

2.1 Impact on Orchard Crops



Funding



United States
Department of
Agriculture

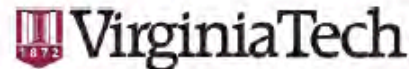
National Institute
of Food and
Agriculture

Specialty Crop Research Initiative
Grant #2011-01413-30937

Collaborating Institutions


















Cornell University



Exclusion Cage Study: 2011 - 2012

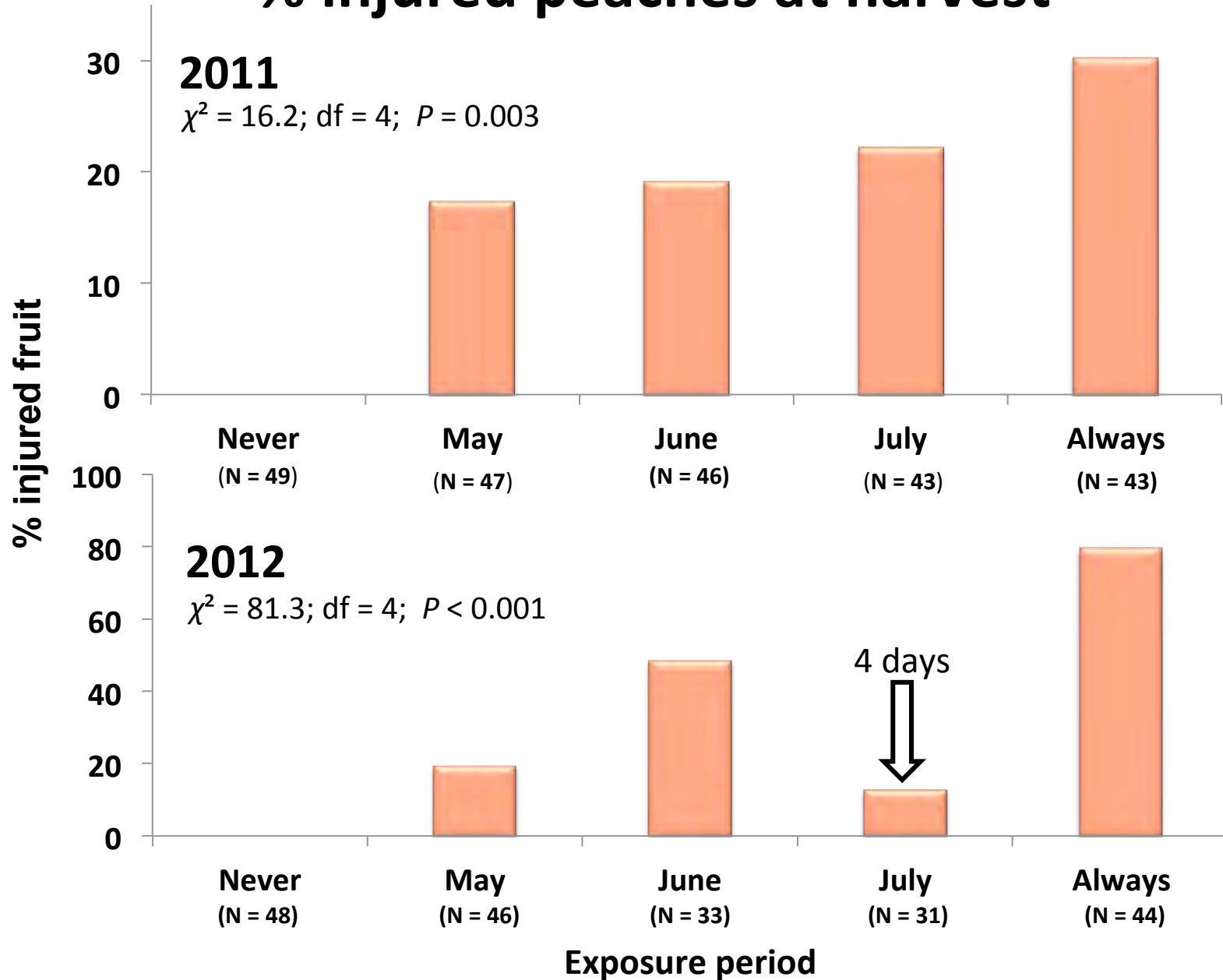
Injury to peaches & apples exposed to natural BMSB populations for discrete intervals during the season

- Unsprayed 'Golden Delicious' and 'Redhaven'
- Routine sprays for CM and/or OFM (e.g. Altacor)
- 50 fruit/treatment

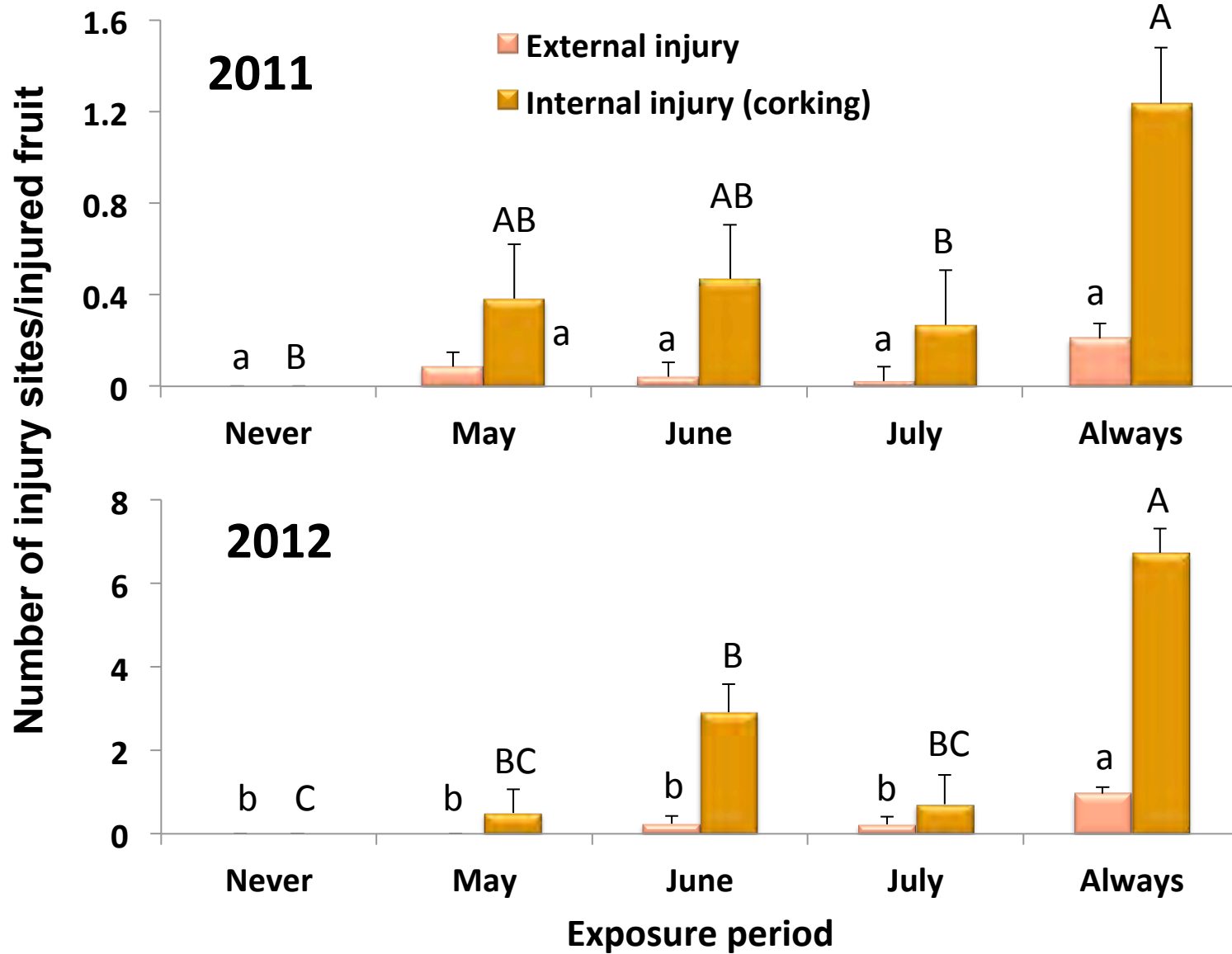
Treatment	May	June	July
Always exposed			
Exposed in May			
Exposed in June			
Exposed in July			
Never exposed			



