

BMSB on pistachio, and survival on crops common in the SJV

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Collaborating Institutions

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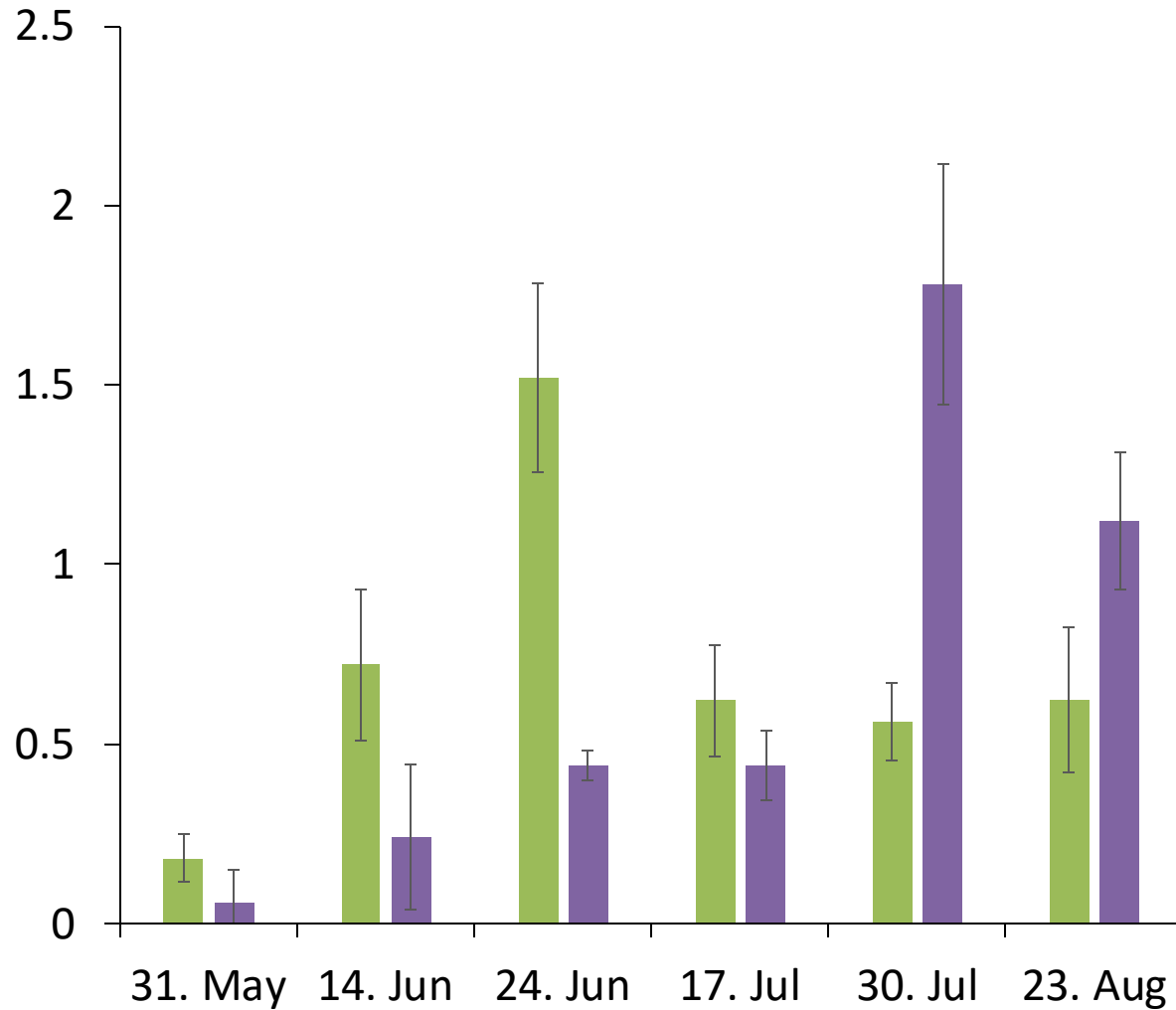
Pistachio production in California

- USA after Iran 2nd biggest producer
- 98% of US pistachio production in CA
- More than 250.000 bearing acres
- And growing: estimated 350.000 by 2023





