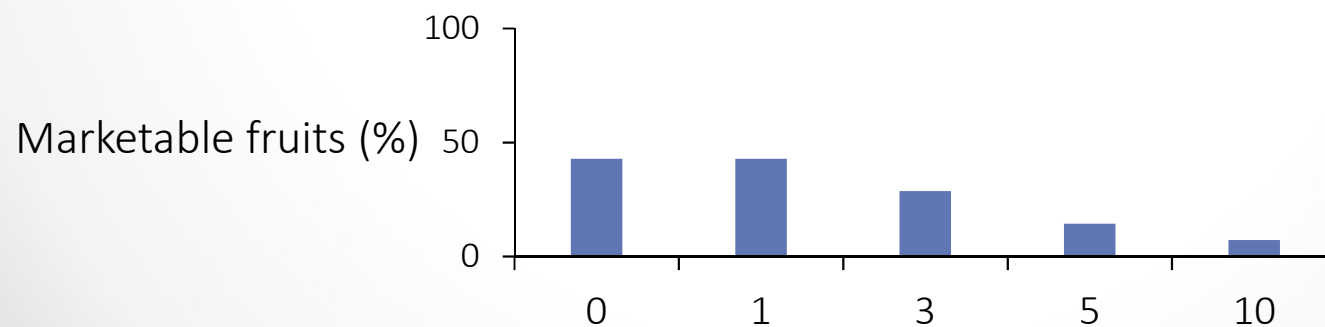
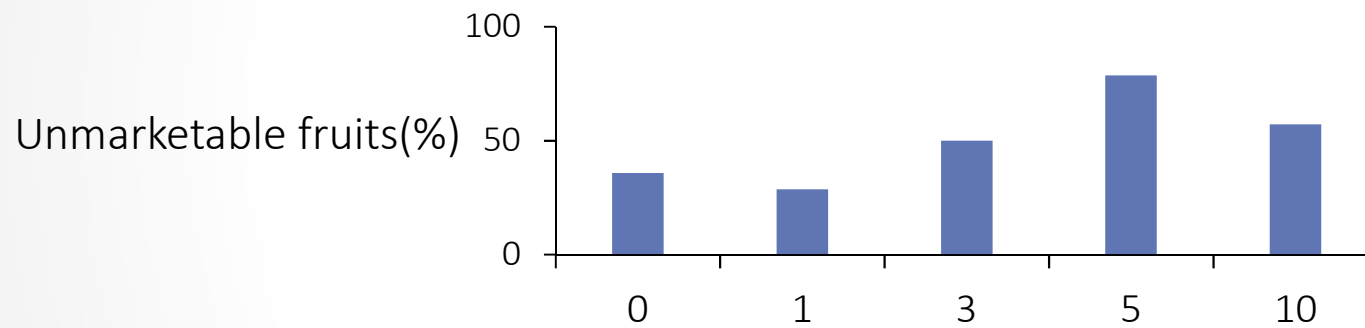
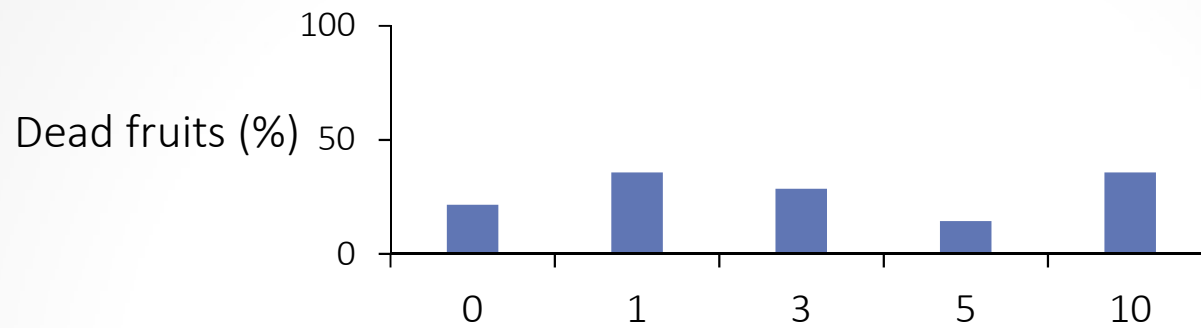