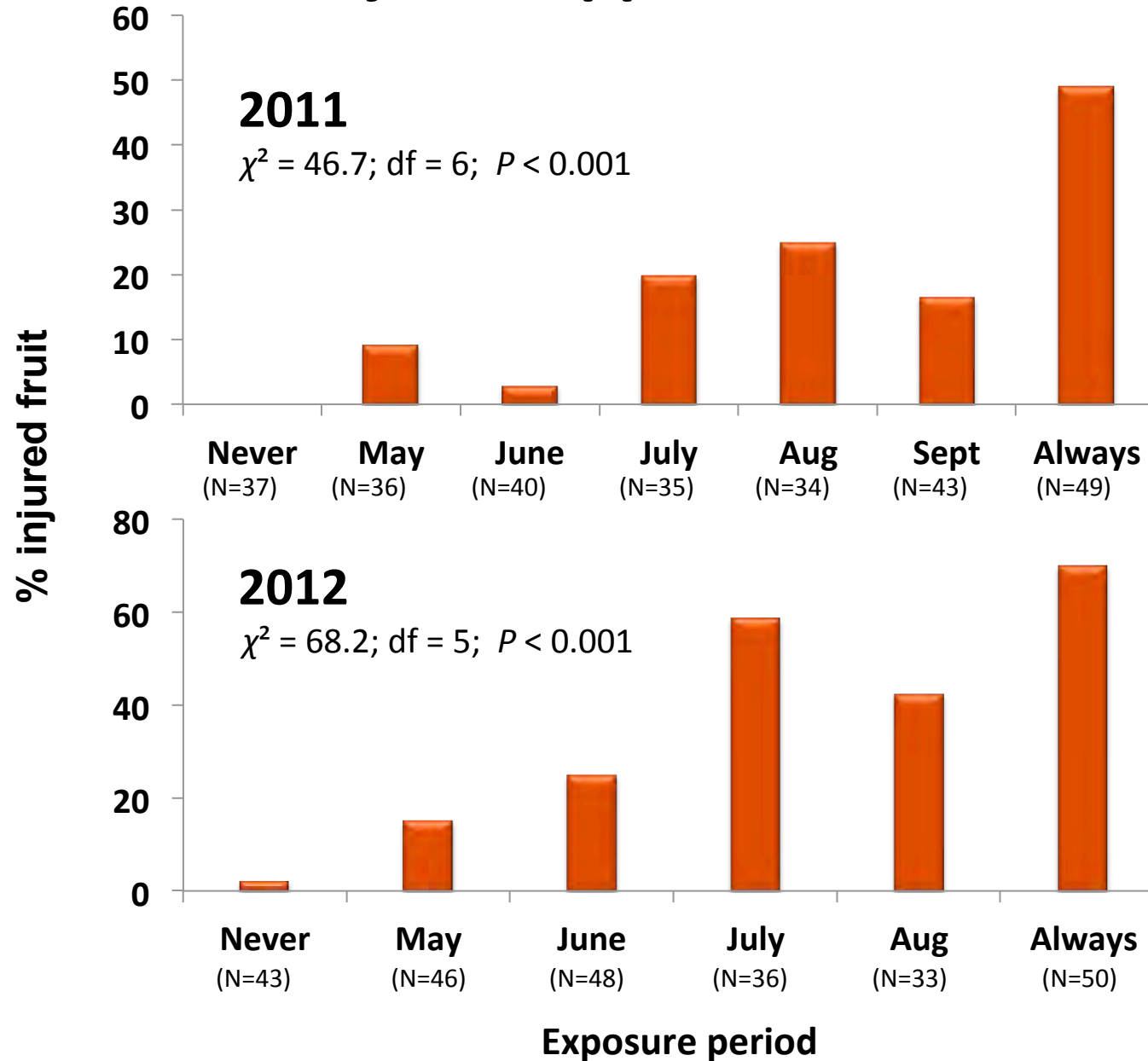
% injured peaches at harvest



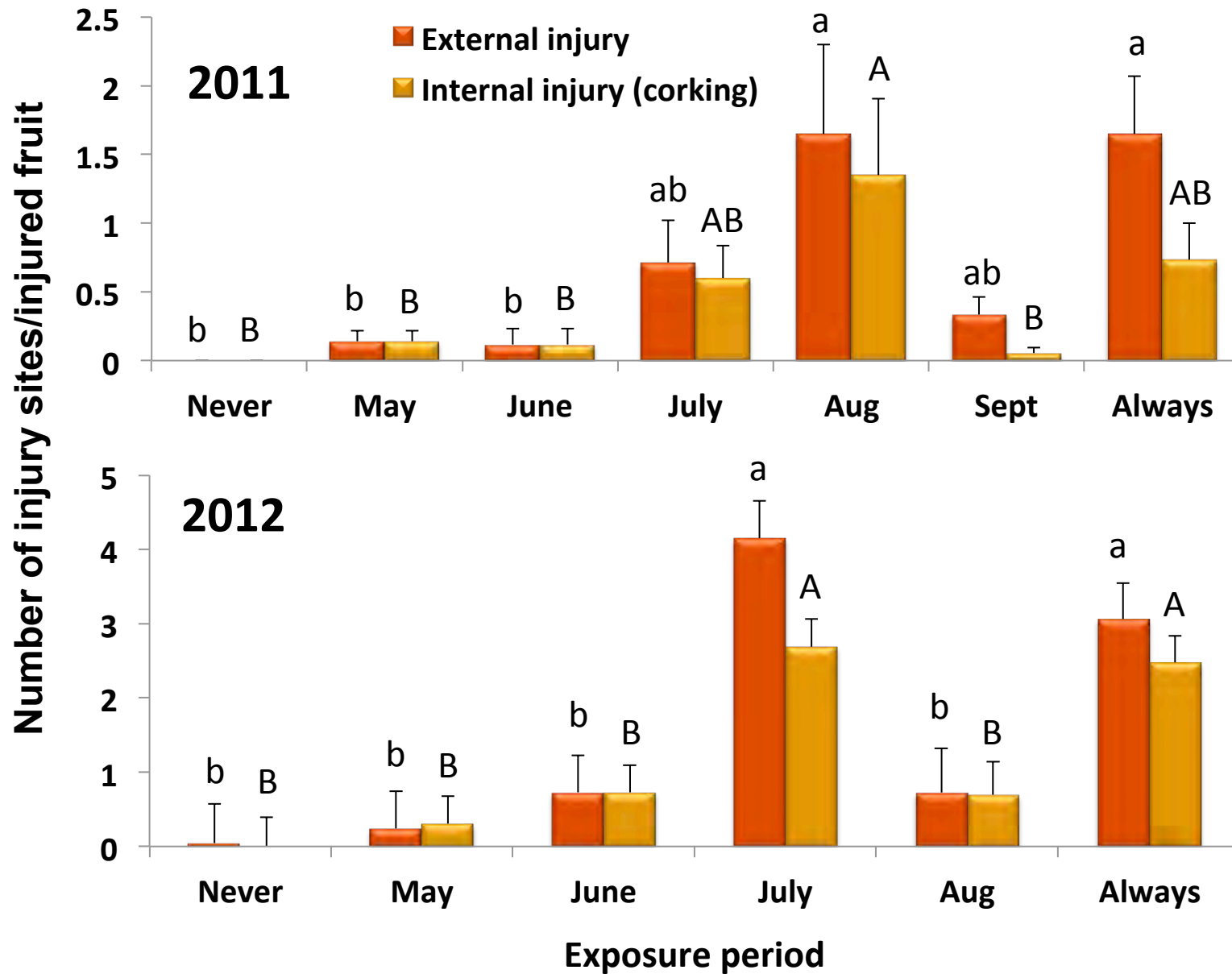
Peach injury severity



% injured apples at harvest

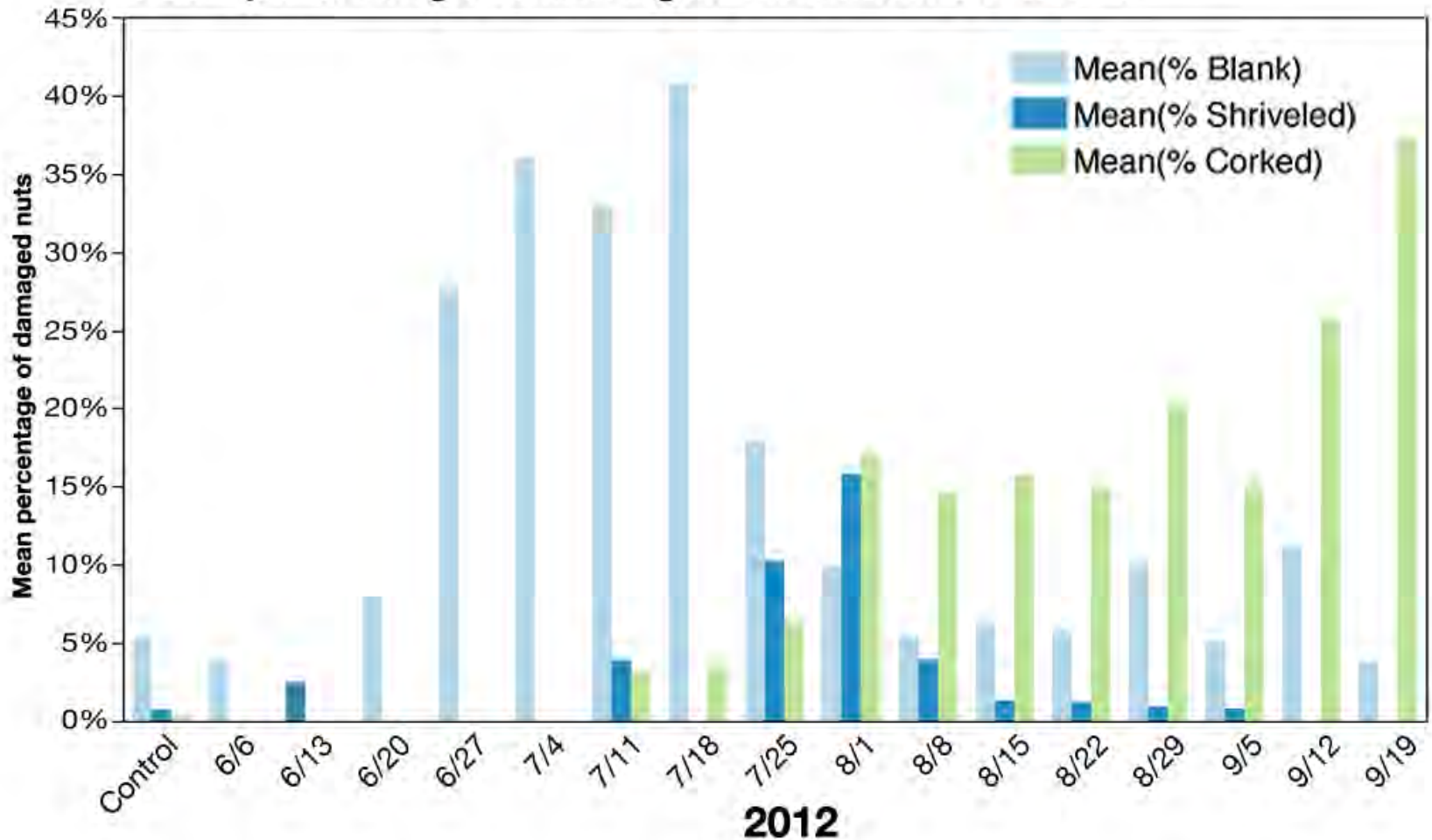


Apple injury severity