Native stink bugs in pistachio



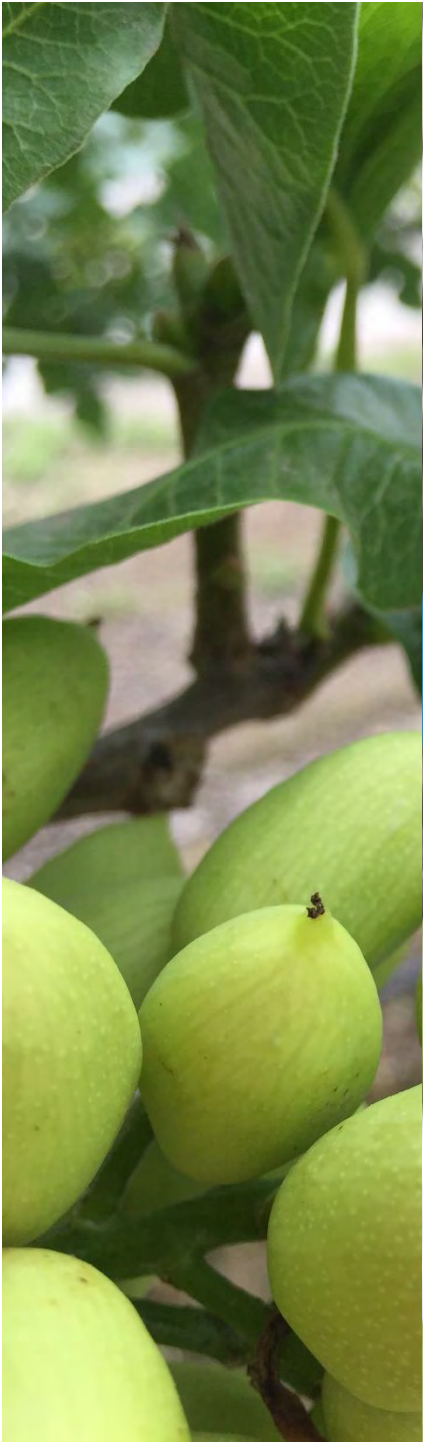
canopy

ground



Native stink bugs in pistachio

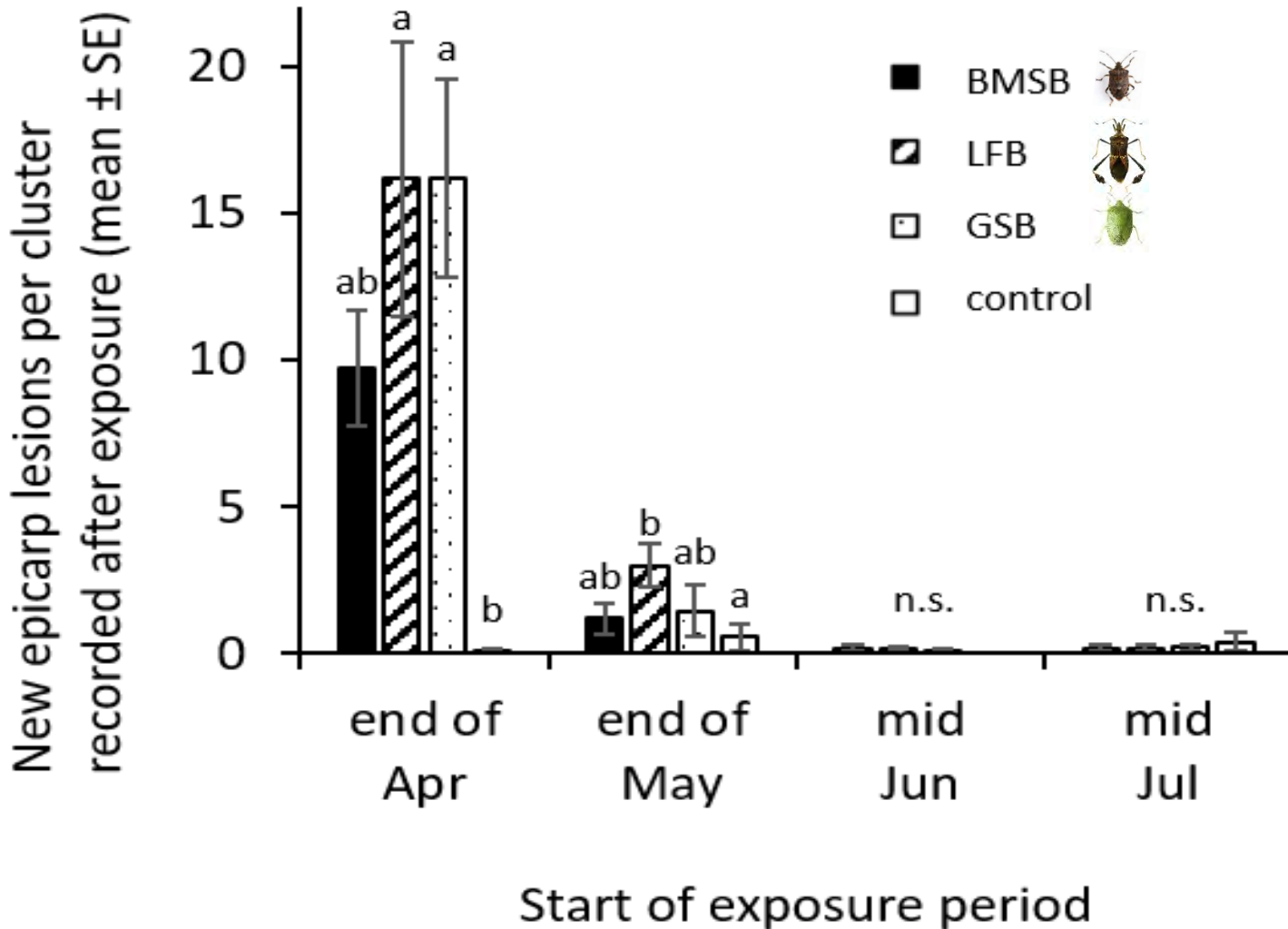
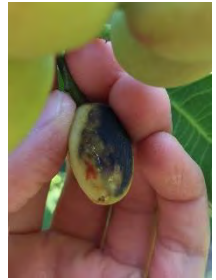




