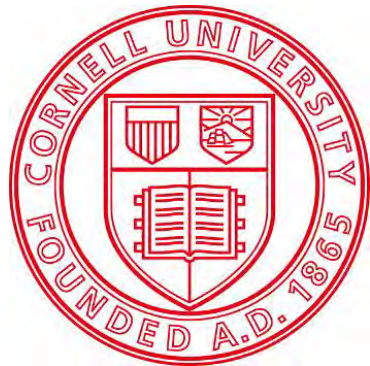


Updates from Fire Blight field research at Cornell AgriTech

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Cornell
AgriTech

New York State Agricultural
Experiment Station



Fire Blight

- High-density tall/super spindle plantings (1000 – 1200/A) = high-value/vigor acreage
- Young productive trees: protracted bloom & vigorous susceptible shoot tissue
- New popular scion varieties susceptible
- Seasons warmer weather from bloom to terminal bud set



Fire Blight Trials at AgriTech

- Orchard sites (RCB design –wide spacing)
‘Gala’ trees on B.9 planted in 2000



Blossom Blight Trials

- Blossom blight application timing
 - Pre-bloom timings for biopesticides (SARs)
 - All antibiotics & biopesticides @ 80% bloom (20-40% bloom)
 - (Ea 273 at 1×10^6 CFU ml⁻¹) @ 80% Bloom
- Blossom blight incidence: percentage of blighted blossoms (5-6 reps)



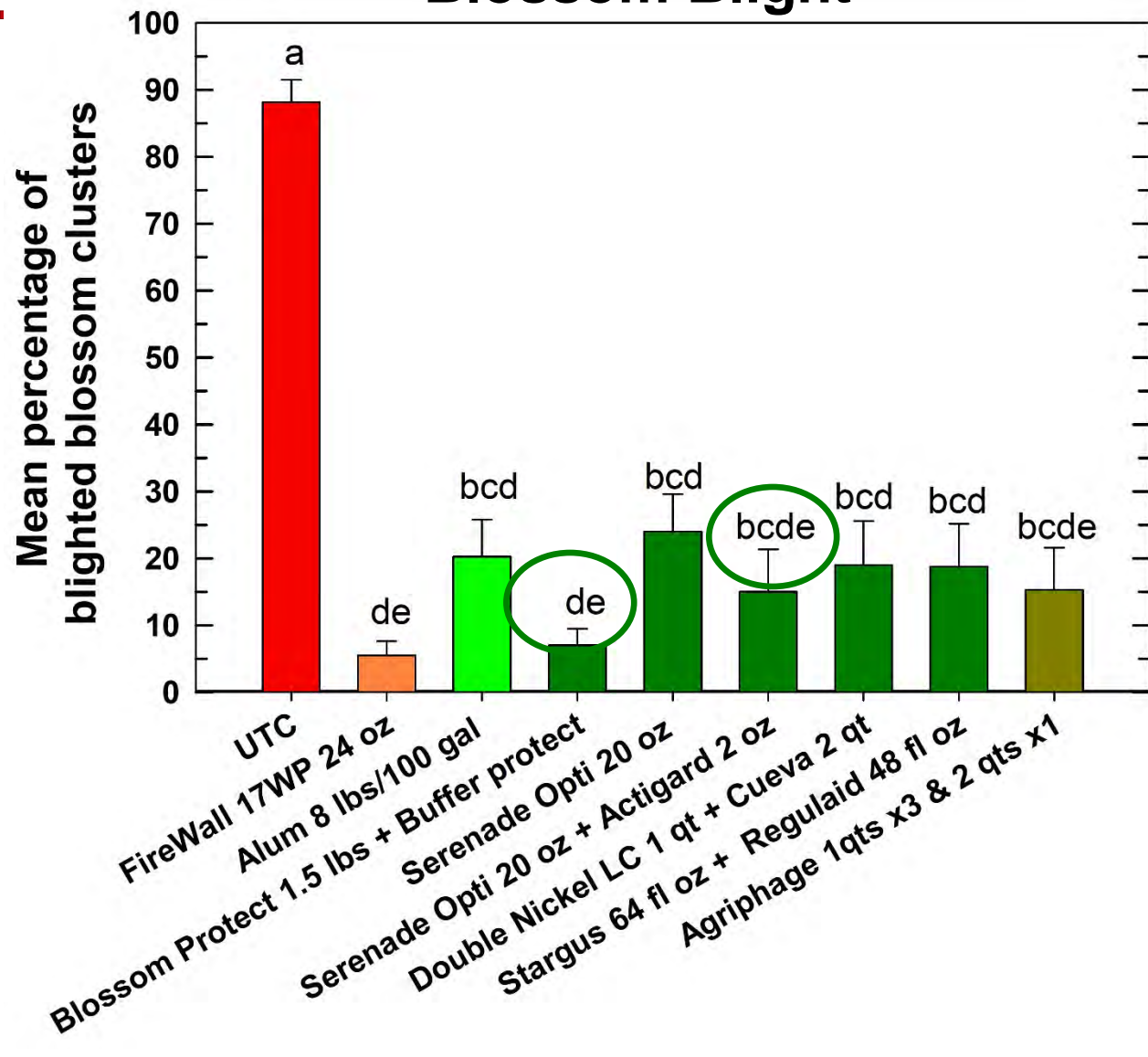
Shoot blight trials

- Shoot blight application timing
 - Natural infection from blossom blight infections
 - Apogee (PF/1-2") & SARs (Actigard, Lifegard, Regalia)(2-5 days prior)
- Shoot blight: progression of cankers or percentage of blighted shoots/tree