2012 Hazelnut Damage Trials in Oregon

Mean percentage of damaged hazelnuts vs. week























To be repeated in 2013

Inclusion Cage Study: 2011 - 2012

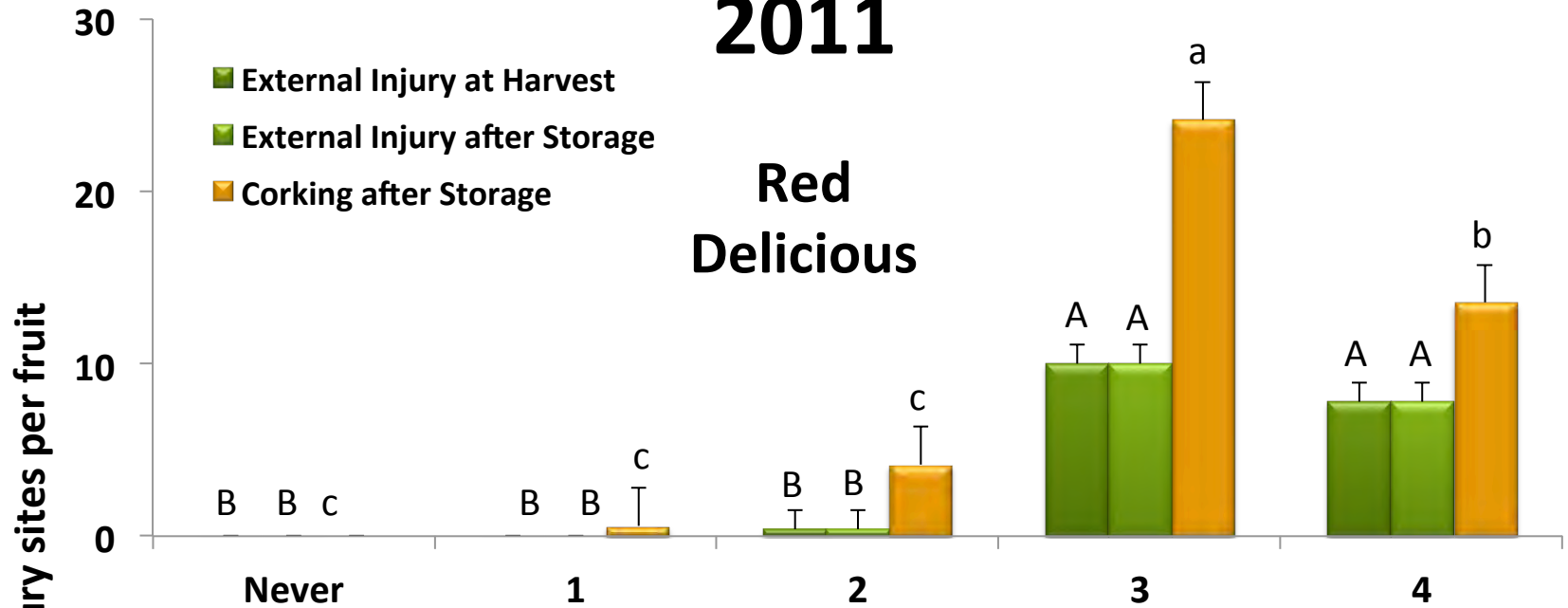
Injury to apples exposed to 5 adult BMSB for a 1-week interval