



Mitezapper Efficacy Study



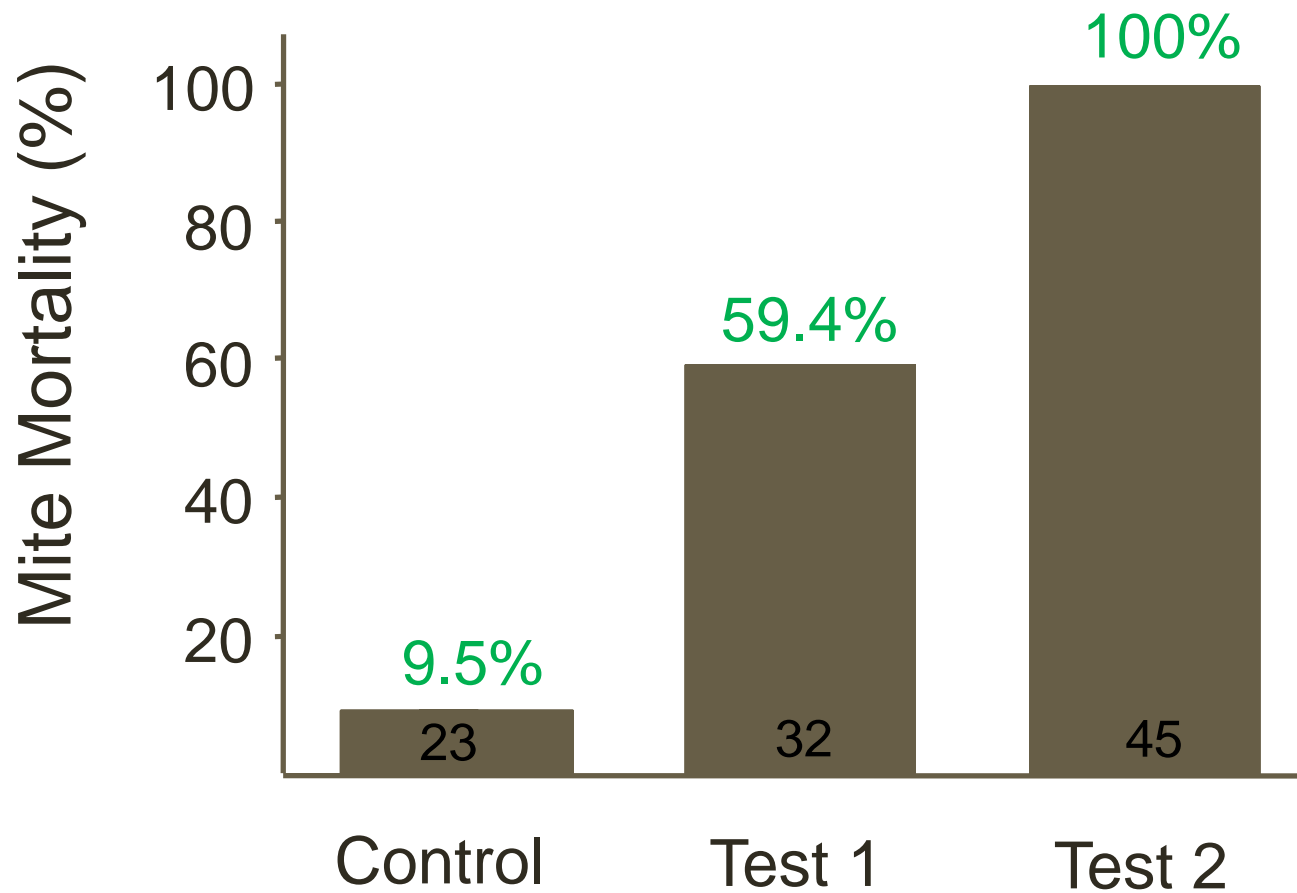
Field test – Conducted by Dr. Zachary Huang, Michigan State University Associate Professor of Entomology

- A total of 42 colonies used
- Three different apiaries
- Each apiary with three groups
 - Mitezapper colonies (n=5)
 - Drone colonies (n=5)
 - Control colonies (n=4)
- Natural mite drop monitored at 8-14 day intervals
(sticky trap left for 48 hours but presented as mites/24 hr.)