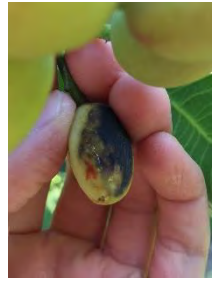




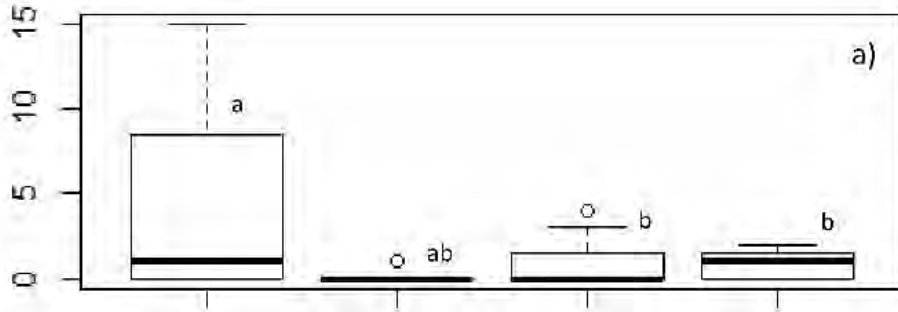
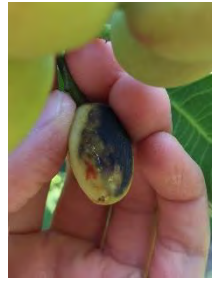
Halyomorpha halys seems to cause epicarp lesions like native species