during each of the 4 weeks preceding harvest

- Unsprayed 'Red Delicious', 'Fuji', 'Golden Delicious' & 'Honeycrisp'
- 20 fruit/treatment

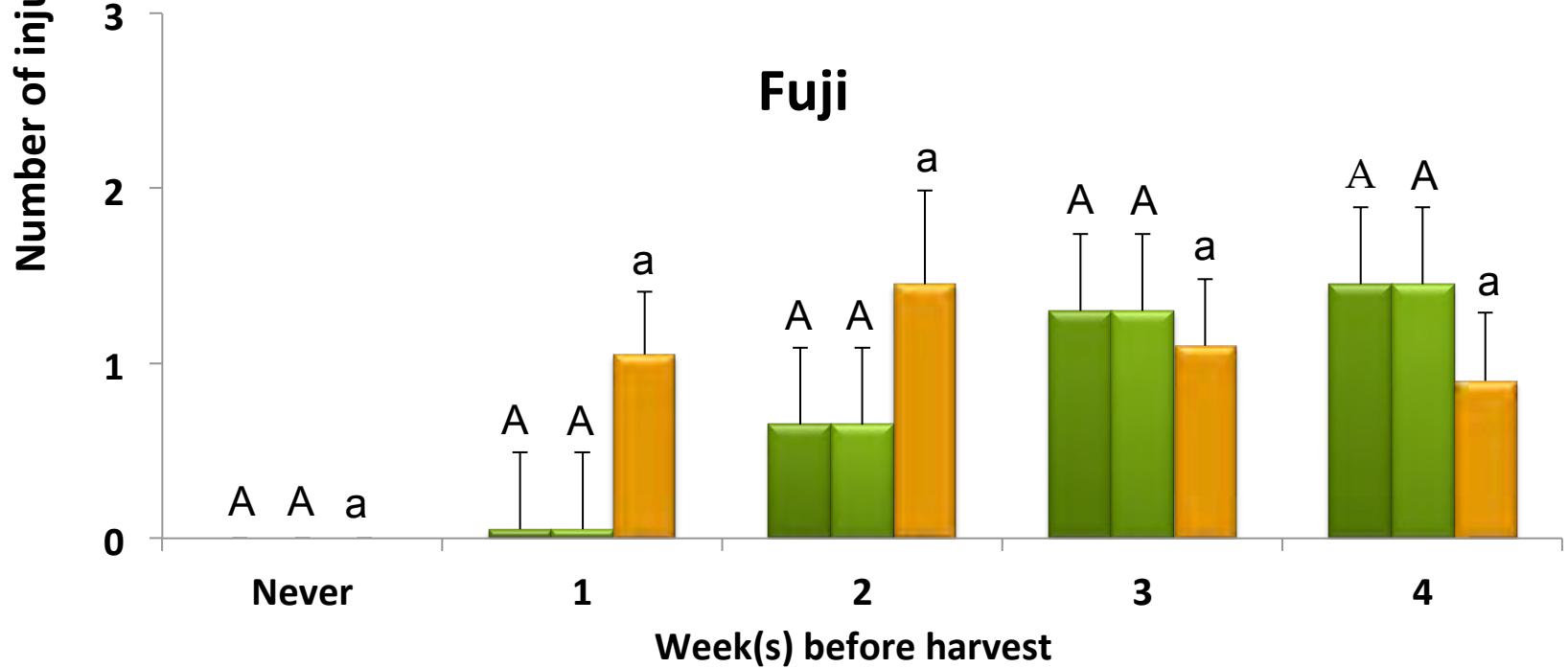
Week before harvest				
4th				
3rd				
2nd				
1st				
Never				