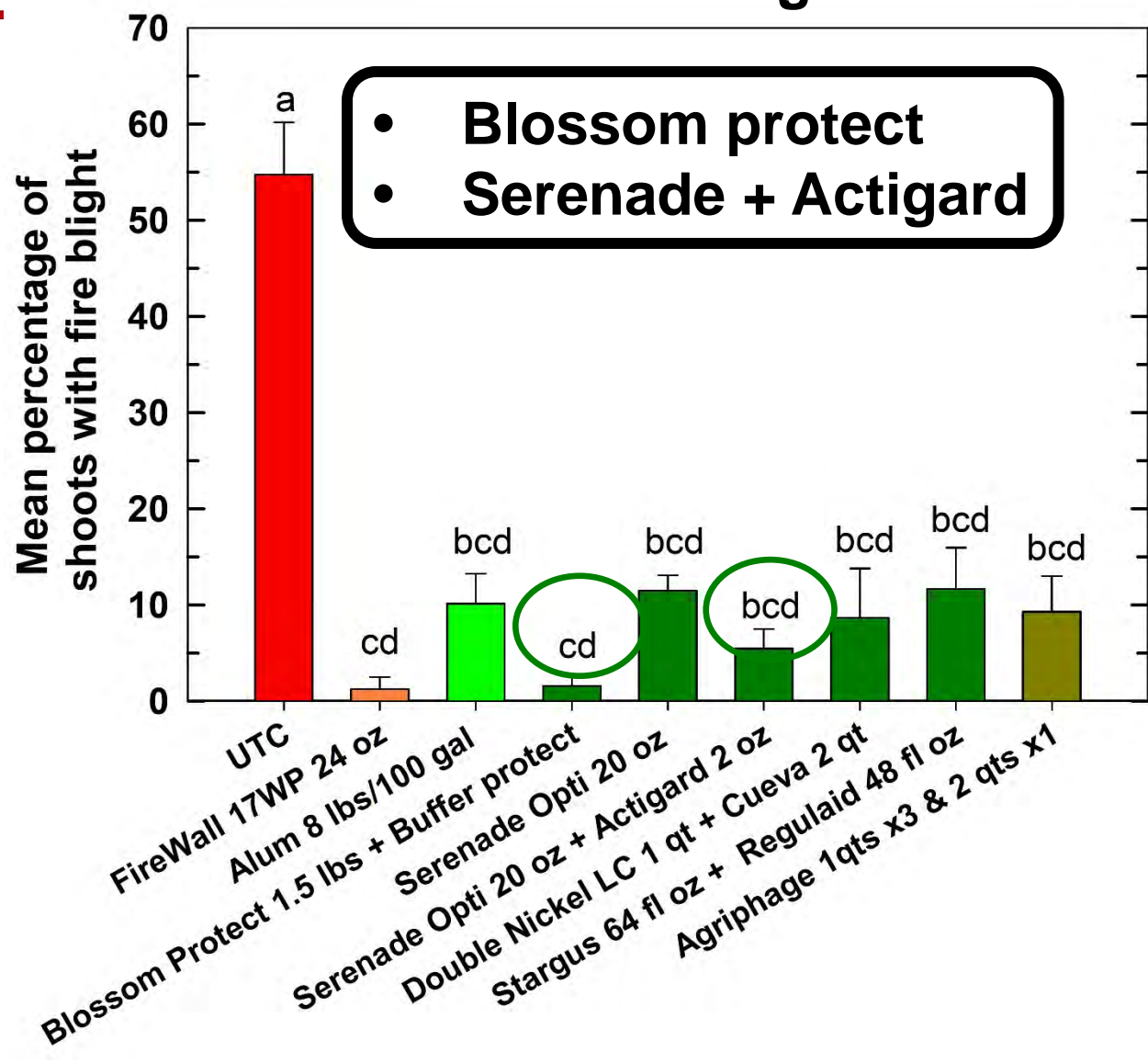


Trials at AgriTech – Biologicals 2019

Blossom Blight

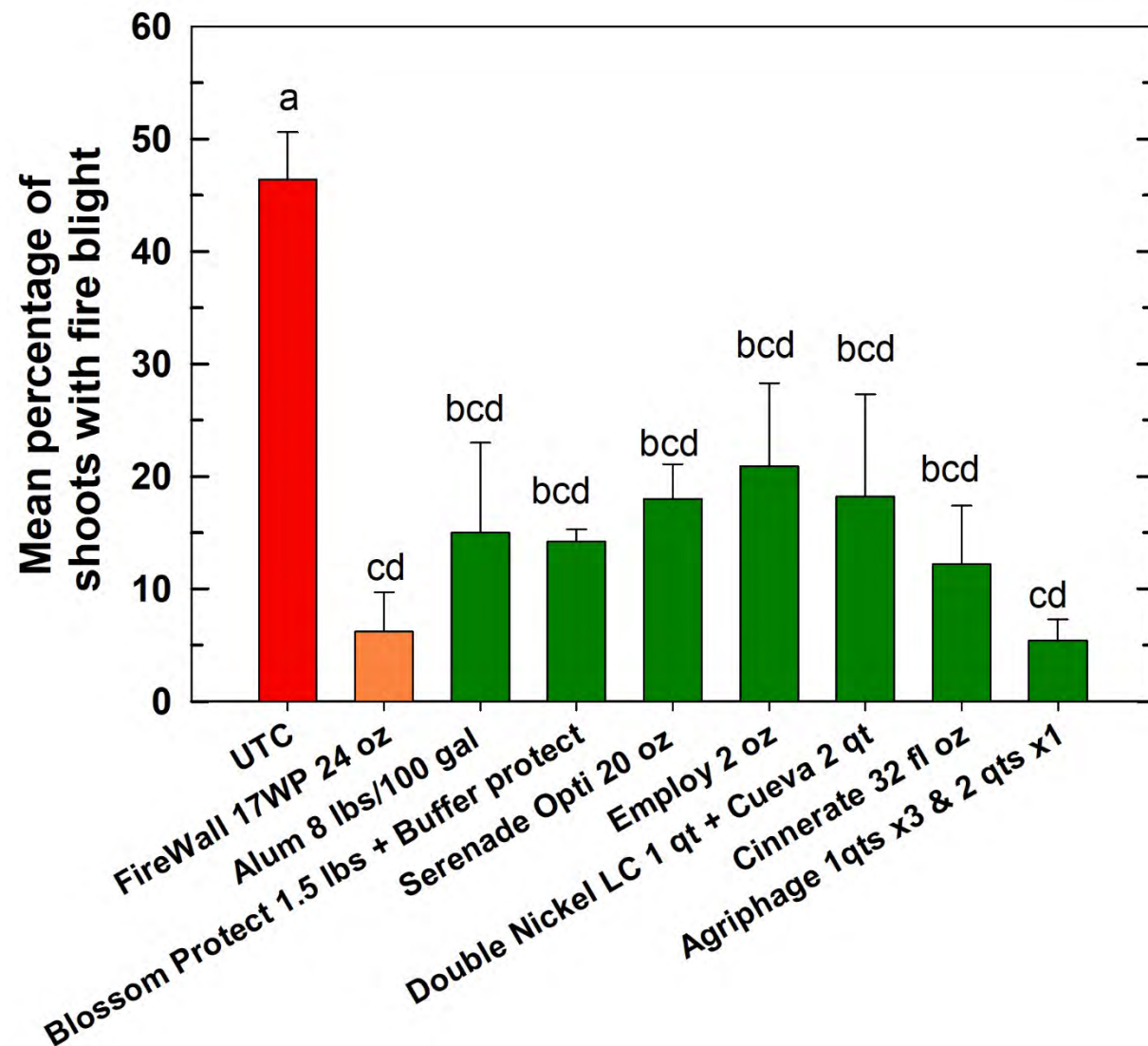
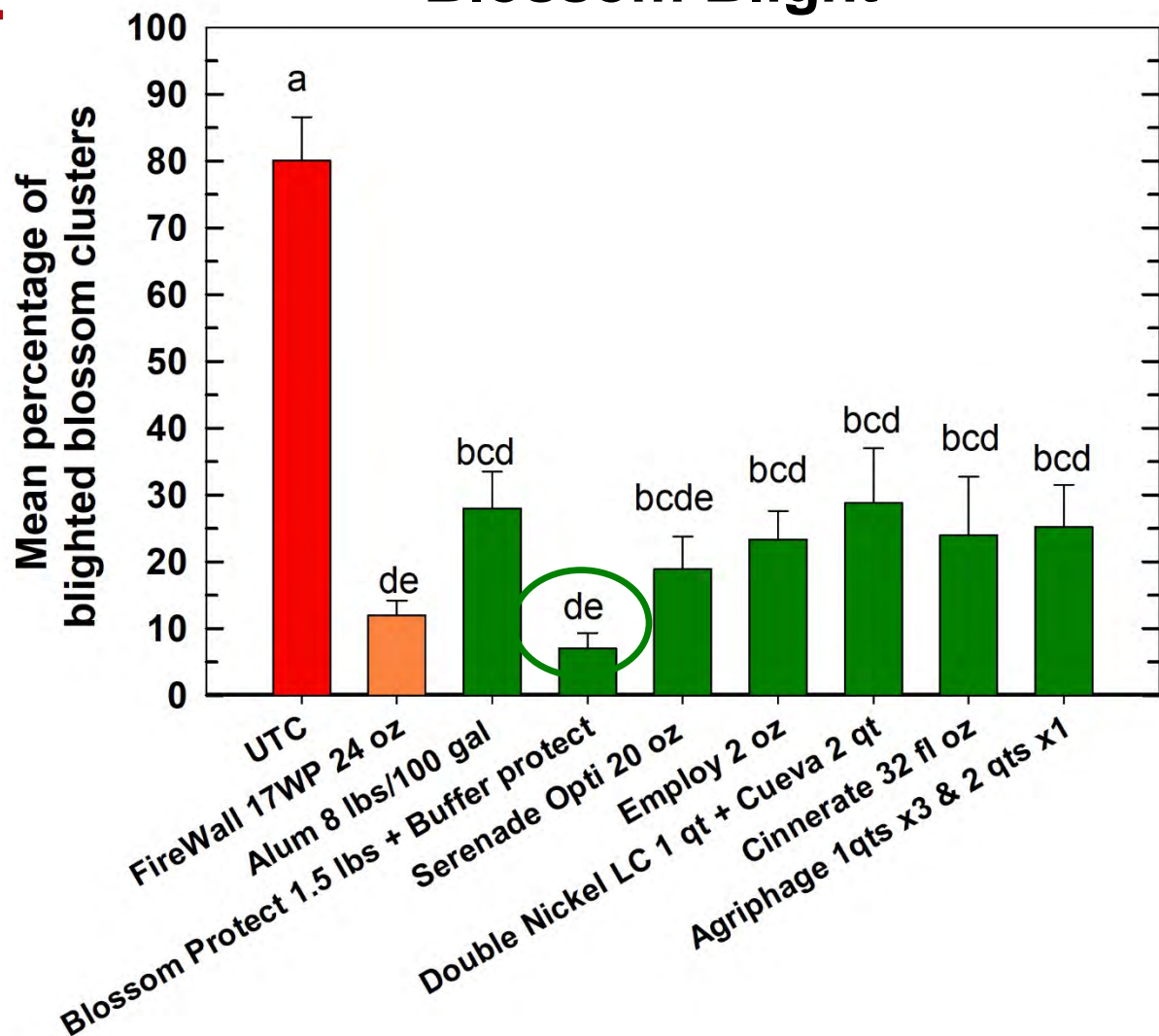


