
Late season brown marmorated stink bug (BMSB) in Honeycrisp apple

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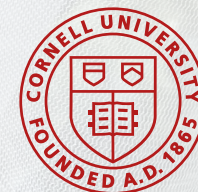
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Confirmation of BMSB Damage Through Caging

ARDP Funded-BMSB Project-- What does late-season damage look like on honeycrisp apples?

Traps are not equal to damage = more essential to define damage

Brown Marmorated Stink Bug Caging Experiment



Study design

=Caging treatments were applied every week for four weeks before harvest

=Branches with two apples each were bagged with the following treatments

- 4 Adult BMSB
- 4 4-5 instar BMSB
- 4 2-3 instar BMSB
- Untreated Control

=Insects were removed after 4 days of exposure and replaced daily during this time

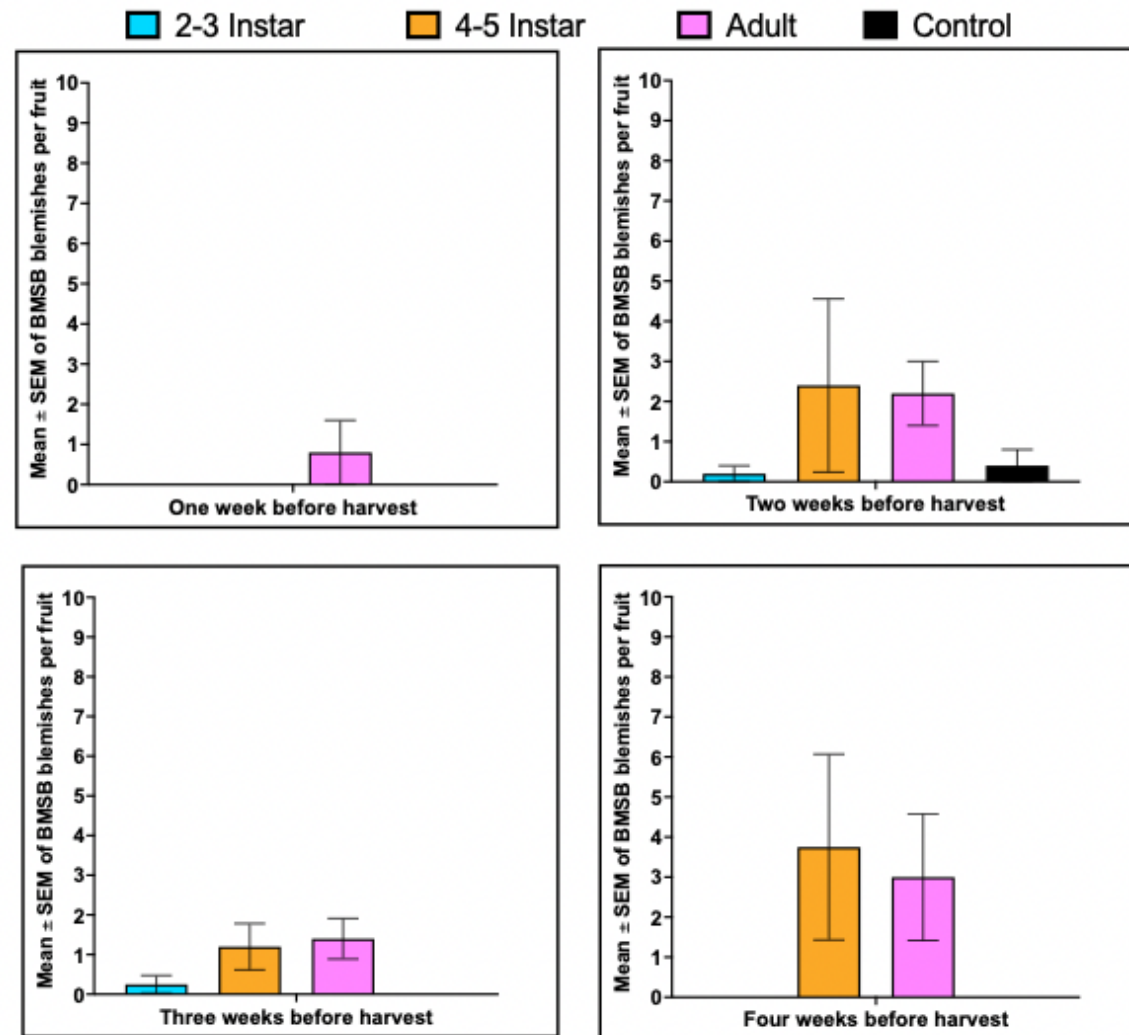
=Damage was assessed at harvest

Damage results at harvest

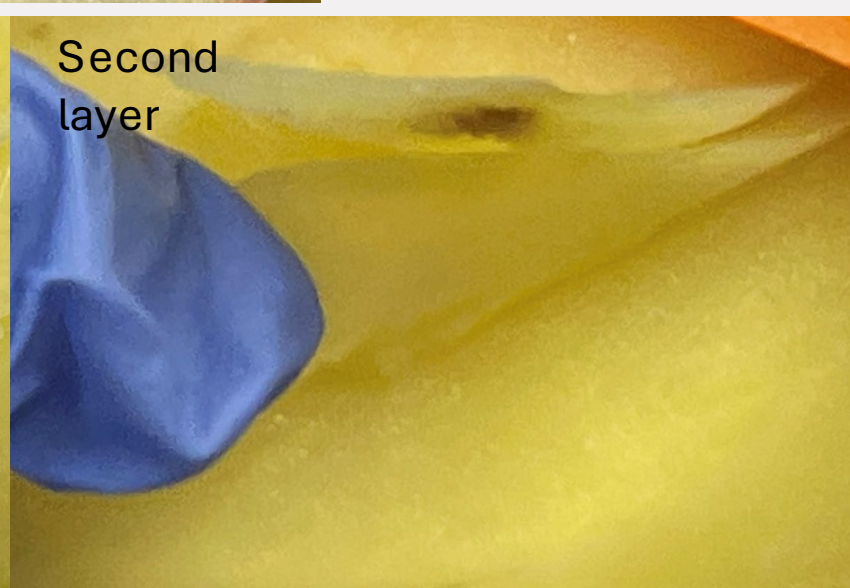
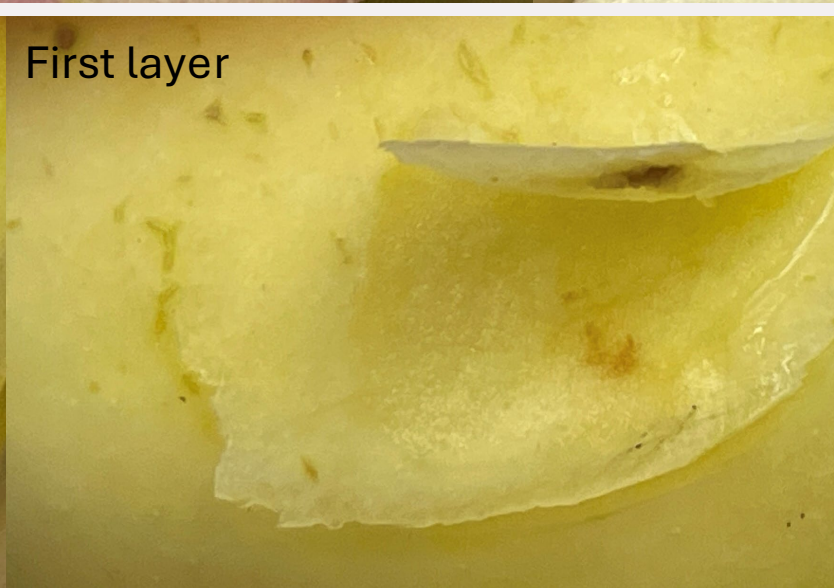
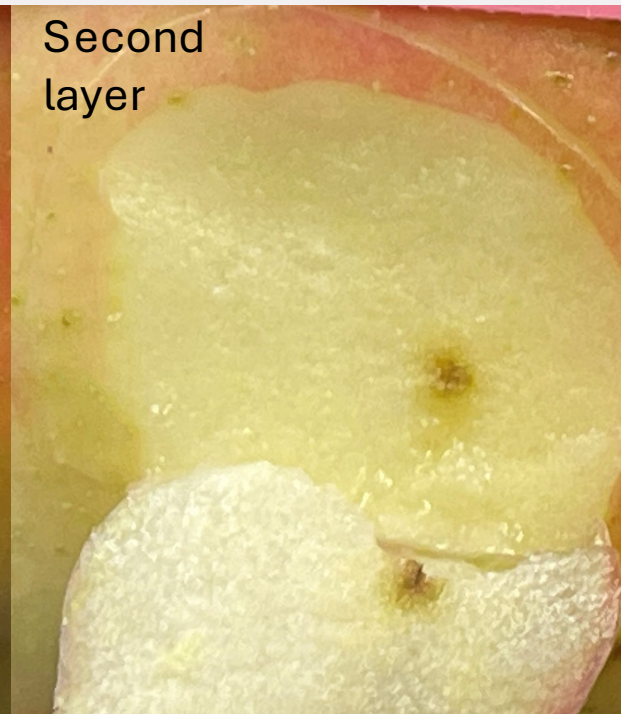
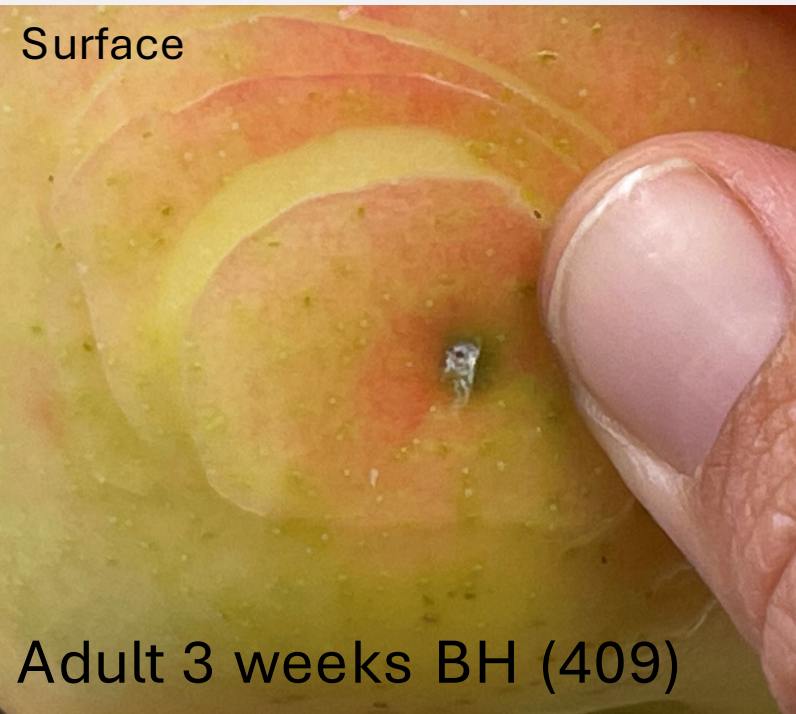


