



# **Evaluation of the IGR Larvicide *Mosquiron 0.12CRD* in Catch Basins**

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# Outline:

- Mosquiron product
- Catch Basins utilized
- Application details
- Monitoring plan
- Results
- Discussion



# What is Mosquiron:

- A.I. = novaluron
- IGR
- Formulations
  - 0.12 CRD
  - 0.12 P
- Label details –
  - origin of the current label rates
    - Originally developed for potable water
    - 50 gallon drums
- Extended slow release design
  - Previous studies



# Catch Basins

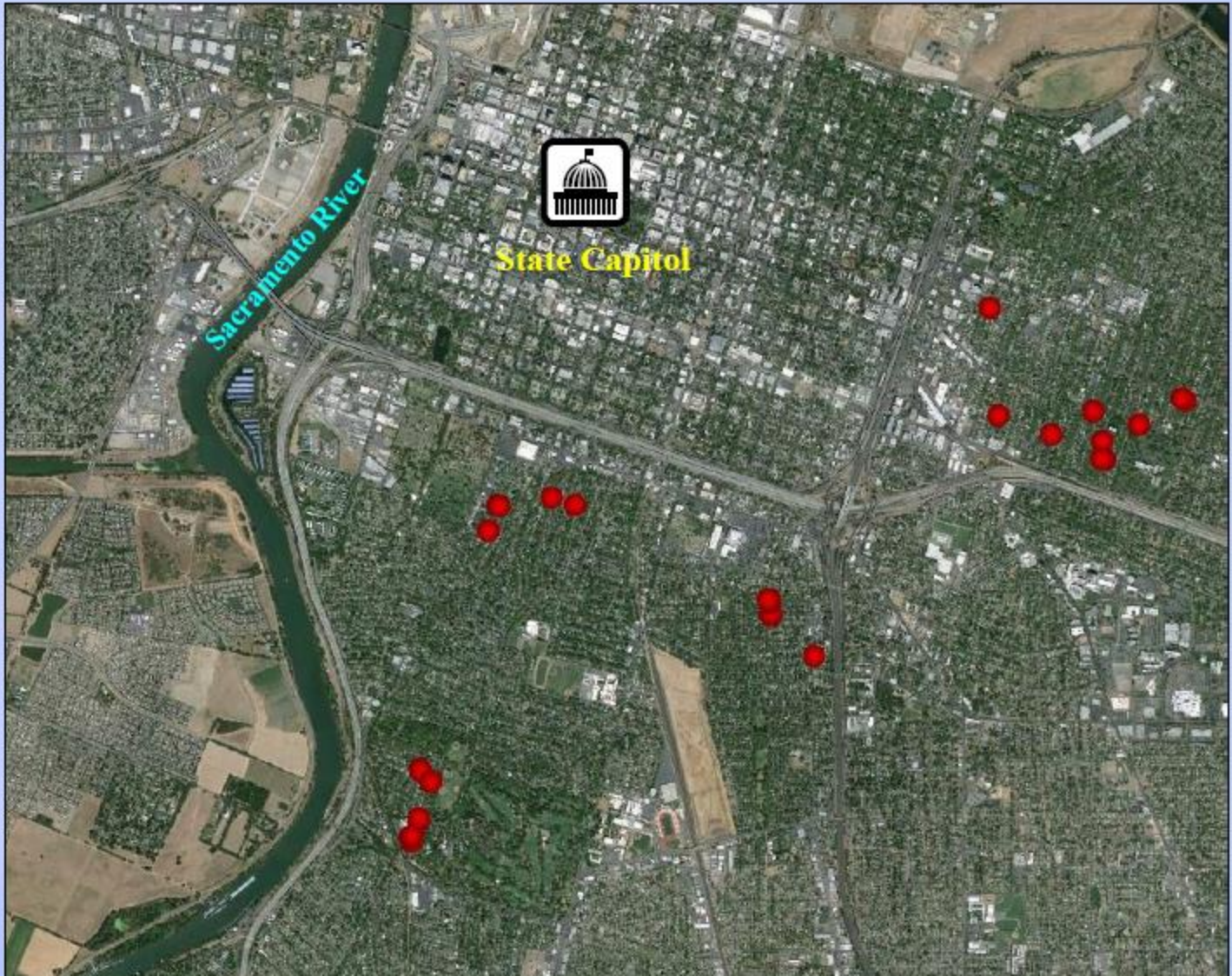
- Sacramento City basins used
  - Flow to waste treatment
  - Similar design and dimensions
    - “B” type basin
  - “Similar water usage and gutter environment”
- 30 basins treated
- Treated July 29<sup>th</sup>, 2013