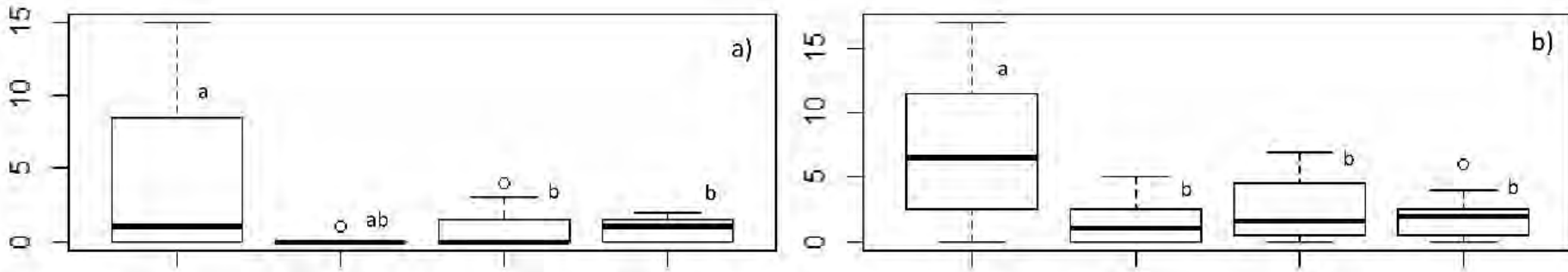
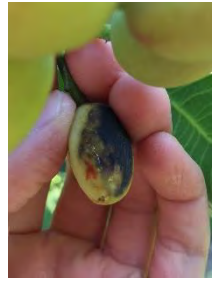
Halyomorpha halys can cause more epicarp lesions than native species



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Treatment

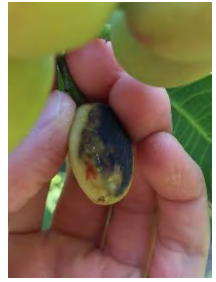


Photo: Tim Haye

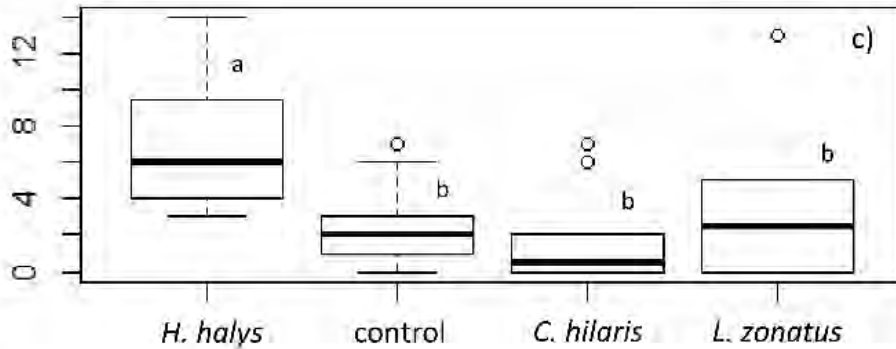
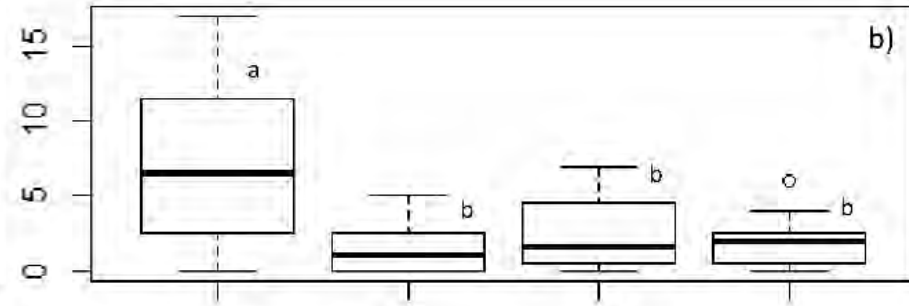
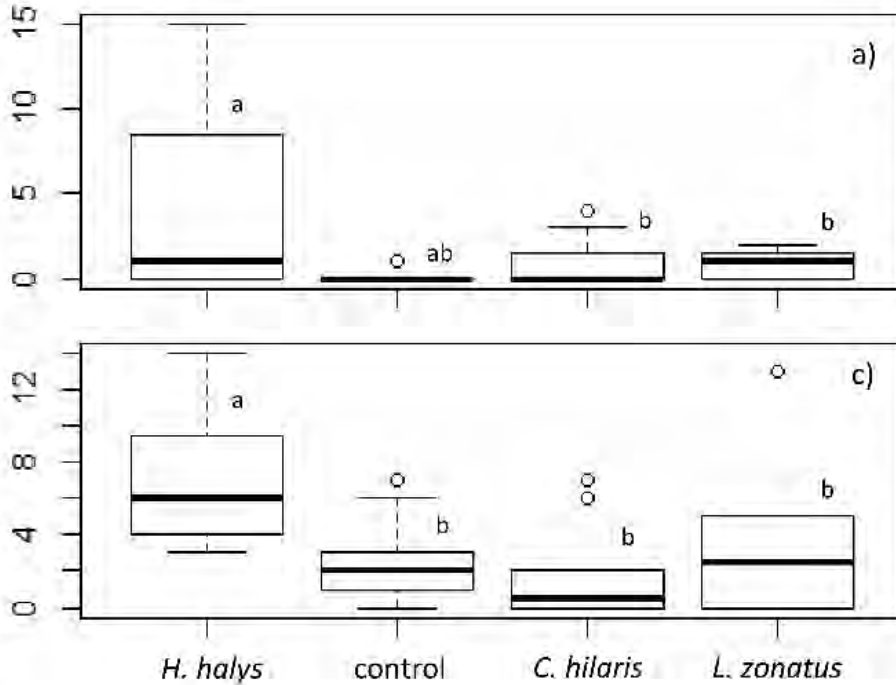
Photo: Odaguides.us