2011

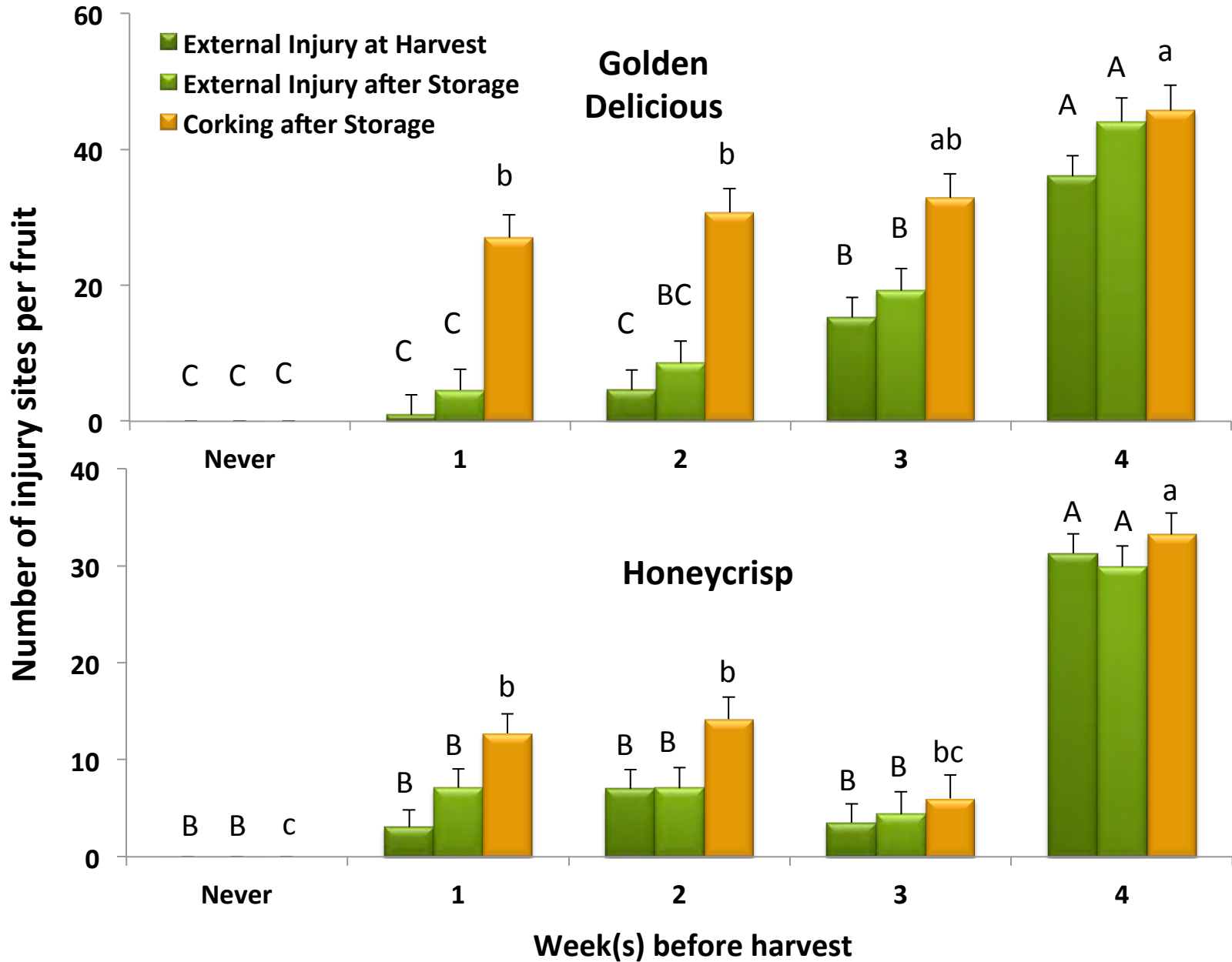
Red Delicious



Fuji



2012



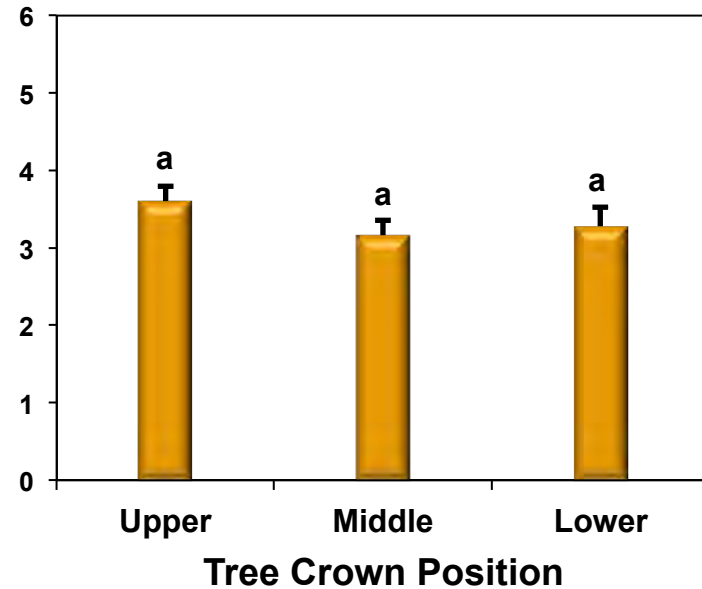
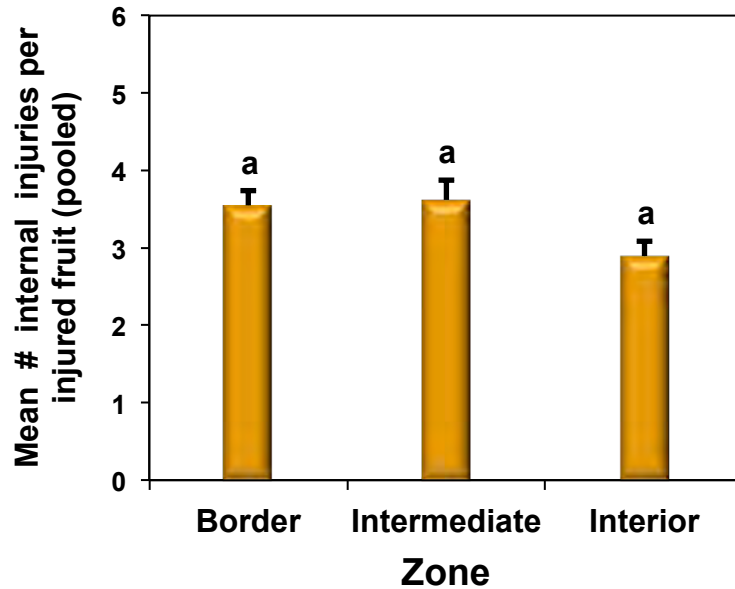
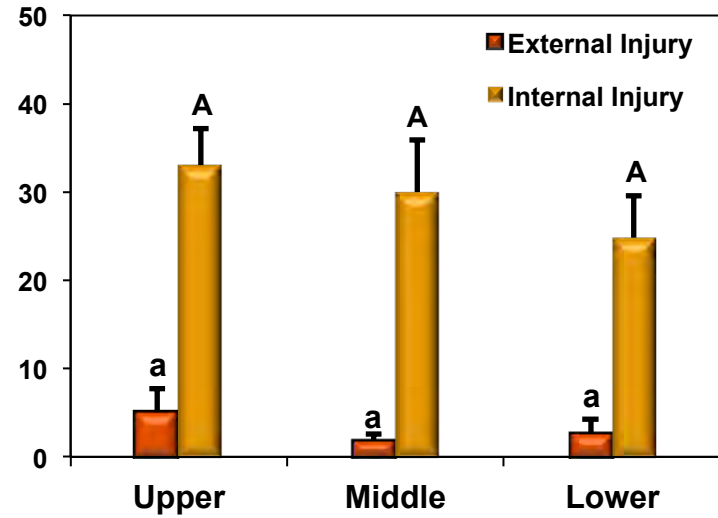
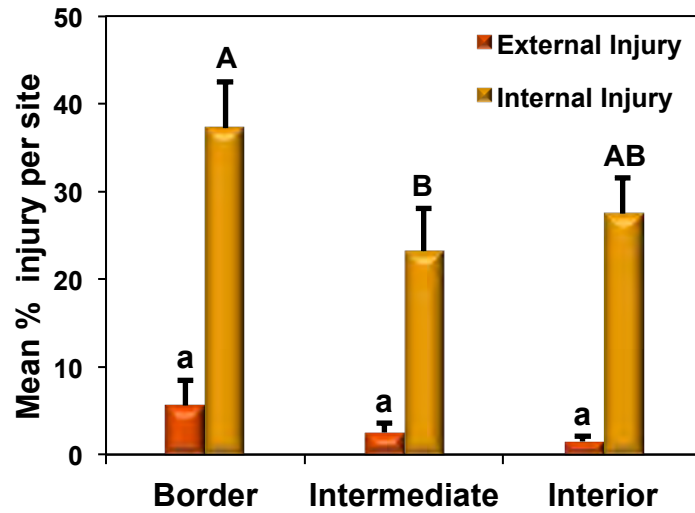
Distribution of brown marmorated stink bug injury within mid-Atlantic apple orchards