Field test – Conducted by Dr. Zachary Huang, Michigan State University Associate Professor of Entomology

- Sticky board used for mite calculation.
- Calculation based on mite drop.
- The Drone group comprised of a drone frame foundation.
- Packaged bees from the same supplier were randomly assigned to each treatment.
- Colonies were left to winter
 - 80% of mite zapper colonies survived the winter
 - All control and drone colonies died

Laboratory Test



Test 1 conducted at lower temperature.

Test 2 conducted at ideal temperature, used in the MiteZapper frame.

Fig. 1. Effect of Mitezapper®: MSU Yard

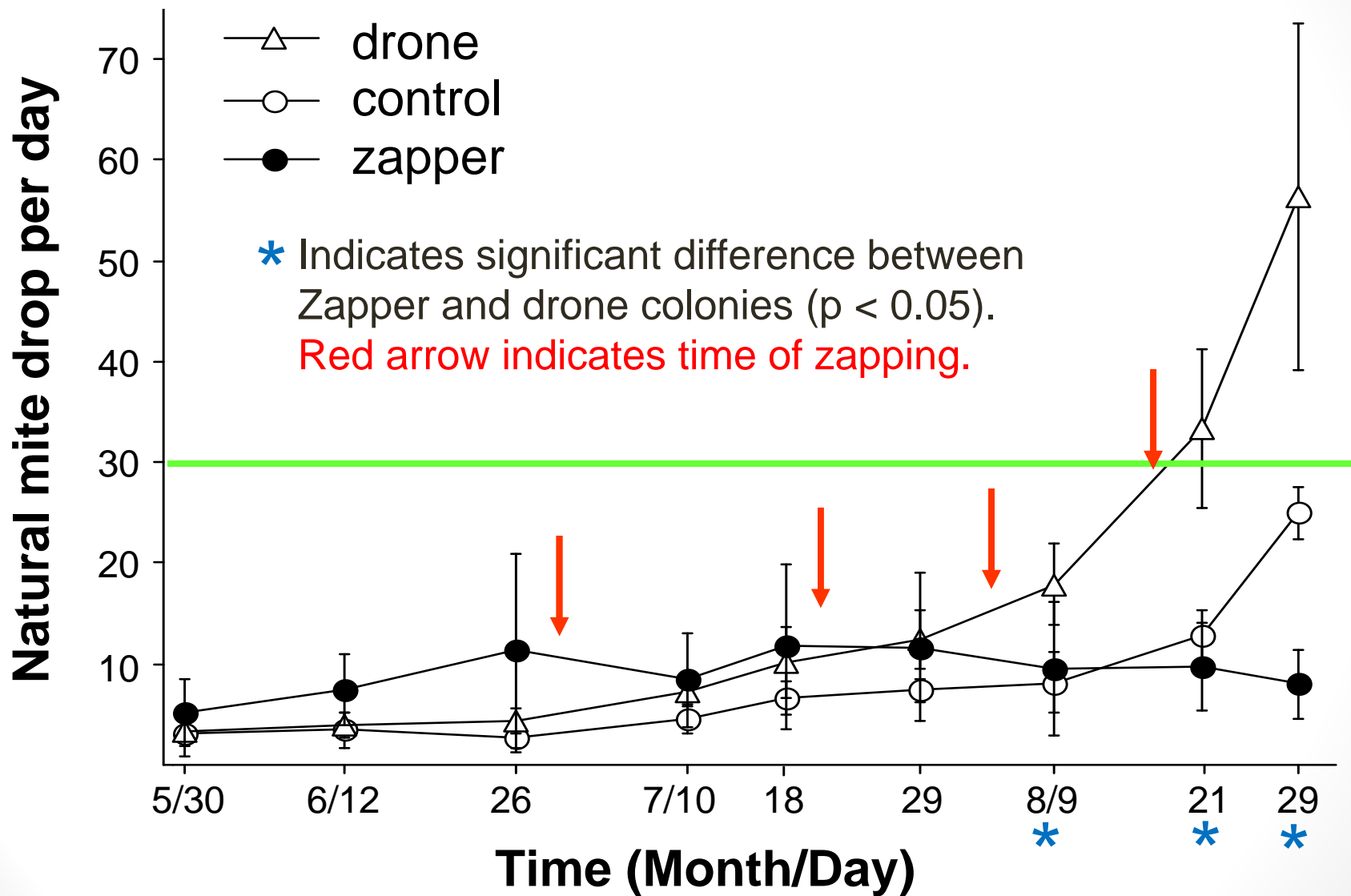


Fig. 2. Effect of Mitezapper®: Nick's Yard

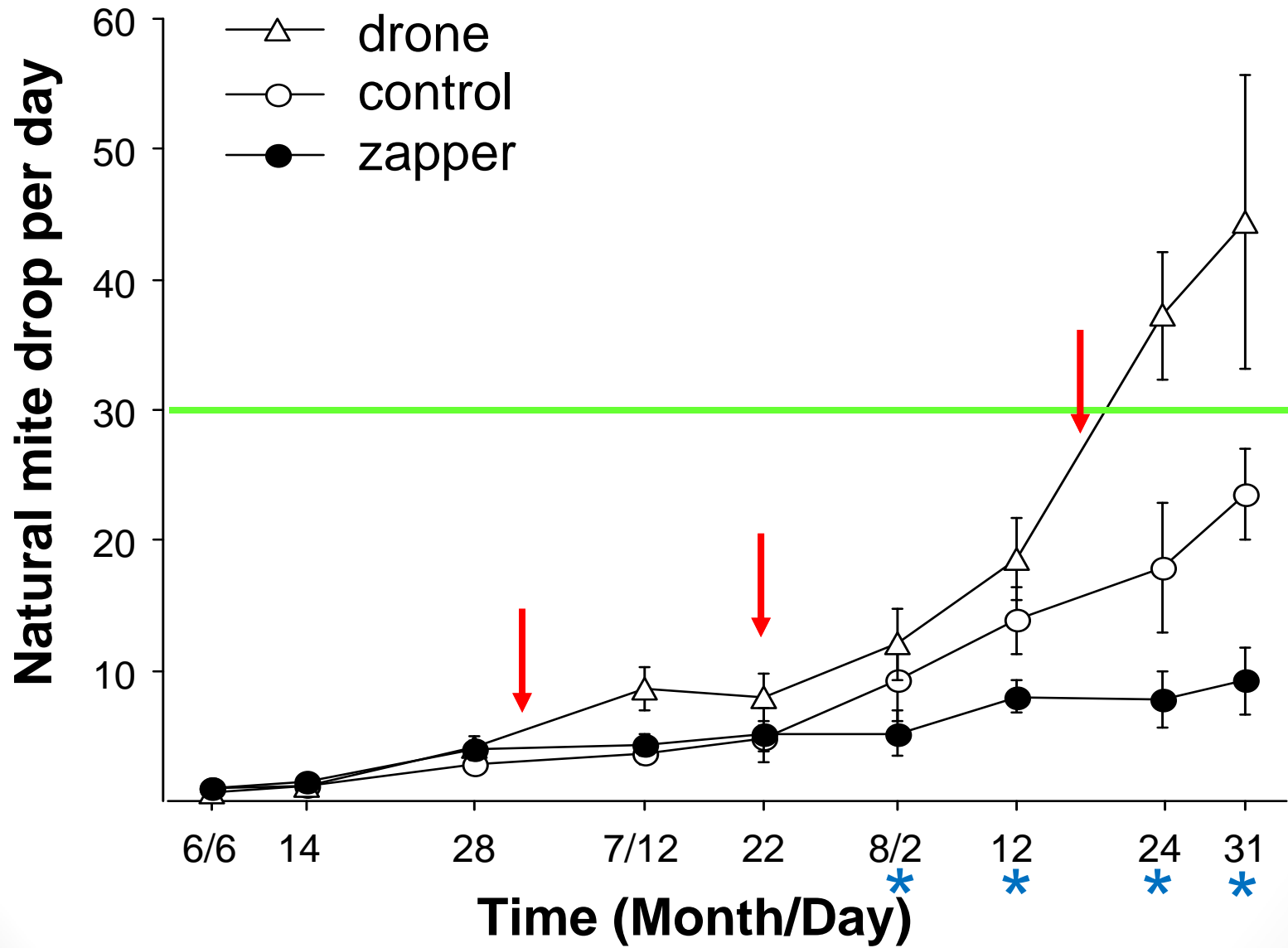
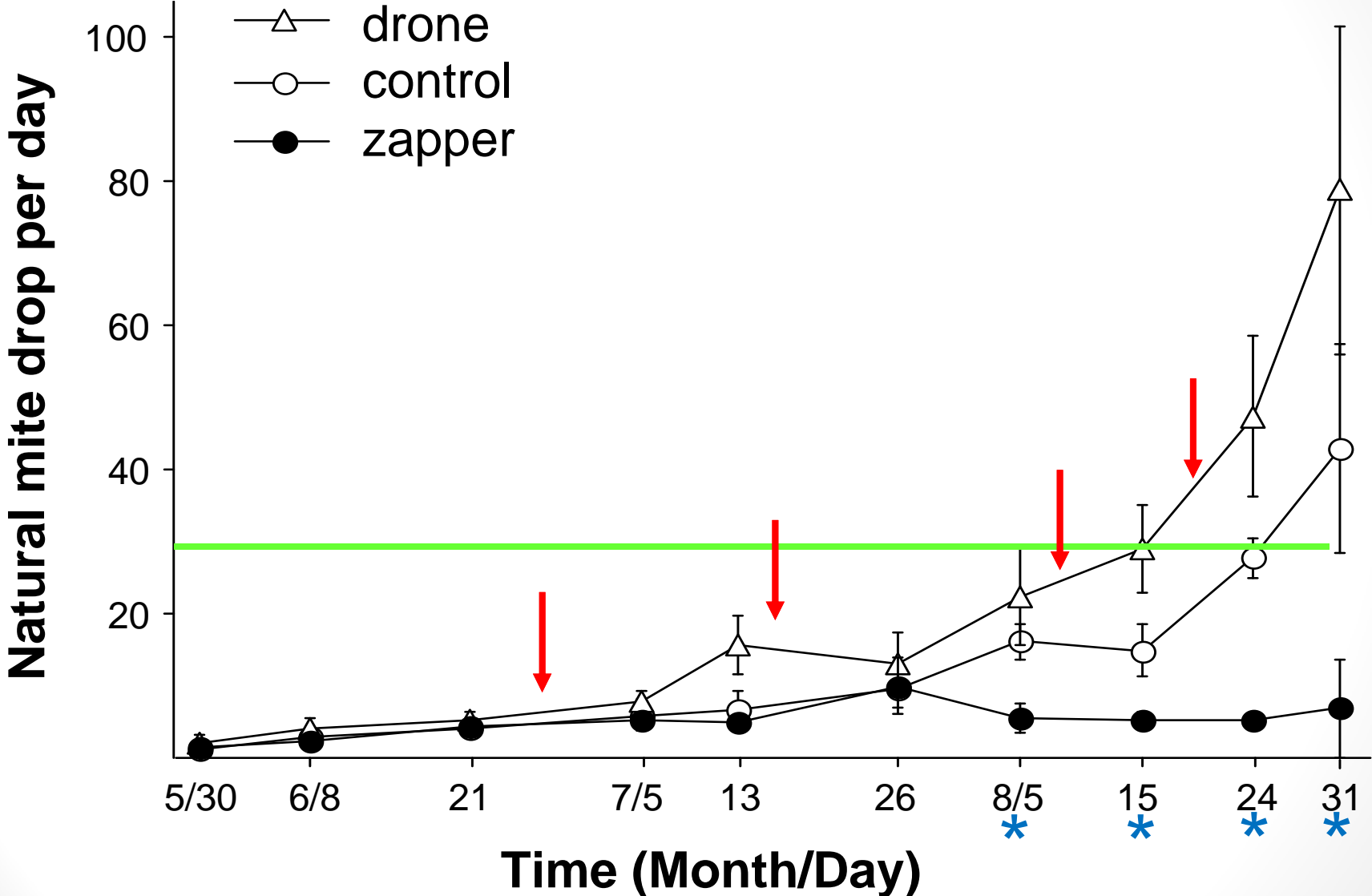


Fig. 3. Effect of Mitezapper®: George's Yard



Conclusions

- Mitezapper[®] significantly reduced mite populations, compared to both control colonies and drone colonies
- Mite levels remained under 30 mites per day, a conservative economic threshold in Michigan
- Takes advantages of mite biology attraction to drone brood
- Kills varroa inside the brood cell, where they reproduce
- MiteZapper[®] can be used under any temperature conditions
- Time-saving (no need to remove the frame)
- Effective **CHEMICAL FREE** treatment for varroa mite control



www.mitezapper.com