Shoot Blight

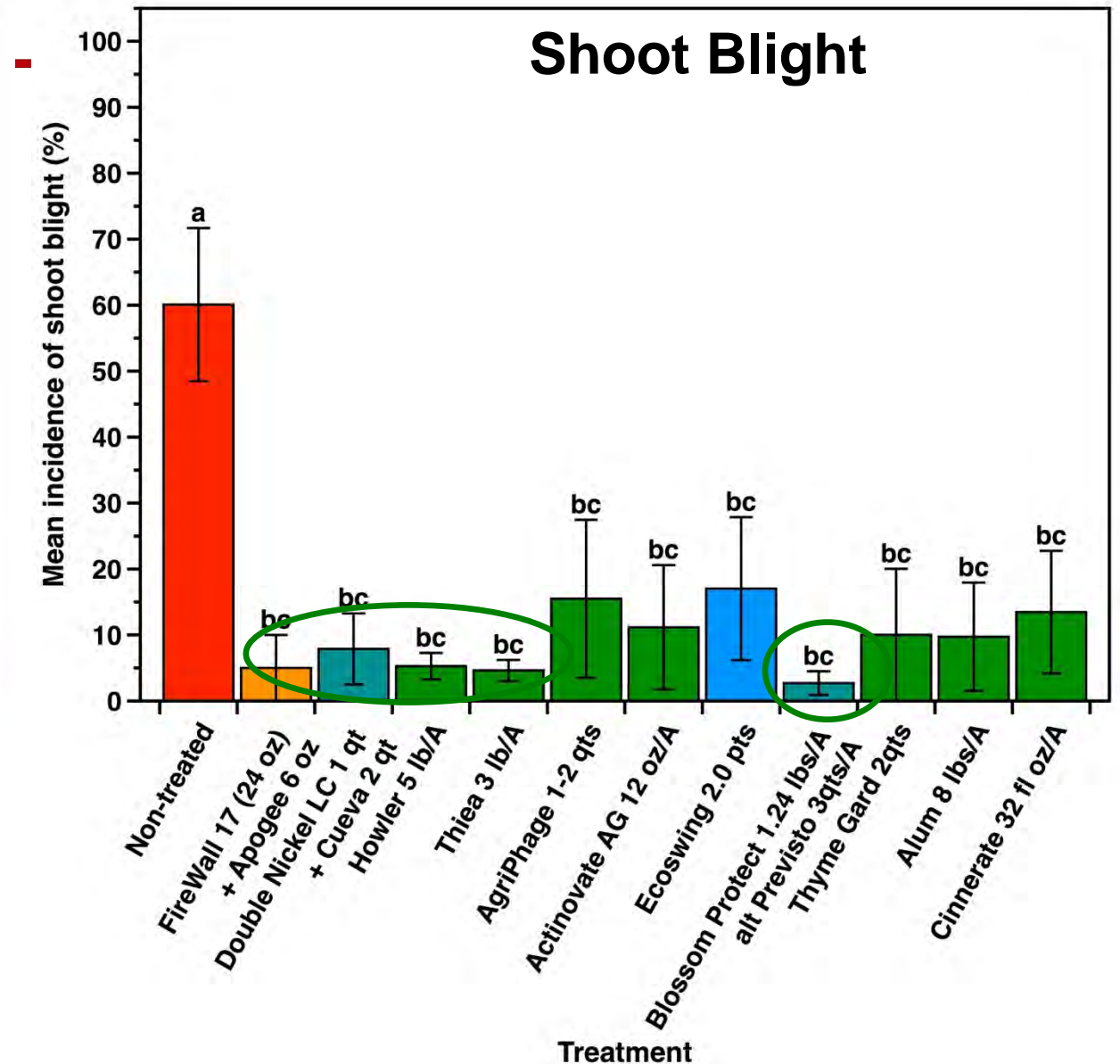
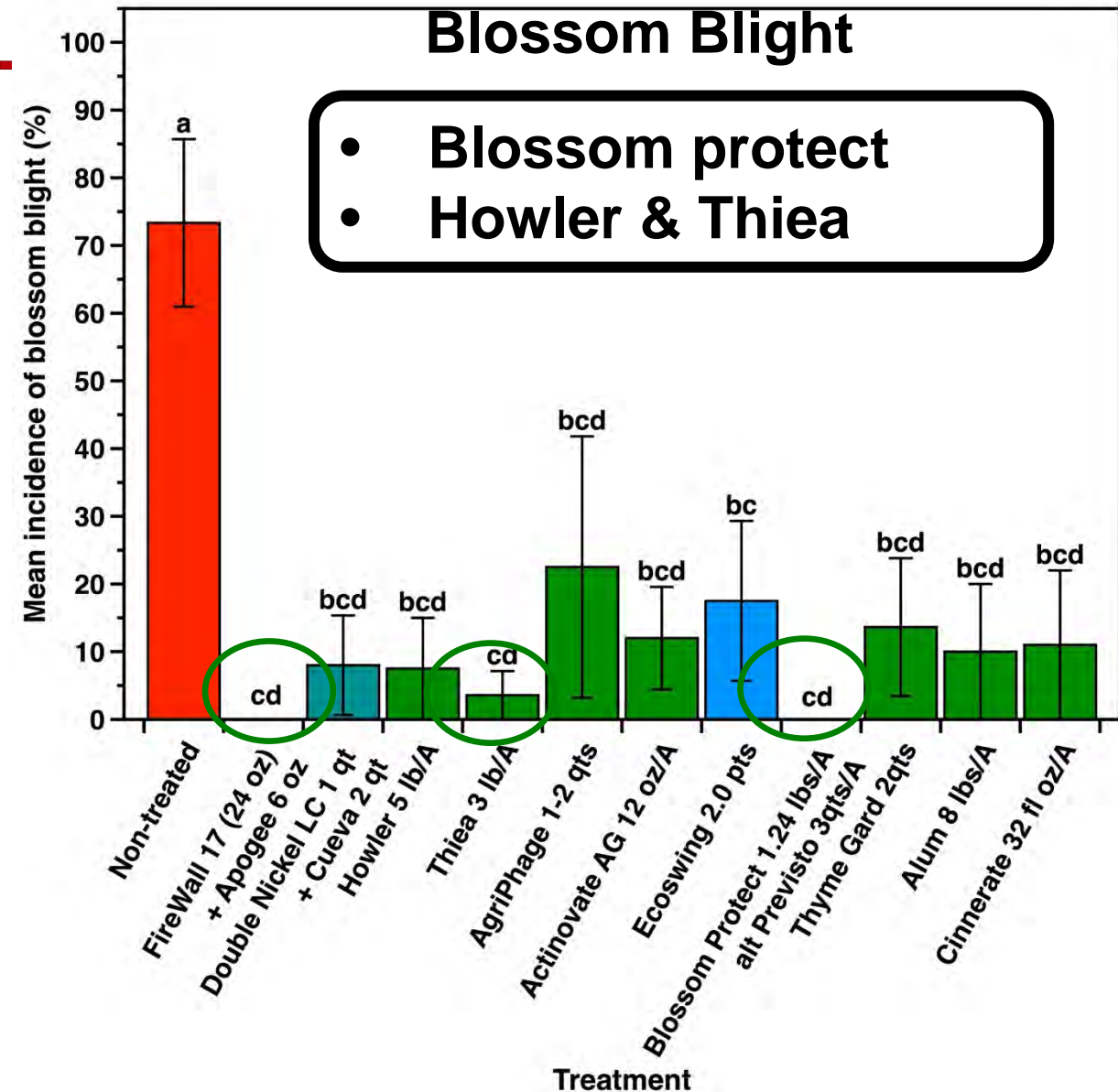