Chris Bergh, Shimat V. Joseph, Tracy Leskey, Dean Polk, Greg Krawczyk, Bryan Butler, and Starker Wright

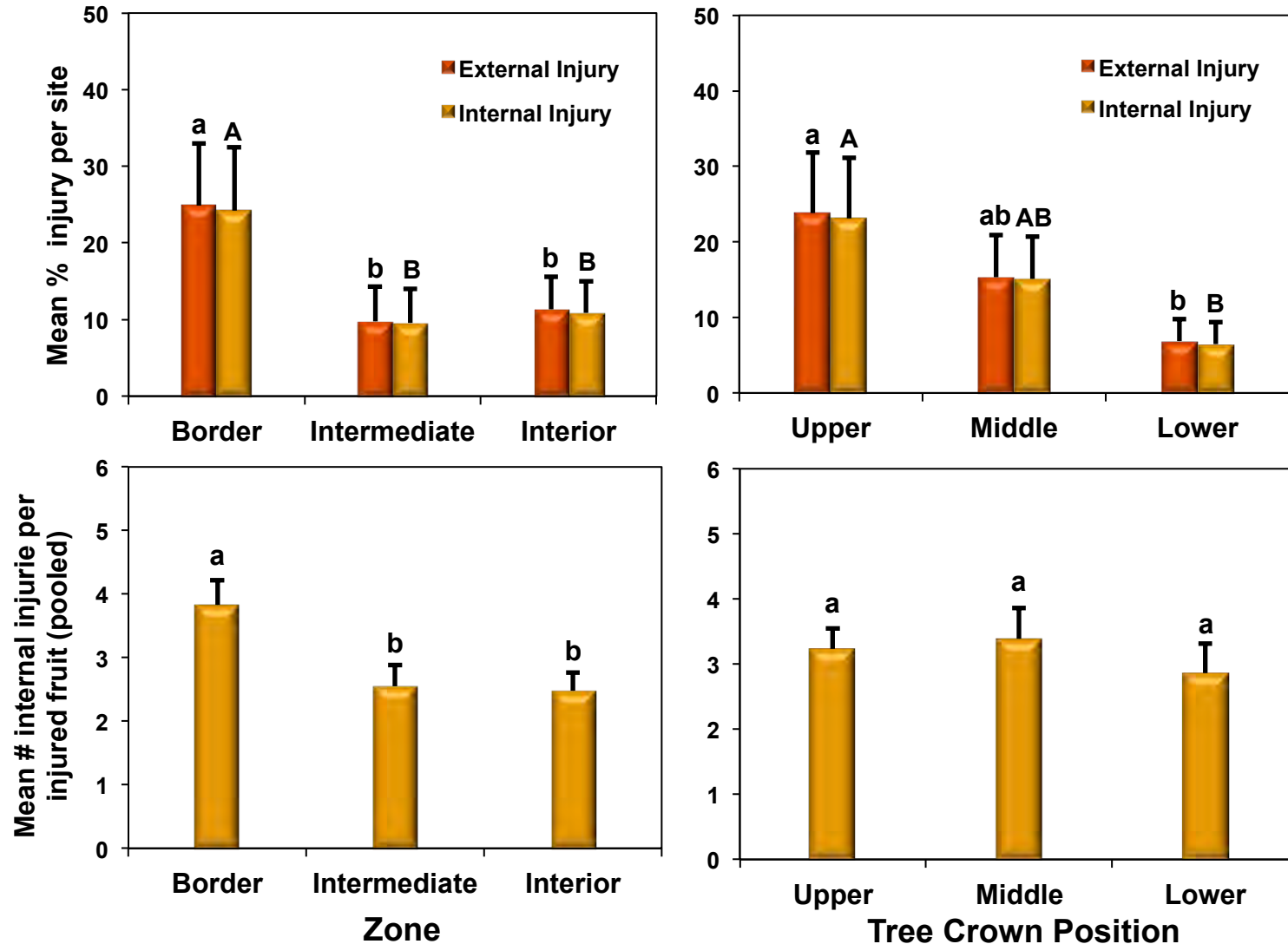
New Jersey: 2011

(5 sites)



