



# SAP Preliminary Recommendations




# Detection

- ▶ Have all detection traps deployed by May 15<sup>th</sup>.
  - ▶ If there is an official Japanese Beetle (JB) sample submitted/collected and verified before May 15, trapping can start that time.
- ▶ First inspection date: June 1<sup>st</sup> or two weeks after initial deployment.
- ▶ Recommended removal/final inspection date: mid-September.
  - ▶ Unless the last inspection yields a positive JB sample, in which case limited delimitation and visual survey occur.



# Delimitation

- ▶ Maintain current Delim strategy:
  - ▶ 49-25-5-5 delimitation trapping array
    - ▶ Maintain flexibility to increase trapping density
- ▶ More intensive visual surveys for adult JB may take place at the discretion of program officials.
- ▶ Visual larval surveys are not recommended.



# Maintain Current Eradication Trigger

- ▶ Current Eradication Triggers:
  - ▶ 2 adult beetle detections within 3 miles of each other and within the same year.
  - ▶ 1 larva



# Eradication Recommendations

- ▶ Ground treatments
  - ▶ Recommended products:
    - ▶ Primary recommendation: chlorantraniliprole (Acelepryn)
    - ▶ Secondary recommendation: Imidacloprid (Ex: Merit)
    - ▶ Tertiary recommendation: Thiamethoxam (Ex: Meridian)
  - ▶ Recommended application: Once per year, according to label instructions.
    - ▶ Recommended treatment area: 200m radius centered over every confirmed find site.
      - ▶ Treat vegetated areas, according to label.



# Eradication Recommendations

- ▶ Foliar treatments:
  - ▶ Suspend foliar treatments in residential areas **unless** an official, confirmed, live, adult JB is collected from anywhere other than a trap.
    - ▶ Foliar treatments – when deemed necessary -- may be used in high-risk, non-residential areas, according to the product label(s).
  - ▶ Recommended products: Cyfluthrin, Deltamethrin
  - ▶ Recommended treatment will occur bracketing JB peak flight according to phenology model and previous trapping history.
  - ▶ Recommend elimination of the host list.
    - ▶ Foliar treatments will occur according to label instructions.



# Outreach Recommendation

- ▶ Notification Recommendations:
  - ▶ 60 day official notification of affected properties.
    - ▶ Will provide general treatment area information, product information, treatment preparation guidelines, specific contact information, links to additional resources, such as the Notice of Treatment (NOT) map.
    - ▶ Public Information Officer to accompany every treatment crew OR provide each treatment crew with a card detailing contact information for the Public Affairs Office.
    - ▶ Posted online and made available through social media platforms.
  - ▶ 72-hr pre-treatment notice
    - ▶ Follow system similar to Healthy Schools Act.
  - ▶ Threat and Opportunities analysis



# Training Recommendations

- ▶ Identification of appropriate application sites
- ▶ Training to identify adult JB feeding damage.
- ▶ Identification of native bee nesting sites.
- ▶ General Pesticide Safety Training
  - ▶ Aim to reduce drift.
  - ▶ Ensure appropriate equipment is being used so as to maximize efficiency and efficacy.





# Research Recommendations

- ▶ Gut analysis of adults to identify host plant
  - ▶ Samples must be preserved in 100% not denatured ethanol OR frozen
- ▶ Newly detected adults will be subjected to stable isotope analysis to determine if it is an incipient infestation.
  - ▶ Samples will need to be freeze-dried
- ▶ Development of Genomic tools to determine population origins and movement-related dynamics.
- ▶ Evaluation of target-specific controls.
  - ▶ Mating Disruption
  - ▶ Evaluate Oxitec SIT
  - ▶ RNAi approaches
  - ▶ BTg
  - ▶ Halofenozide
  - ▶ Micro-encapsulated insecticides/formulations



# Research Recommendations (cont.)

- Soil moisture monitoring to identify habitat suitability.
- Pre/post evaluate treatment impacts on native pollinators.
- Use IR4 data to expand Acelepryn label to include JB adults.
- Evaluate eDNA methods to detect larval JB in soil.
- Develop phenology model to guide detection activities.