Photo: Natash Wright

Halyomorpha halys can cause more epicarp lesions than native species



Number of epicarp lesions per cluster recorded in Sep 2019



Treatment

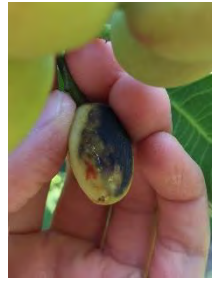


Photo: Tim Haye

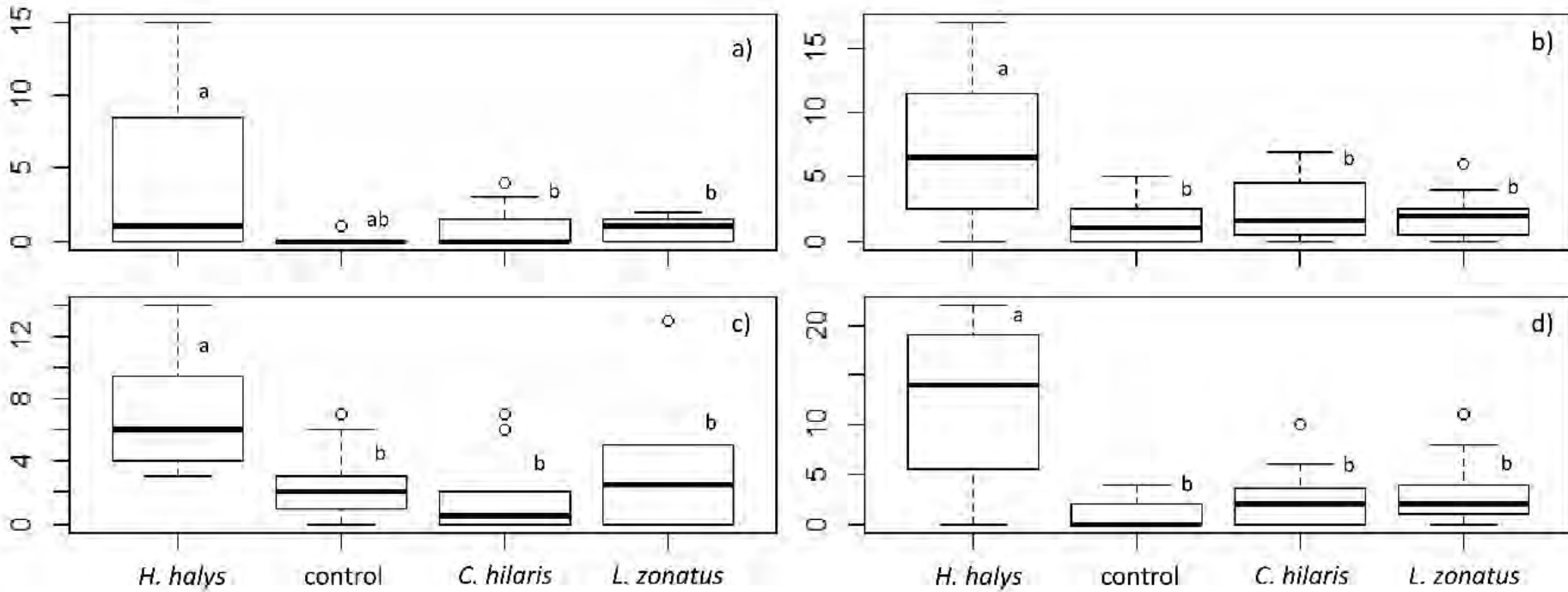
Photo: Odaguides.us