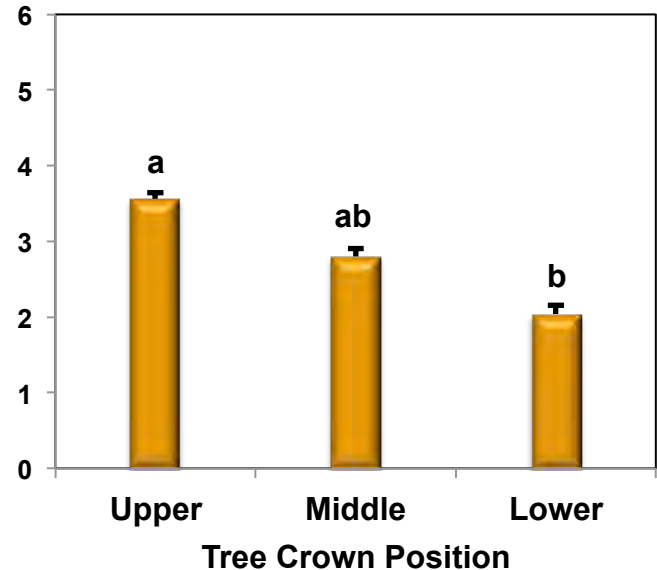
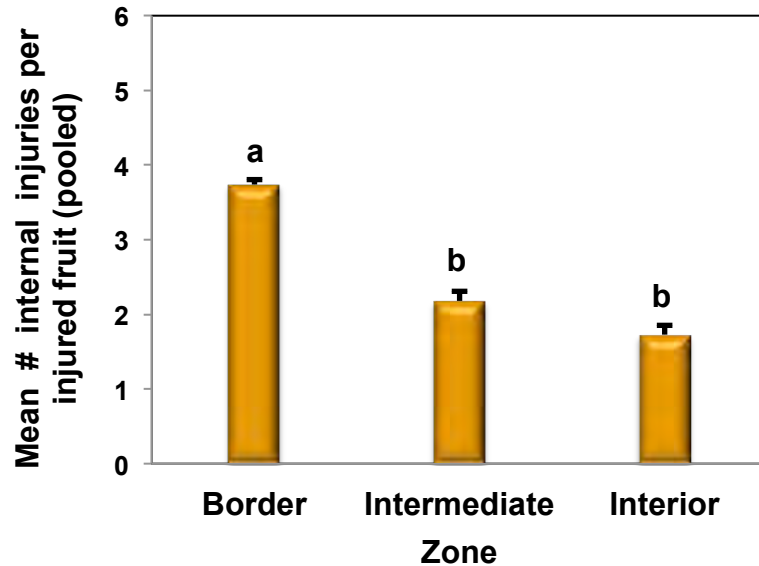
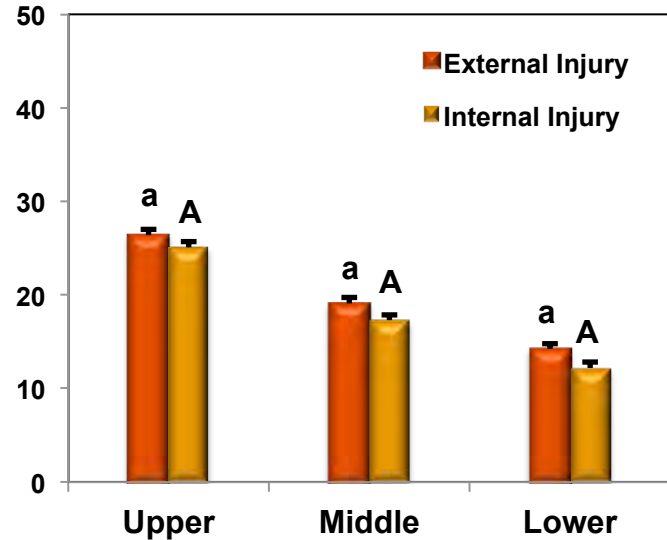
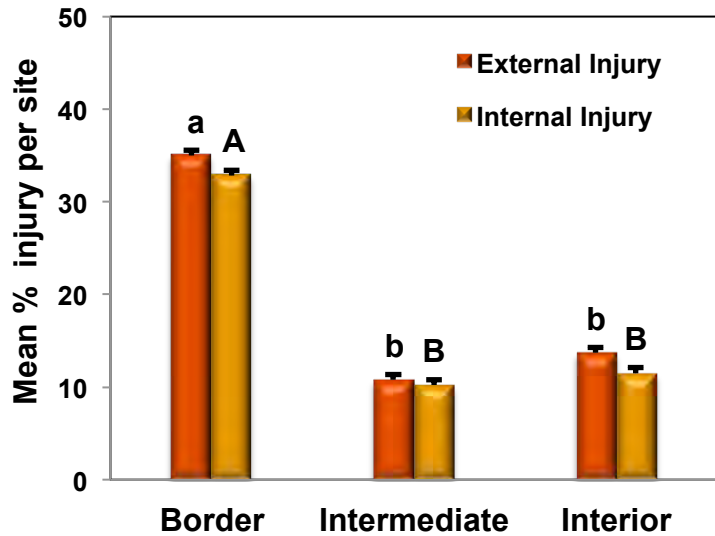
Maryland and West Virginia: 2011

(3 sites)



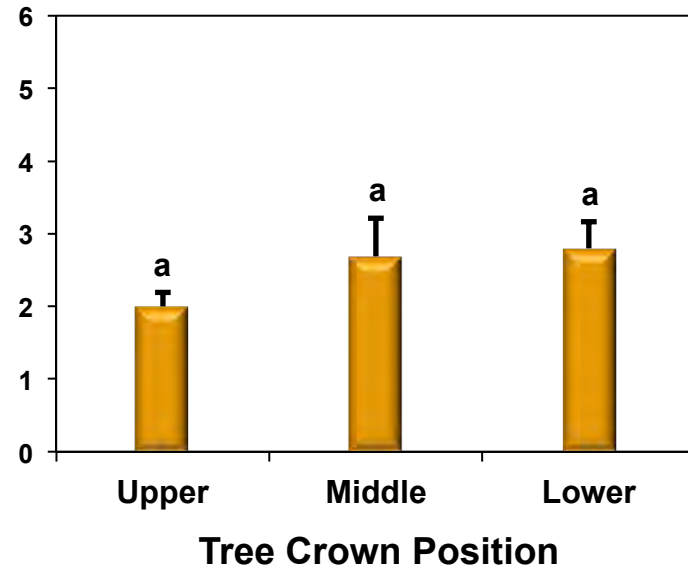
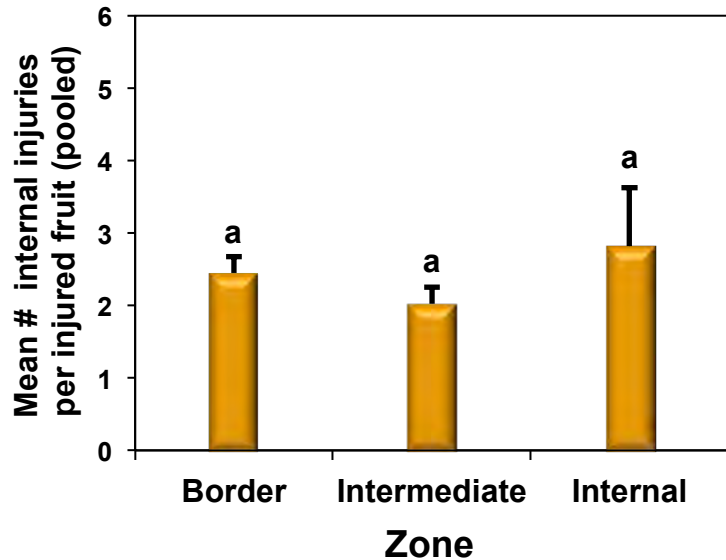
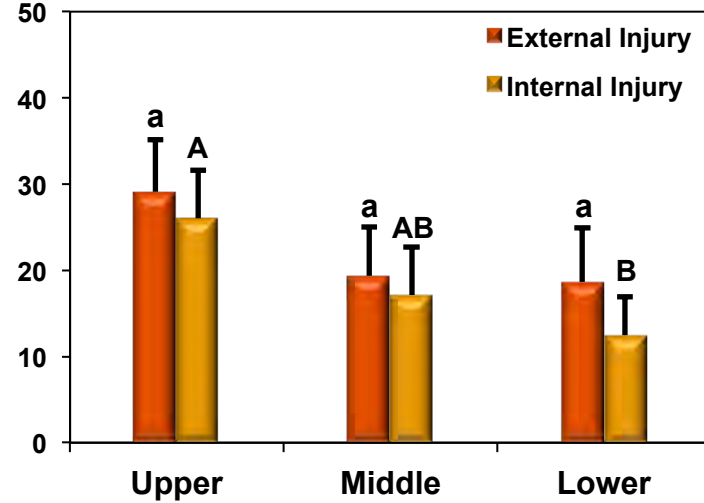
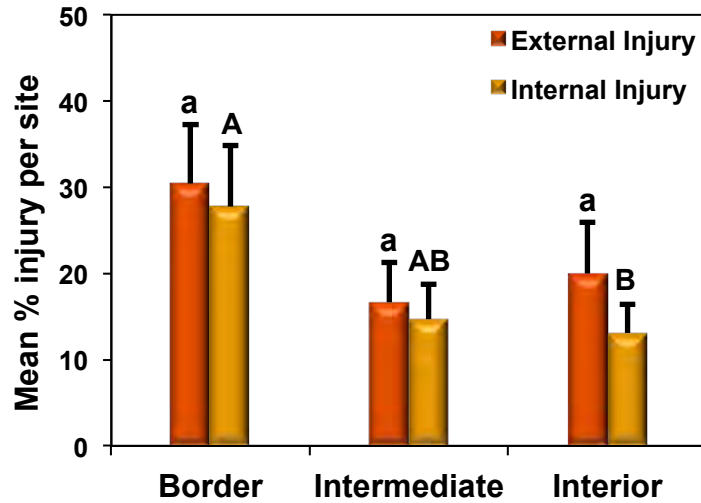
Maryland and West Virginia : 2012