Trials at AgriTech – Biologicals 2020

Blossom Blight

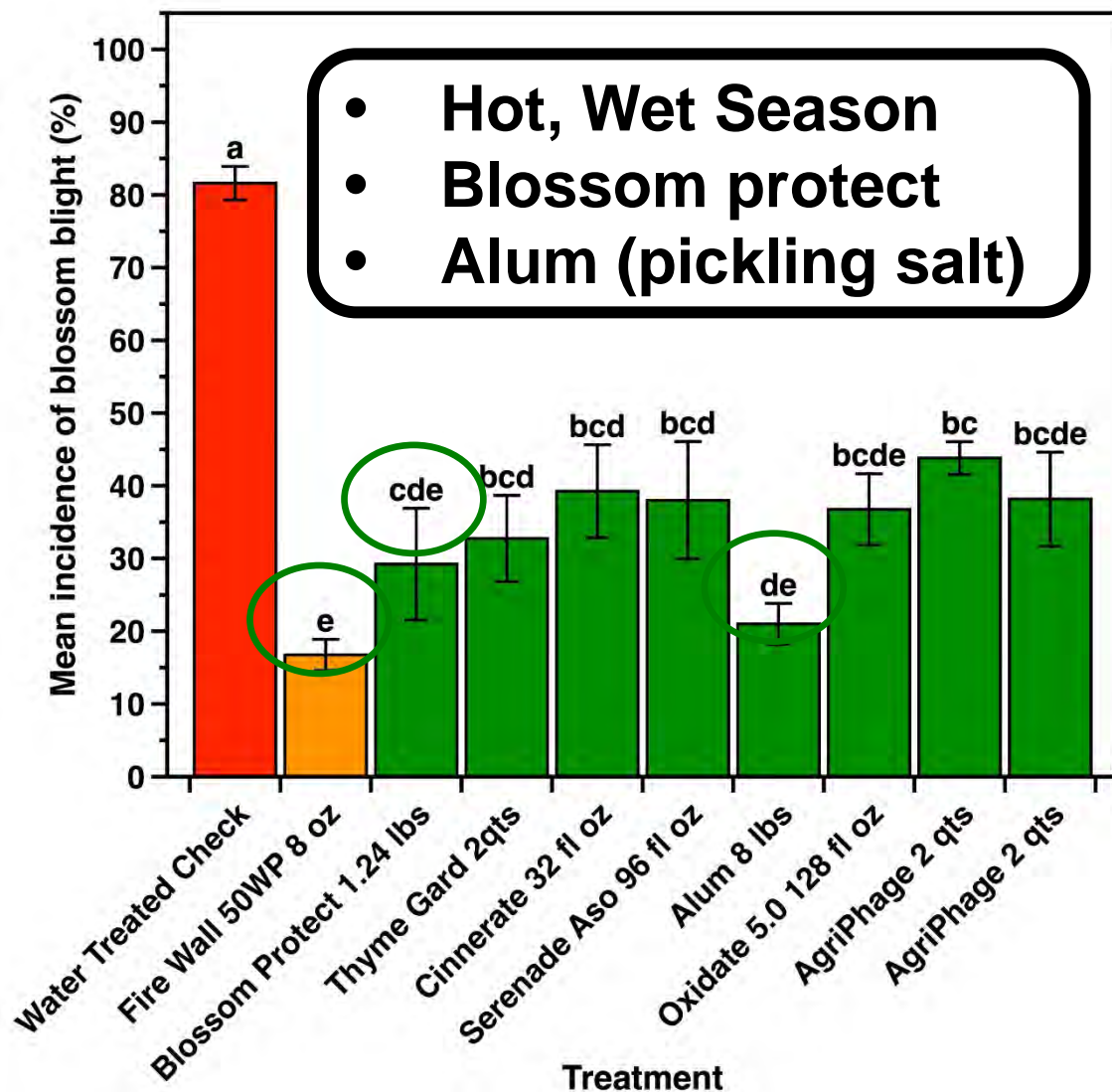


Trials at AgriTech – Biologicals 2021

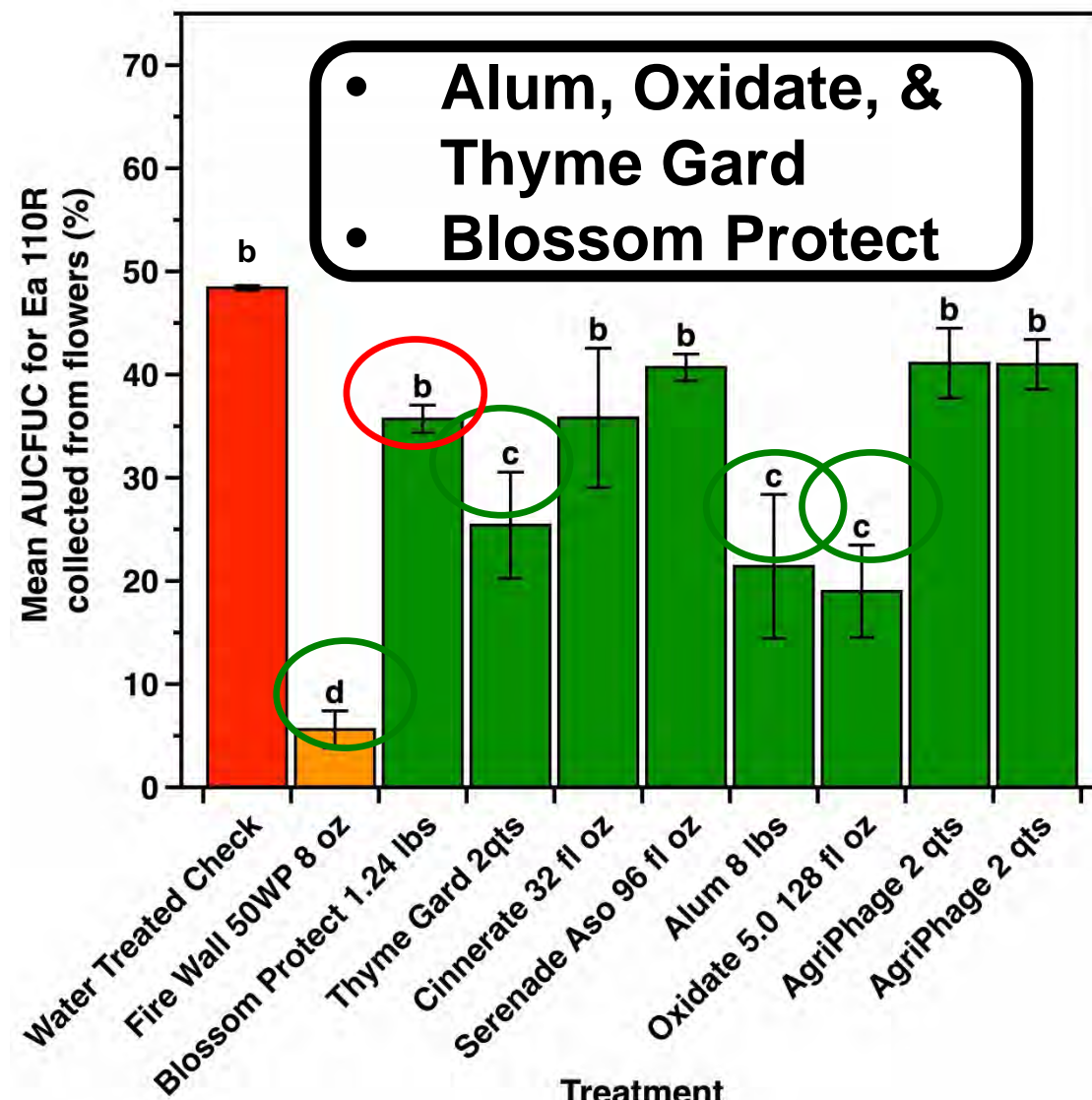


Trials at AgriTech – Biologicals 2022