Adults may be better
at late season
damage than
nymphal stages

Brown marmorated stink bug (BMSB) damage at harvest to apples caged with three BMSB for four days at different weekly intervals before harvest (BH)



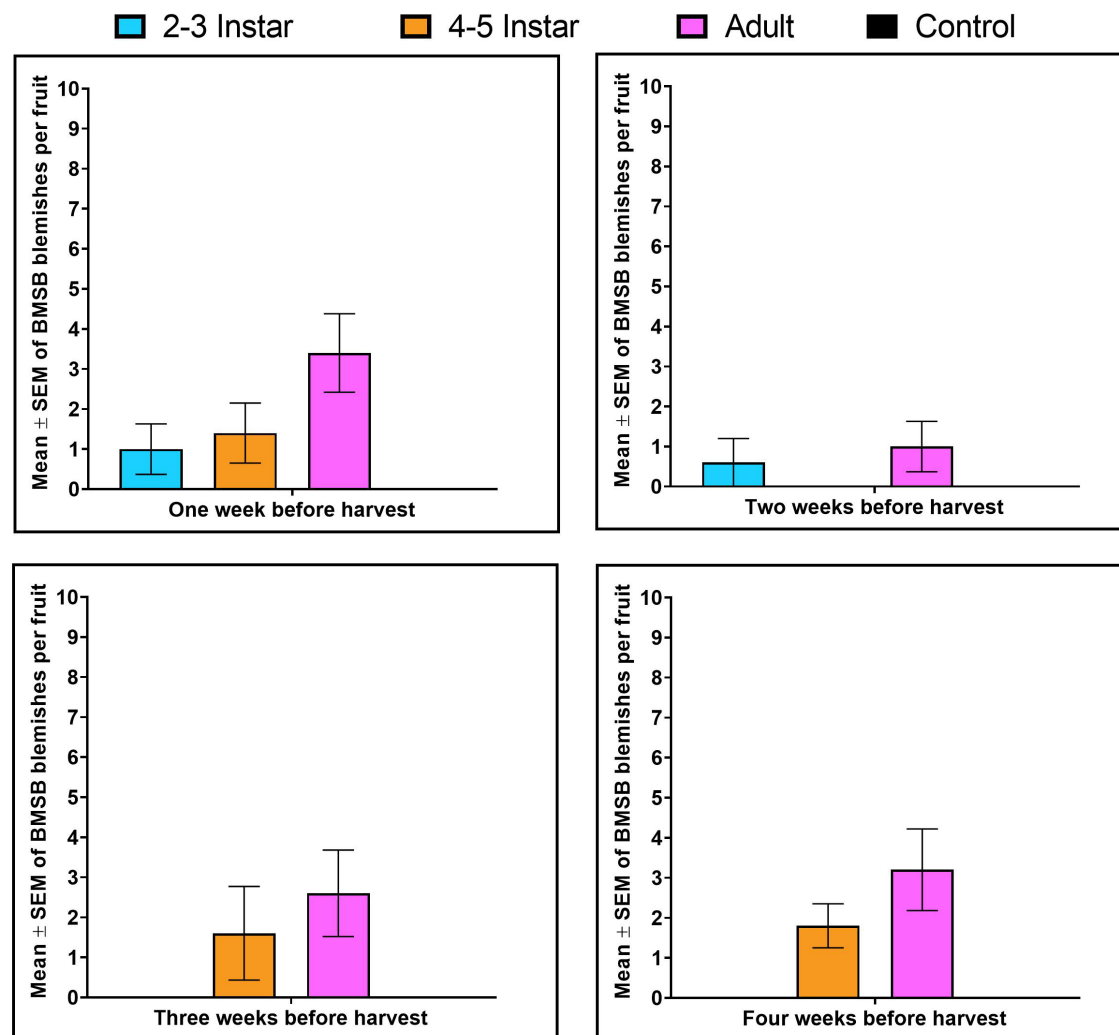
At harvest damage - BMSB



Damage results **post-harvest**

Storage may cause damage to be more apparent/to develop

Brown marmorated stink bug (BMSB) damage post-storage to apples caged with three BMSB for four days at different weekly intervals before harvest (BH)