Photo: Natash Wright

Halyomorpha halys can cause more epicarp lesions than native species



Number of epicarp lesions per cluster recorded in Sep 2019



H. halys control *C. hilaris* *L. zonatus*



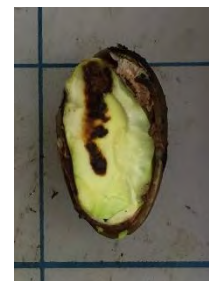
Treatment



Photo: Tim Haye

Photo: Odaguides.us

Photo: Natash Wright



But: No increase in kernel necrosis due to *H. halys* feeding

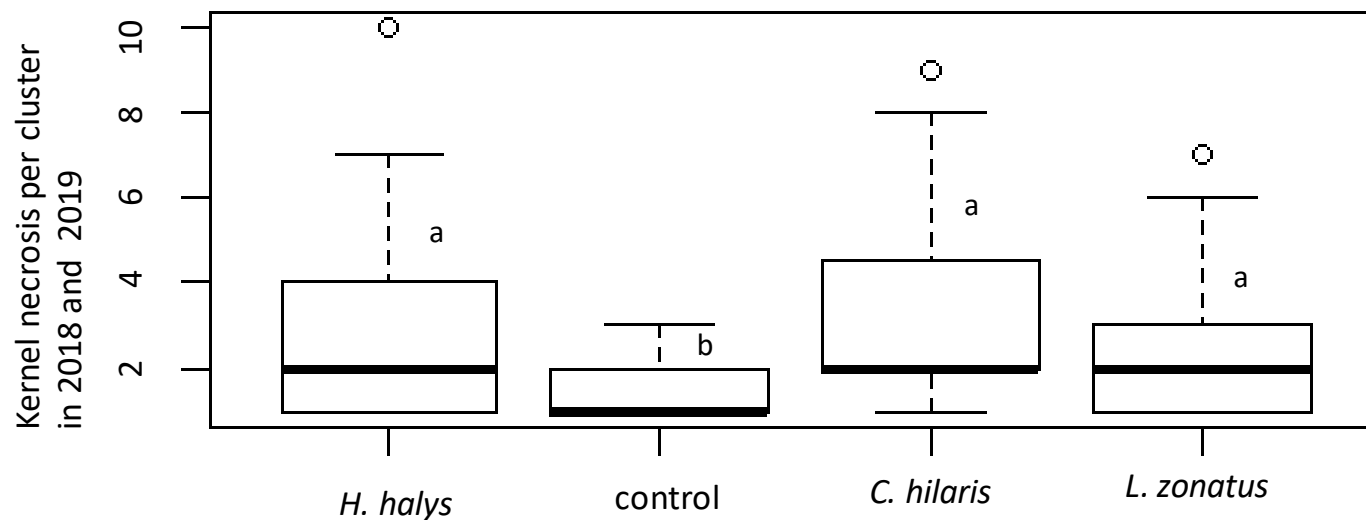


Photo: Tim Haye



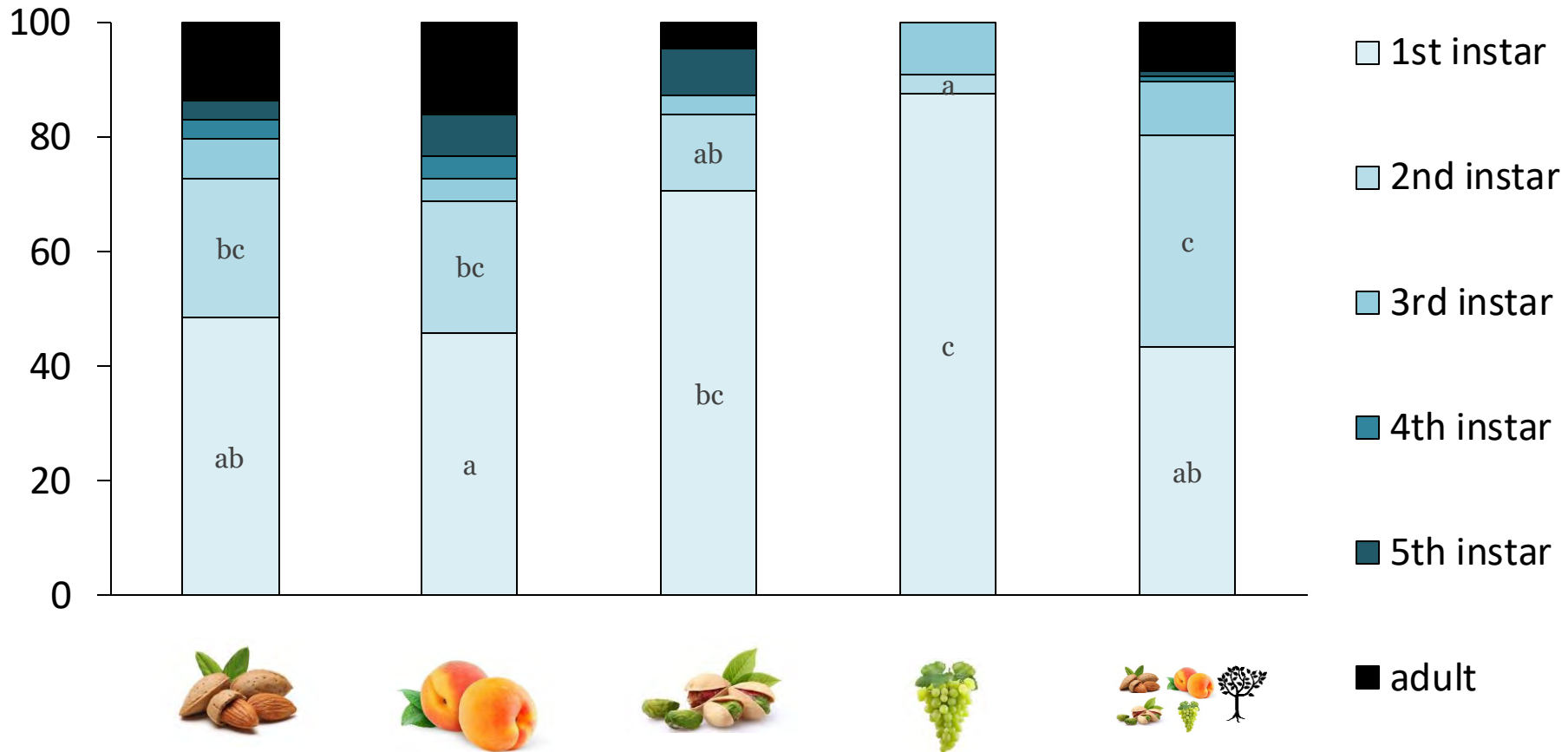
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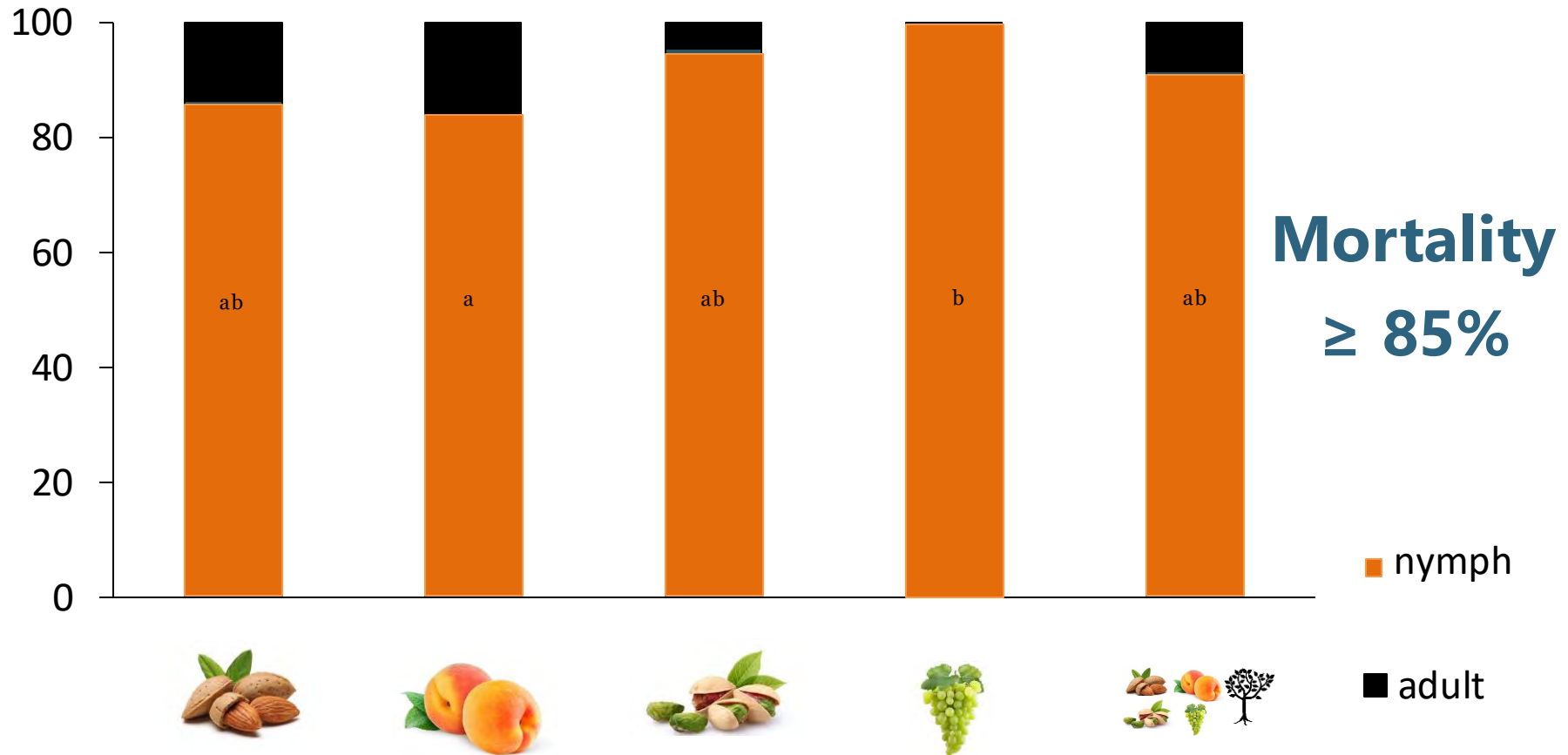
Photo: Natash Wright