Blossom Blight

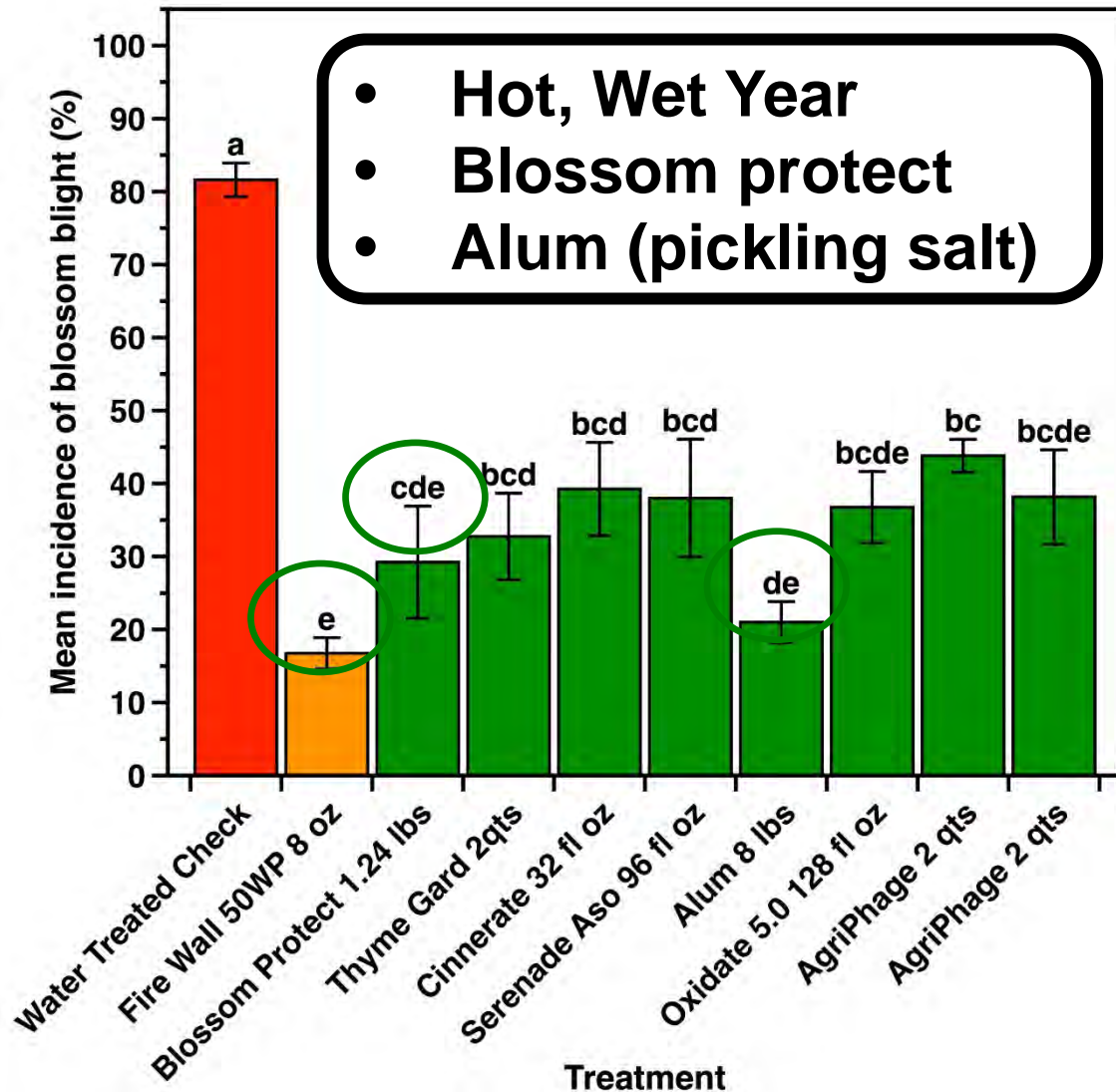


Blossom Populations

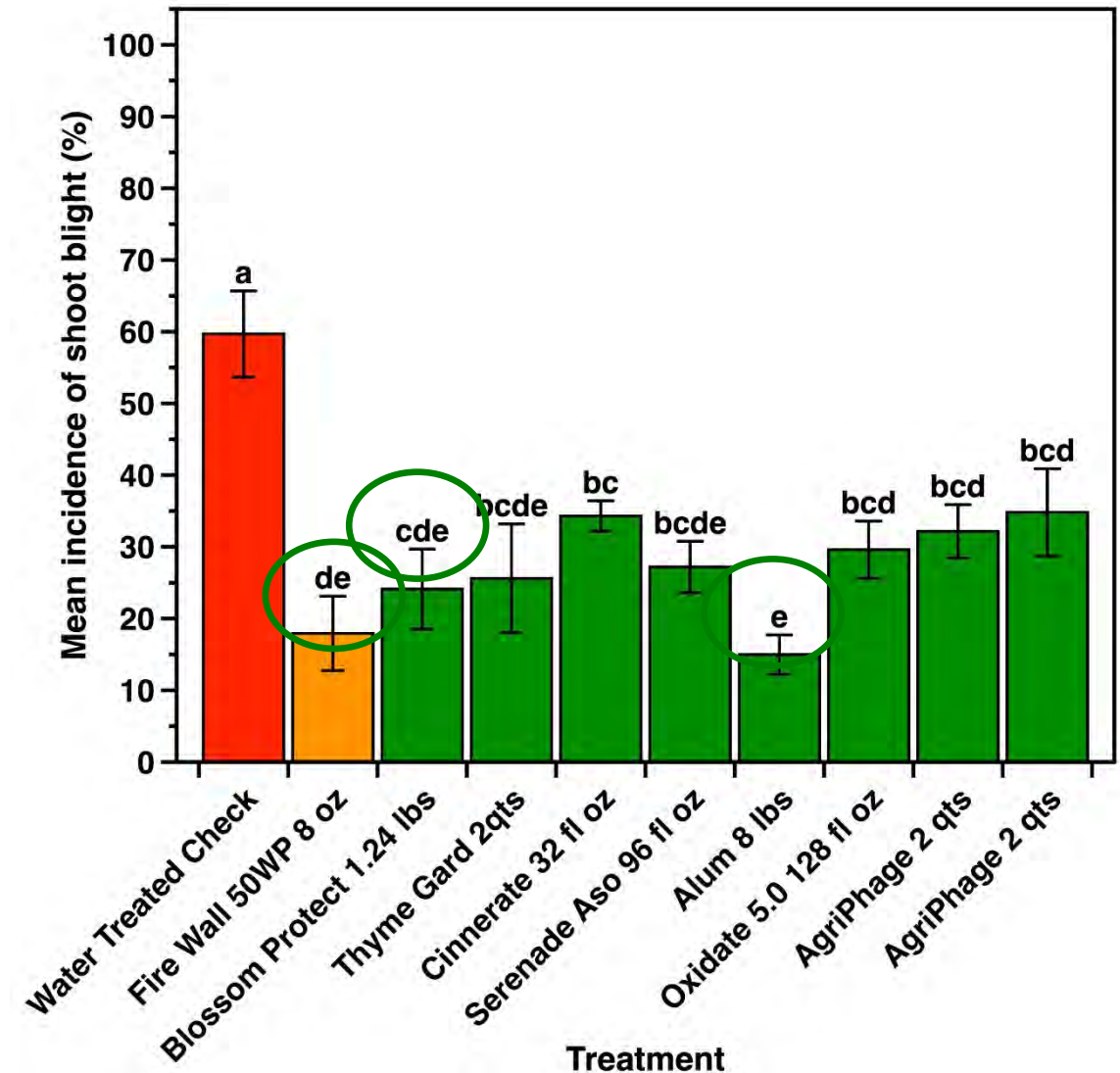


Trials at AgriTech – Biologicals 2022

Blossom Blight

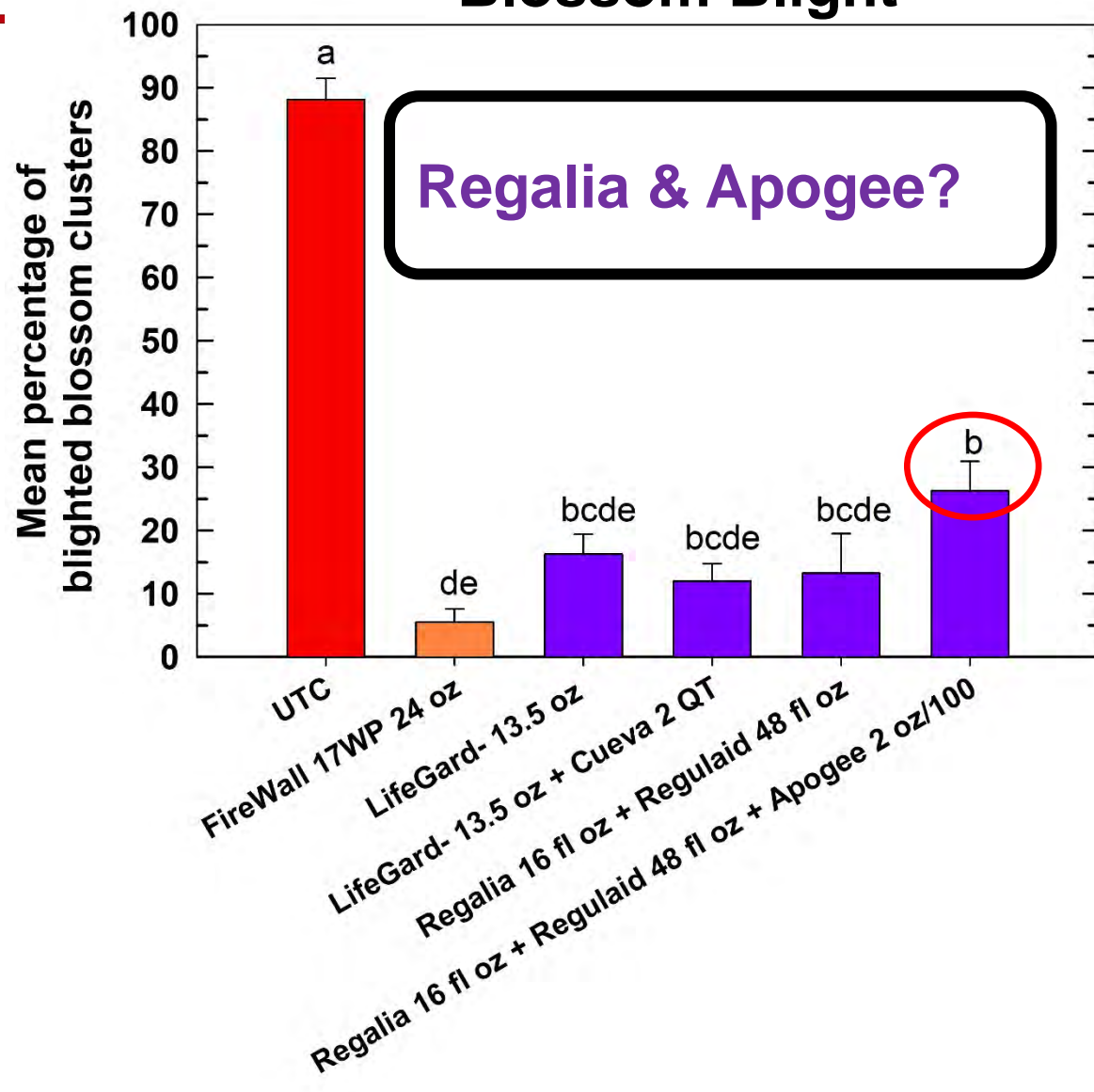