(3 sites)



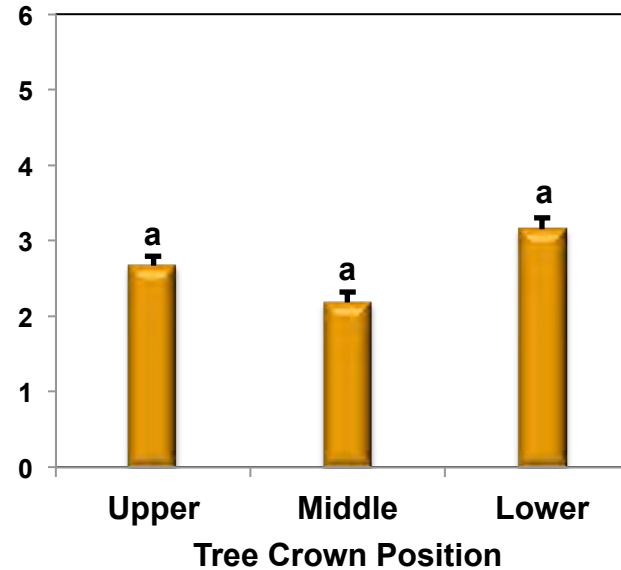
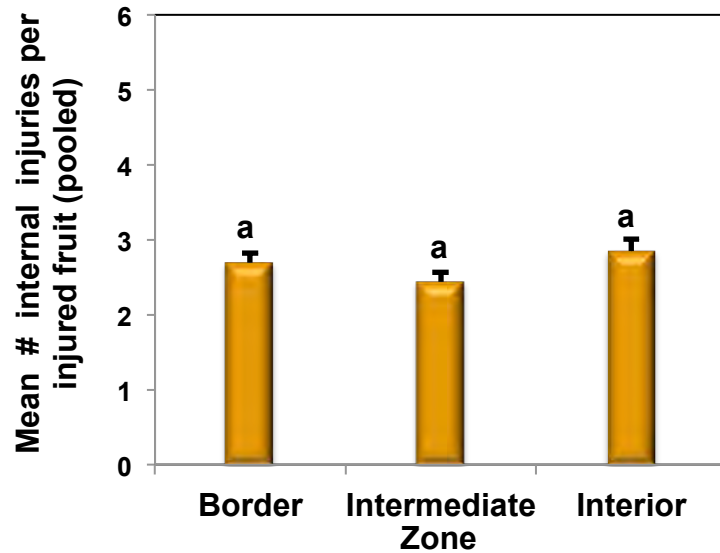
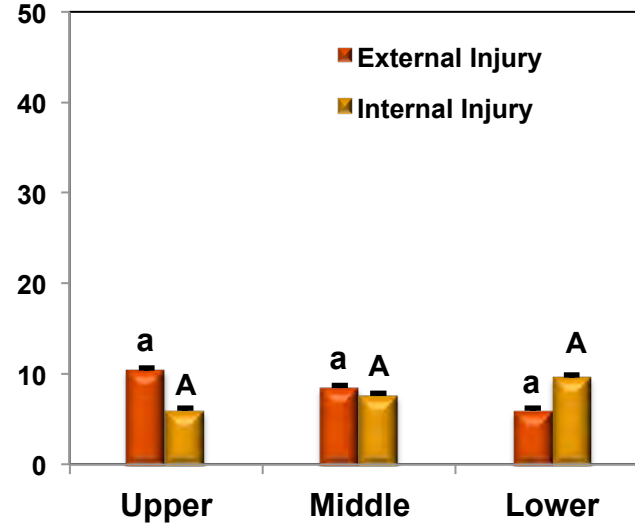
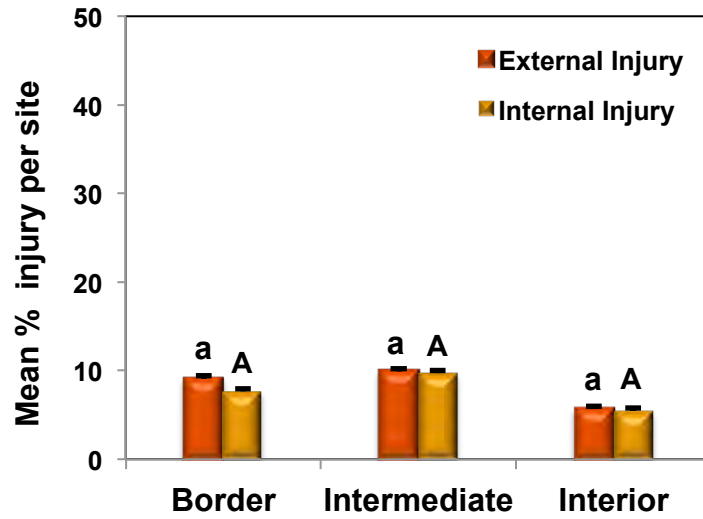
Virginia: 2011

(3 sites)



Virginia: 2012

(3 sites)



Pennsylvania: 2011

(7 sites)