I. halys field survival on Californian crops is low

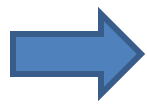
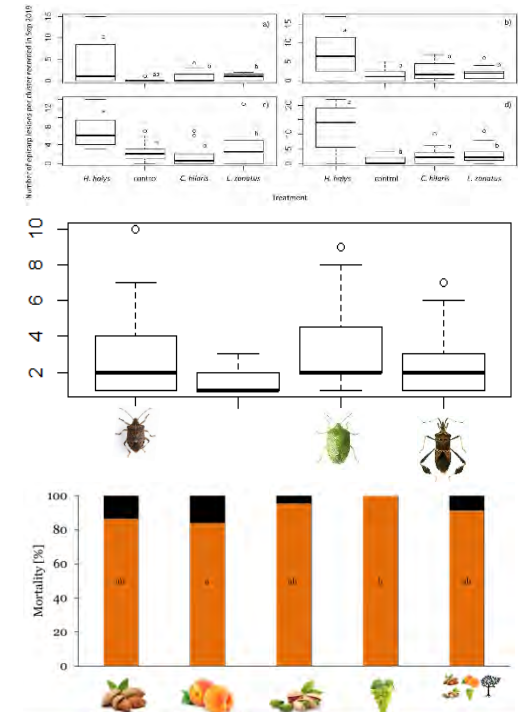


I. halys field survival on Californian crops is low



To conclude...

- *Halyomorpha halys* can cause more external damage on pistachios than native species
- *H. halys* does not cause more internal pistachio damage
- High nymphal mortality might help keep population sizes down



California pistachio production potentially at risk,
but currently low concern because of low population densities

Acknowledgements



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Thank you!