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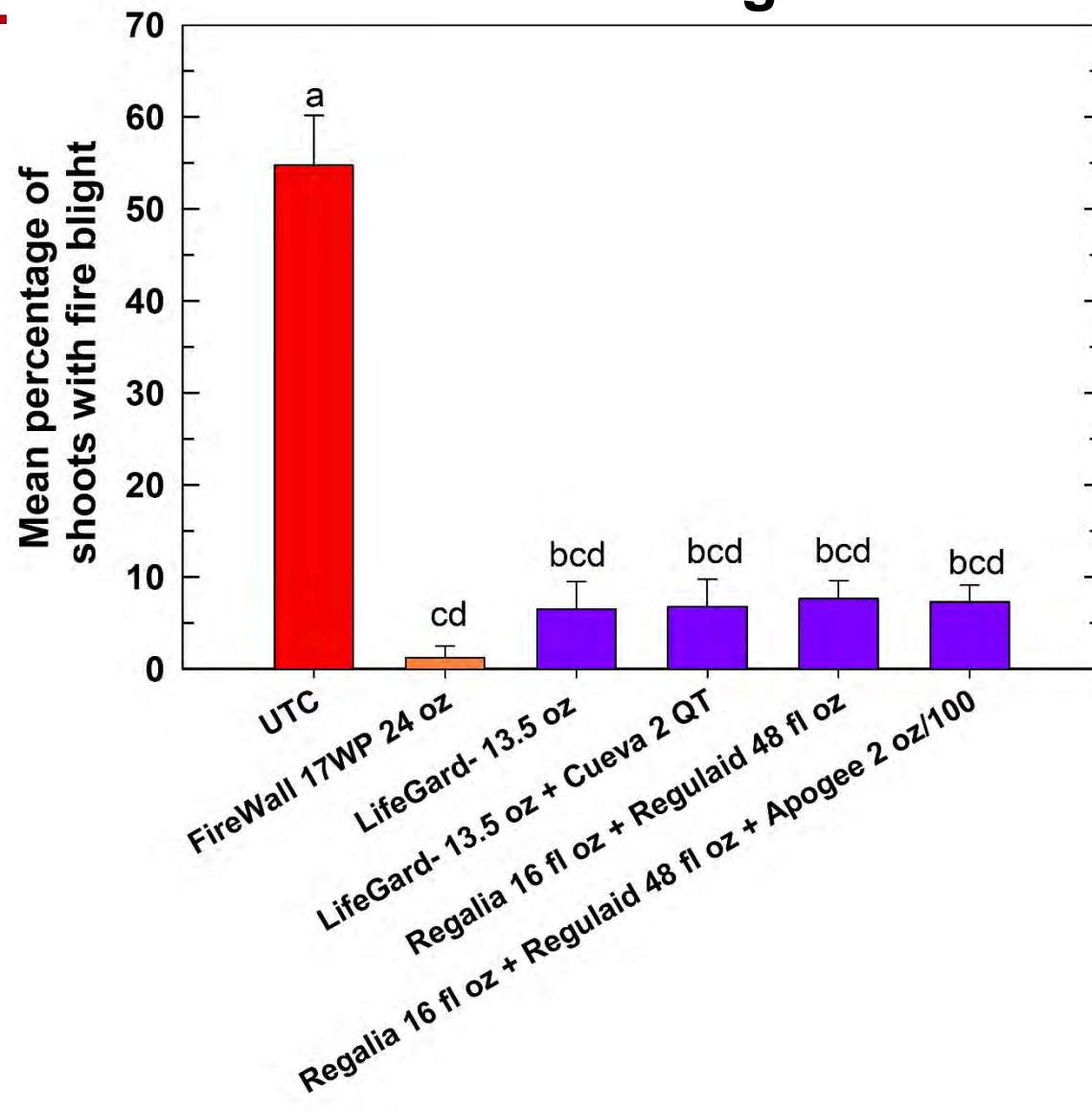


Trials at AgriTech – SARS 2019

Blossom Blight

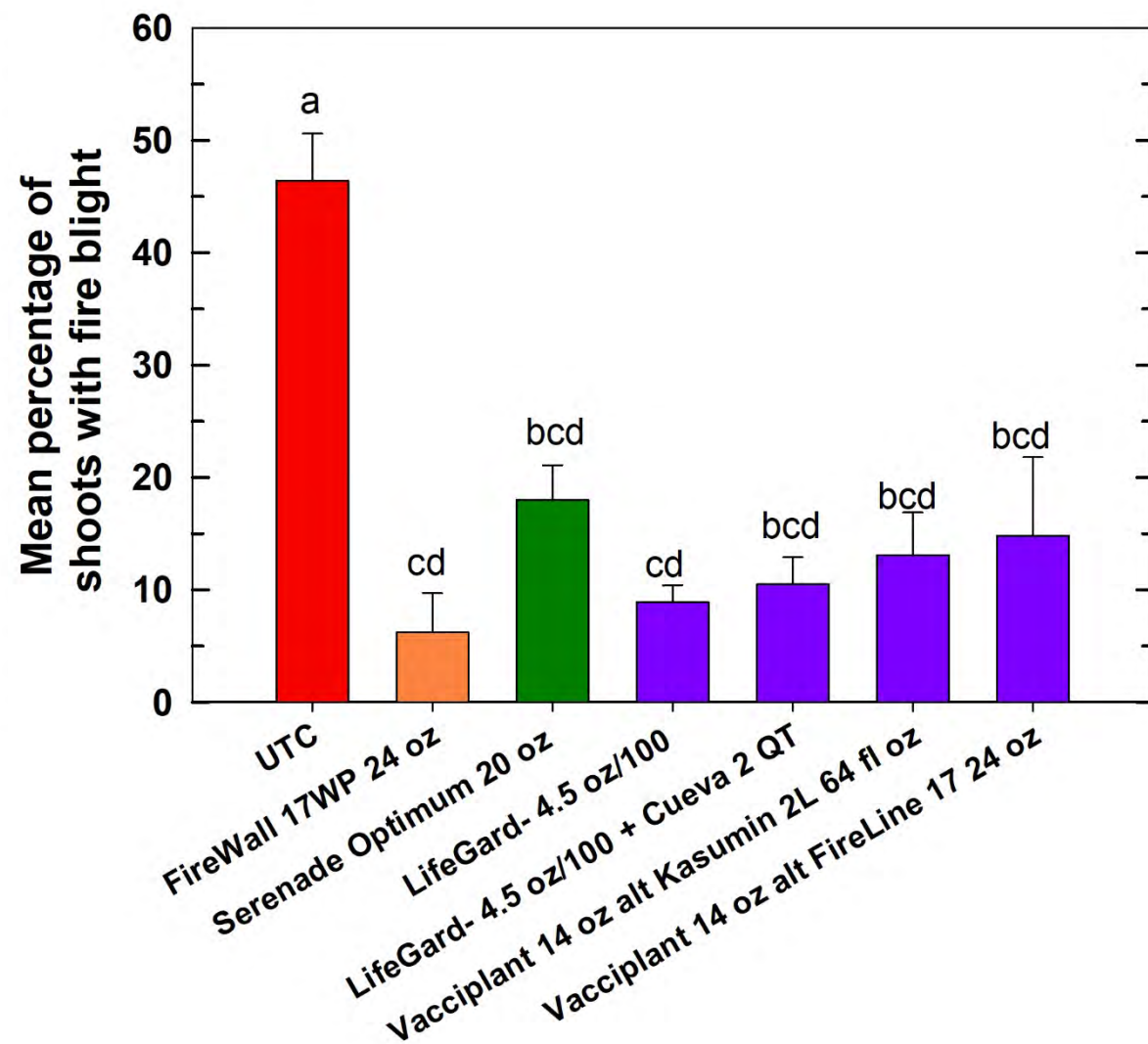
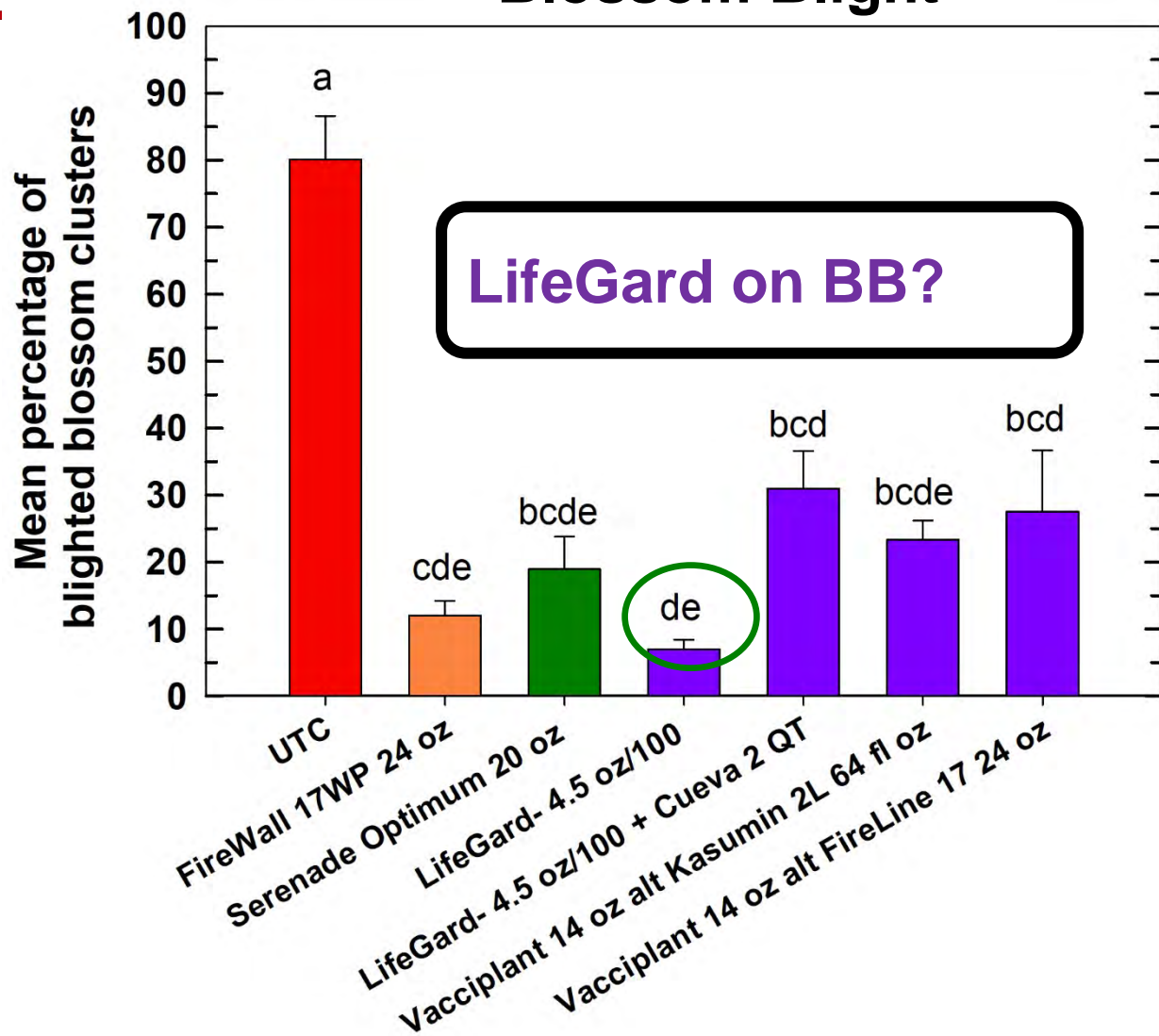