Unmarketable

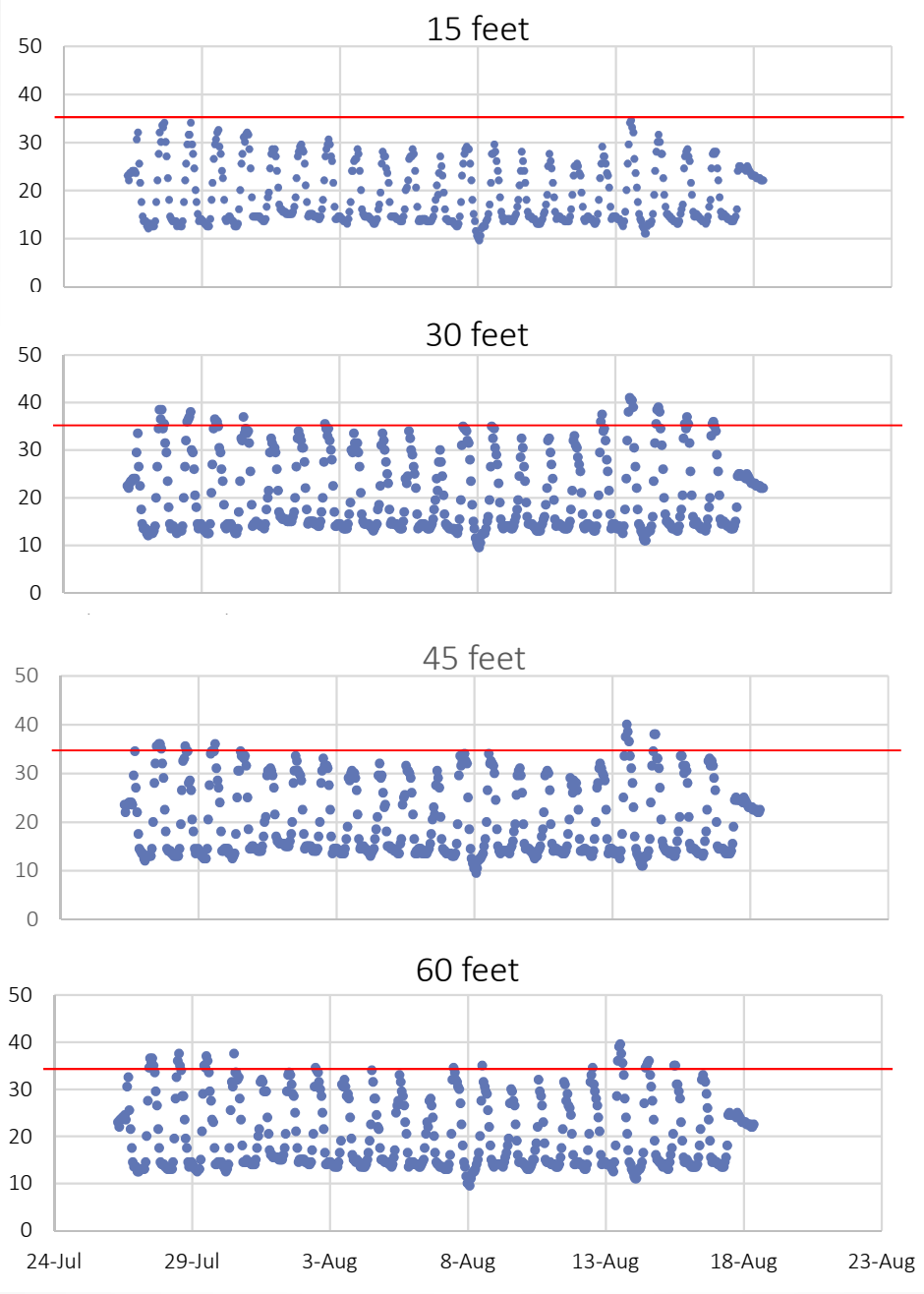


Marketable

Trial 2: Fruit damage



Number of adult lygus bug



Trial 3



Dead

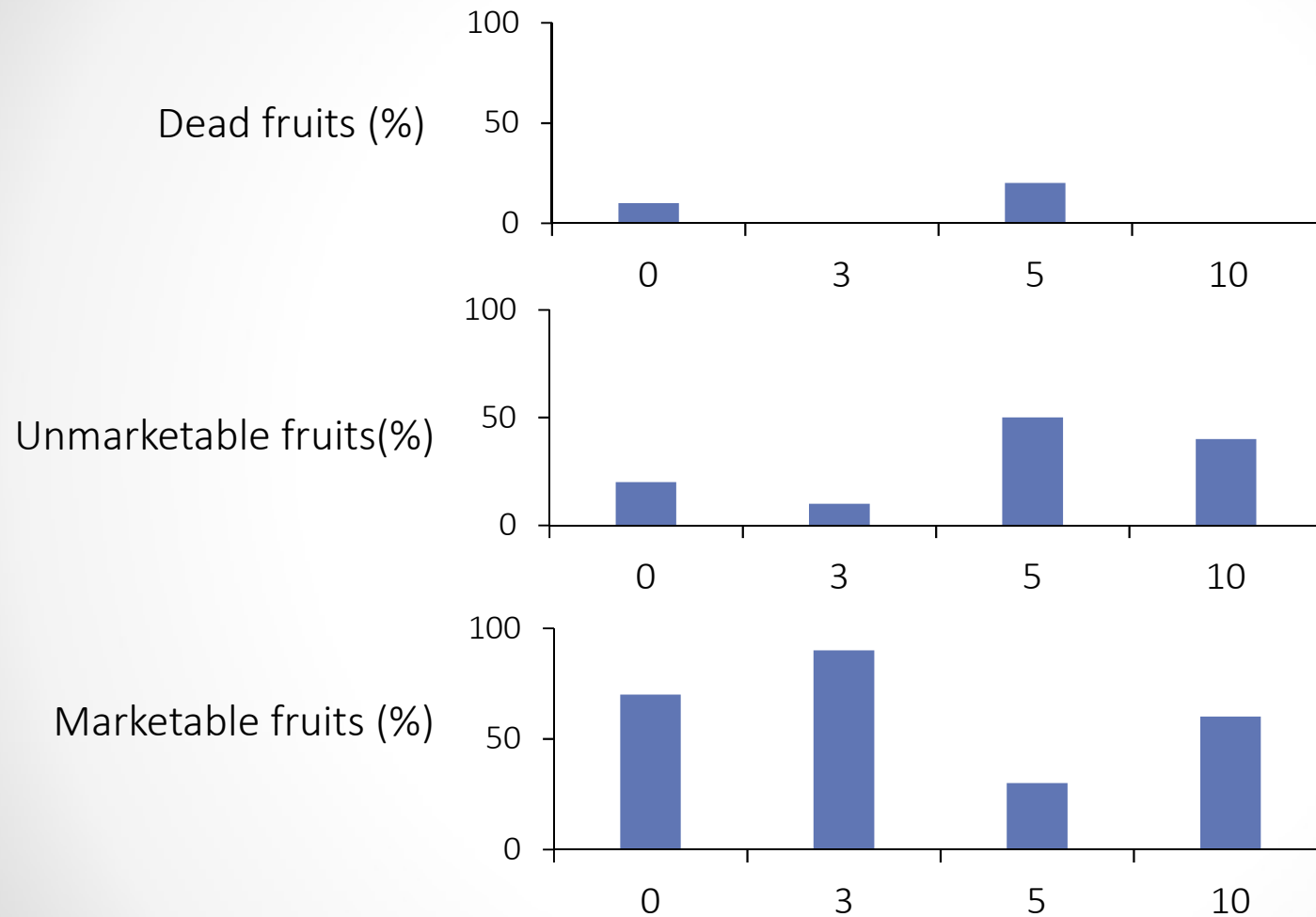


Unmarketable



Marketable

Trial 3: Fruit damage



Summary

- We couldn't say that fruit damage was all related to lygus bug feeding injury
- Other potential reasons: High temperatures in the tunnel that might affect pollination and/or fruit development
- More studies are warranted

Acknowledgement

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