Post-storage damage

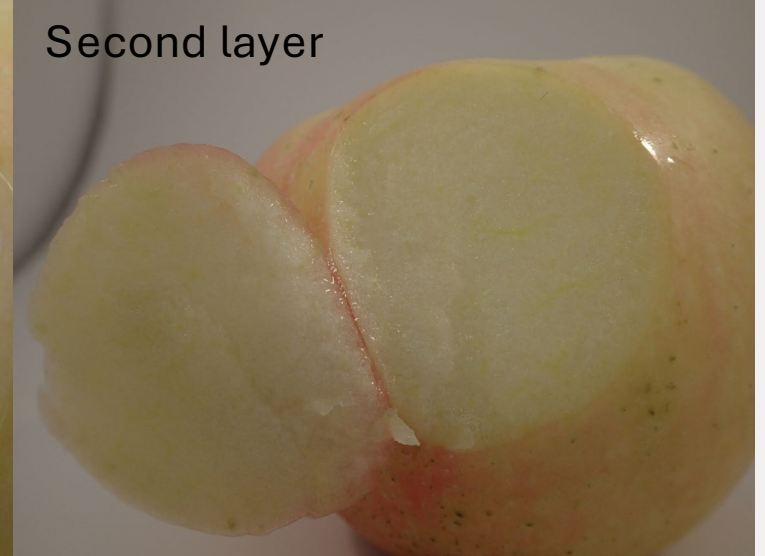
Surface



First layer

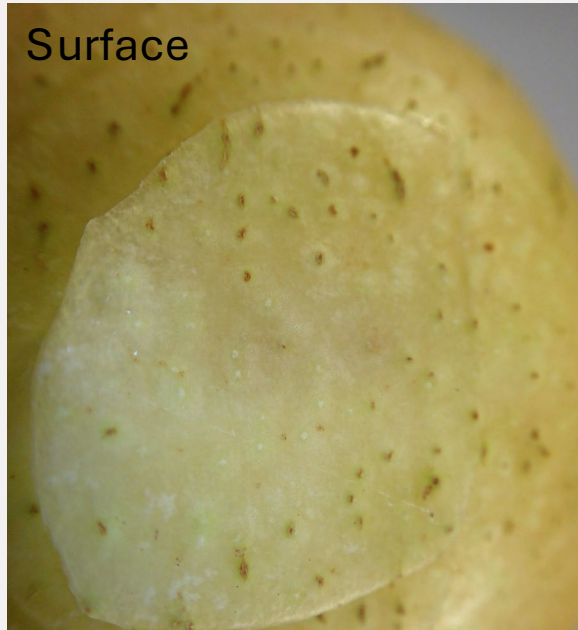


Second layer



Adult 1 week BH (115)

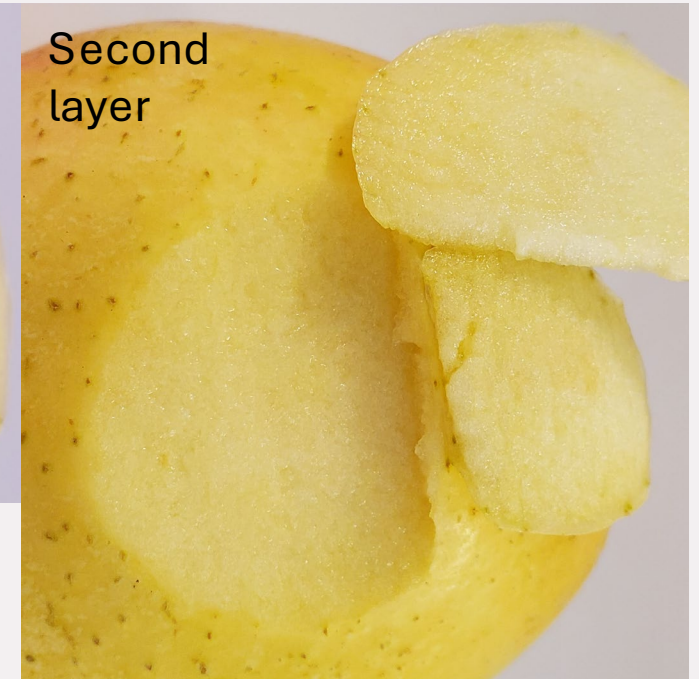
Surface



First layer



Second layer



2-3 instar 2 weeks BH (112)

Future Directions



1. Caging experiment needs to be repeated and peeling of the whole apple at both assessments
2. Second year of funding just submitted!
3. Photos for extension documents were obtained to help growers/packers identify damage to inform late season BMSB treatments