Shoot Blight

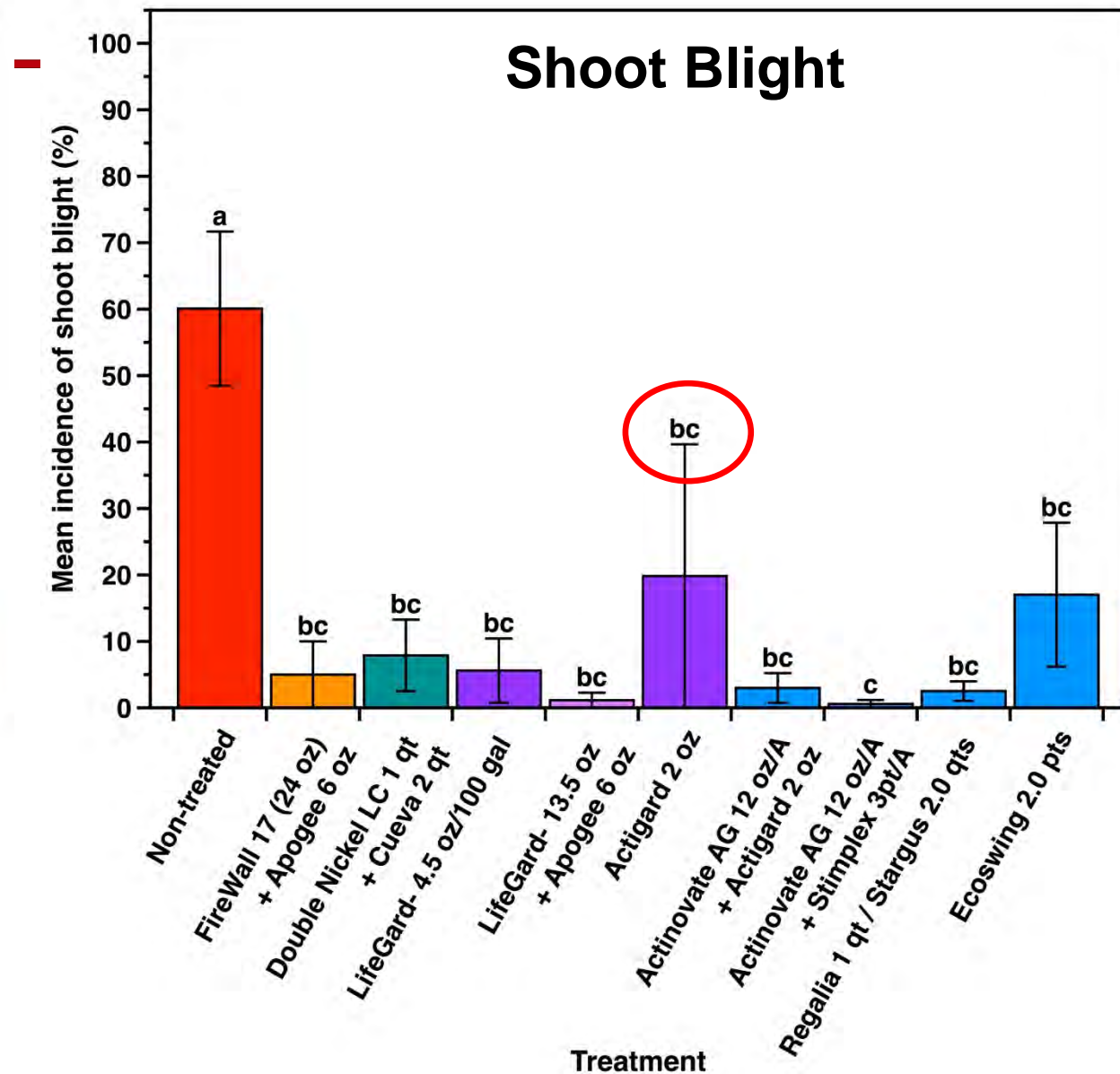
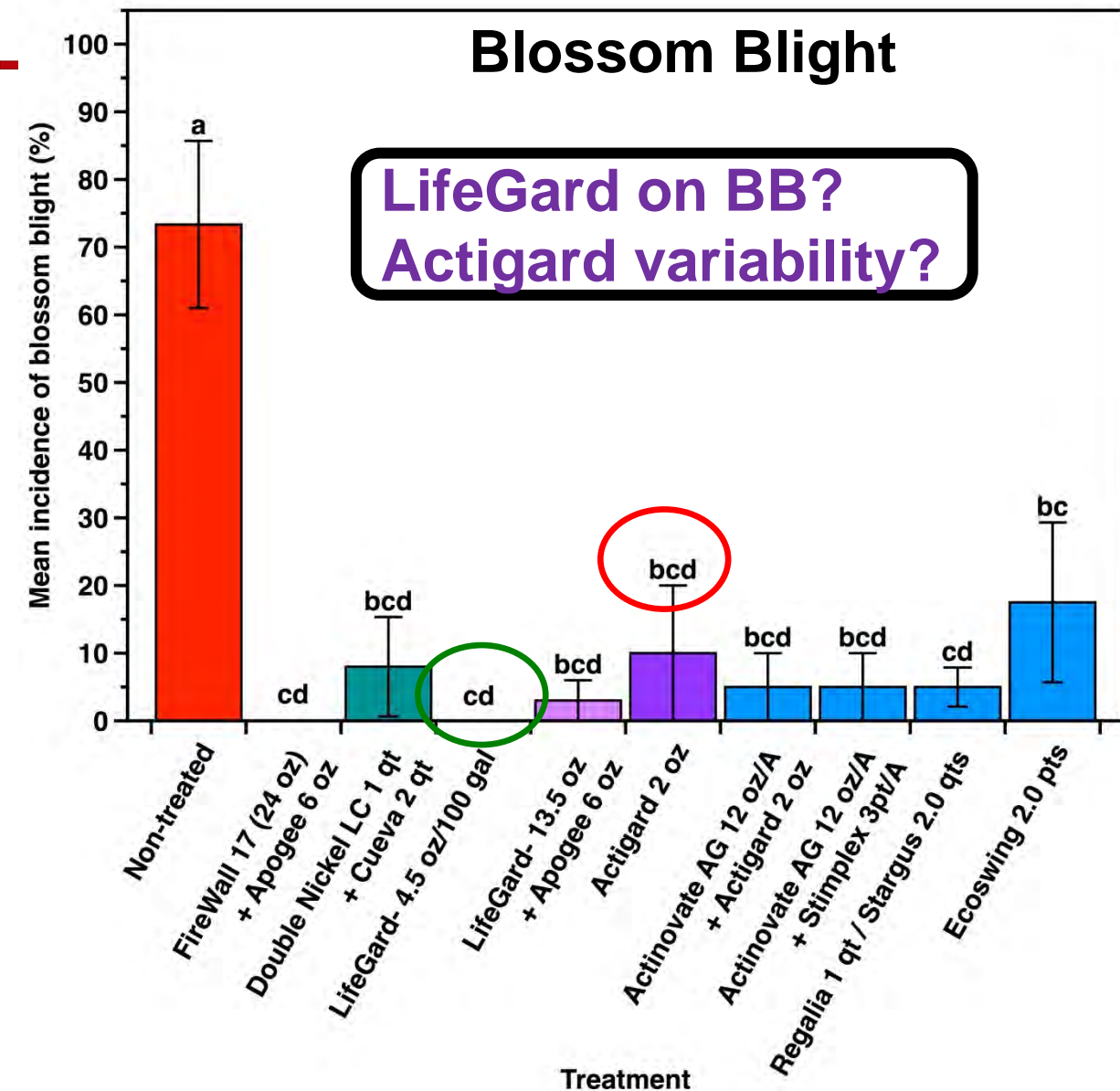


Trials at AgriTech – SARS 2020

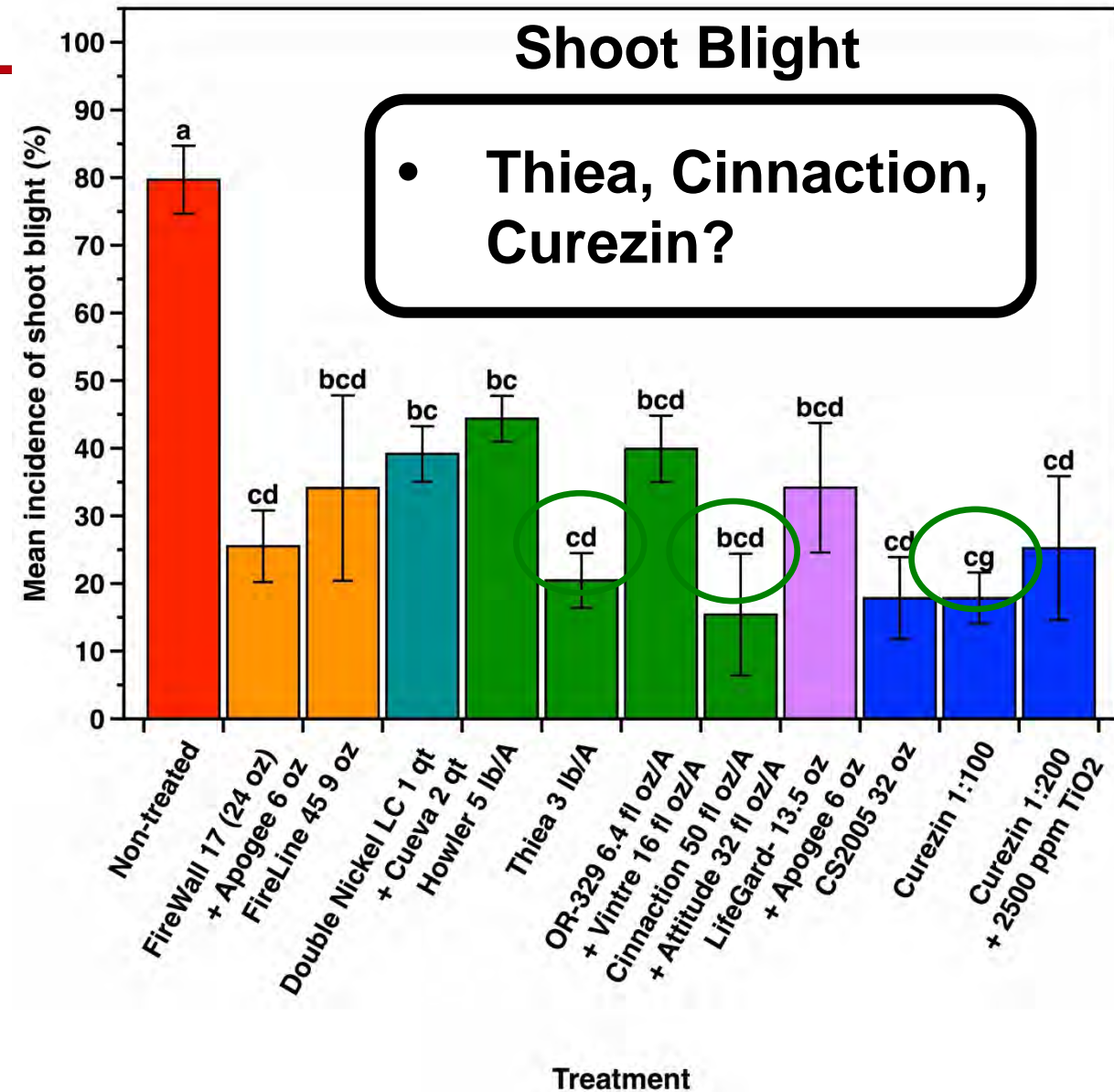
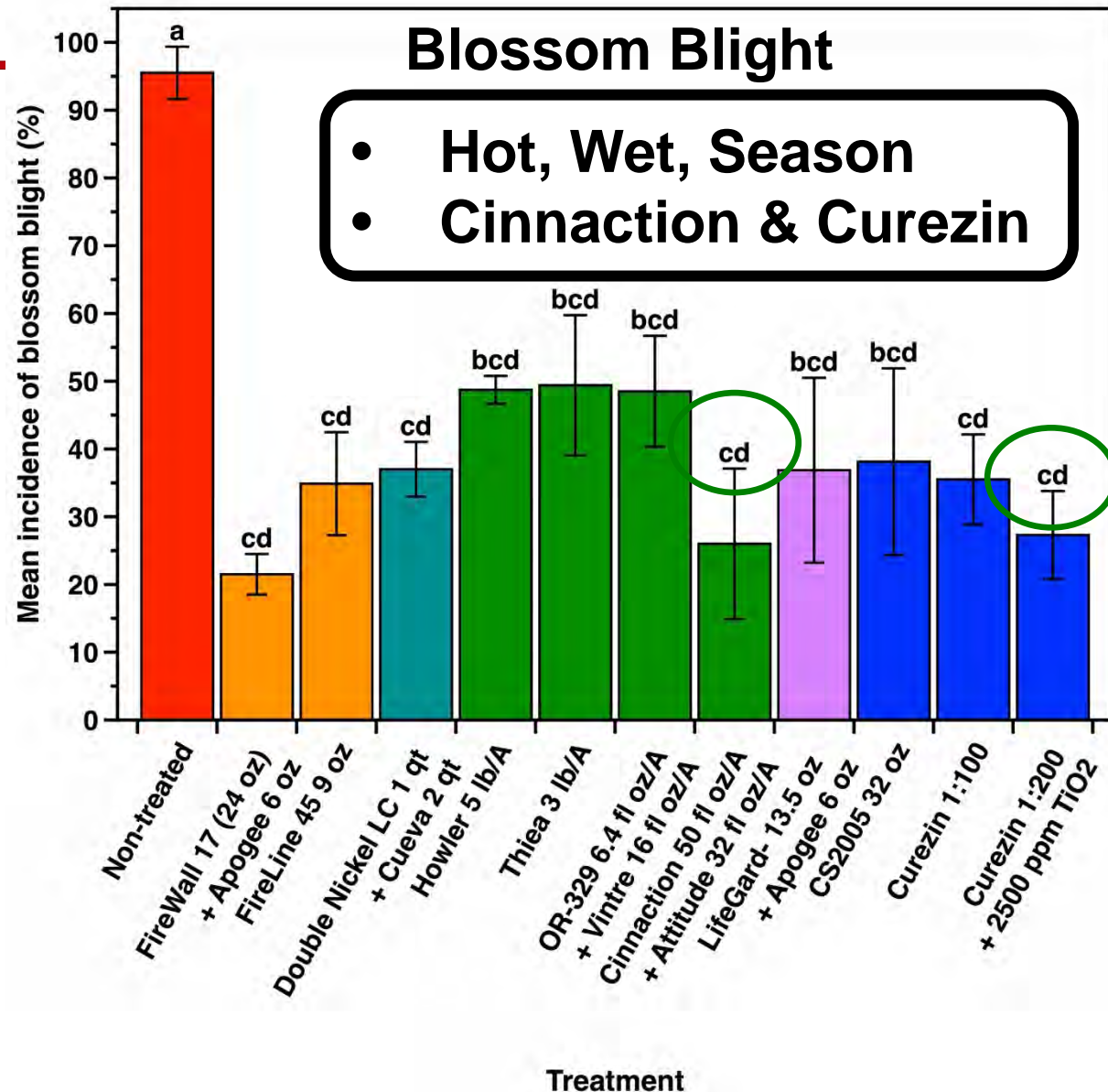
Blossom Blight



Trials at AgriTech – SARS 2021



Trials at AgriTech – Select 2022



Biologicals and SARS Takeaways

- **Biologicals**

- Blossom Protect effective – never seen russeting (don't tank mix with fungicides)
- Howler & Theia look promising
- Alum (similar in MI, NC, WA, and OR in 2022)

- **SARS**

- Similar performance from LifeGard & Regalia
- Some variability with ASM (Actigard) in 2021, but better in combo with Apogee



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