# Sacramento City

## Catch Basin Locations



# Application

- All basins treated same day
- All treated with one Mosquiron block
- All had water present
- Initial 4 dips taken and larvae/pupae counted
- Presence of adults and/or egg rafts noted
- Each basin evaluated for:
  - Low/Med/High organic load
  - Water depth

# Monitoring Plan

- Weekly frequency
- 4 dips taken and L1-2, L3-4, P #s recorded
- Organic load amount estimated
- Pupae collected if possible
- Presence of adults and/or egg rafts noted
- Return collected pupae to District to monitor for successful emergence

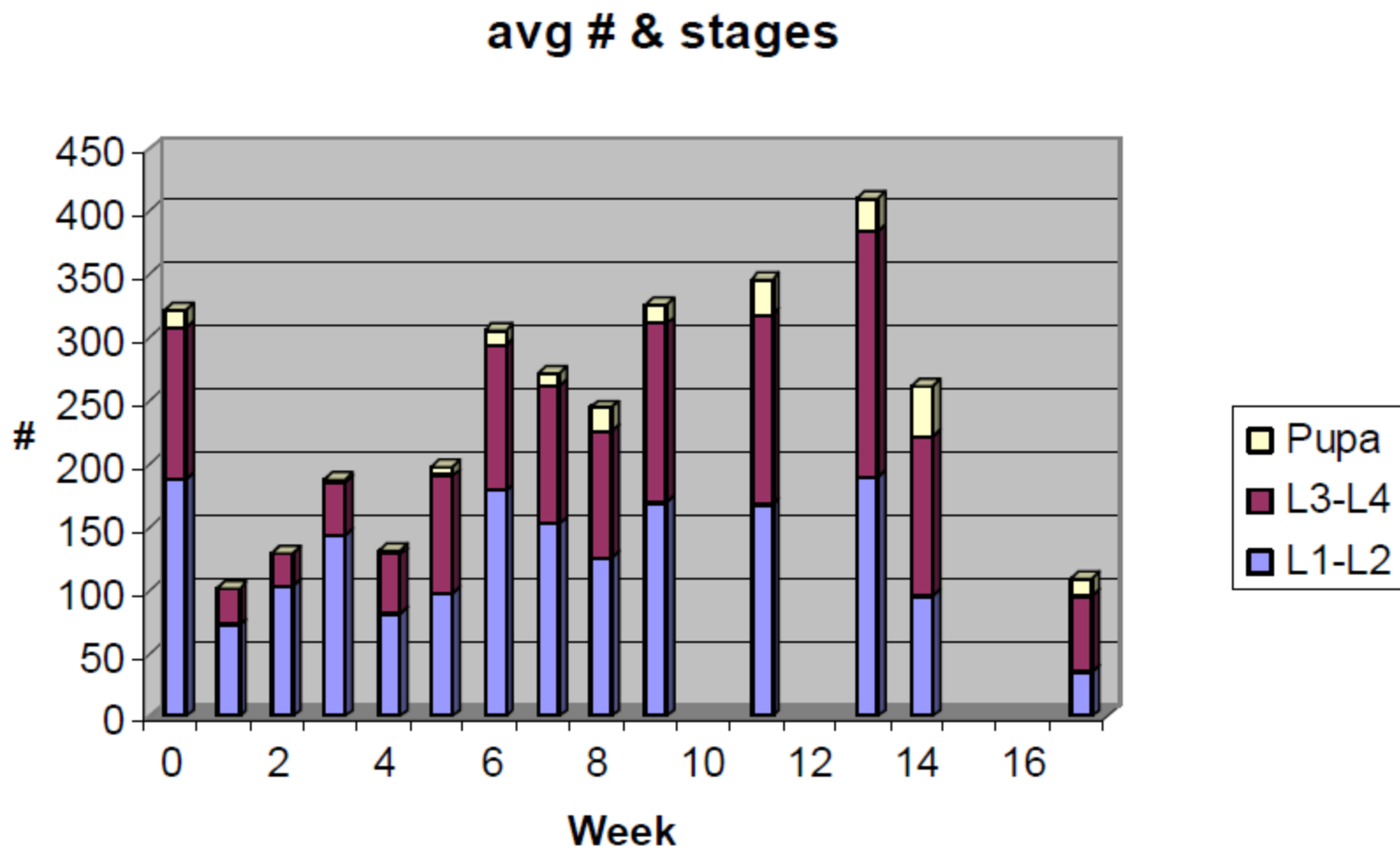


## The weekly monitoring:

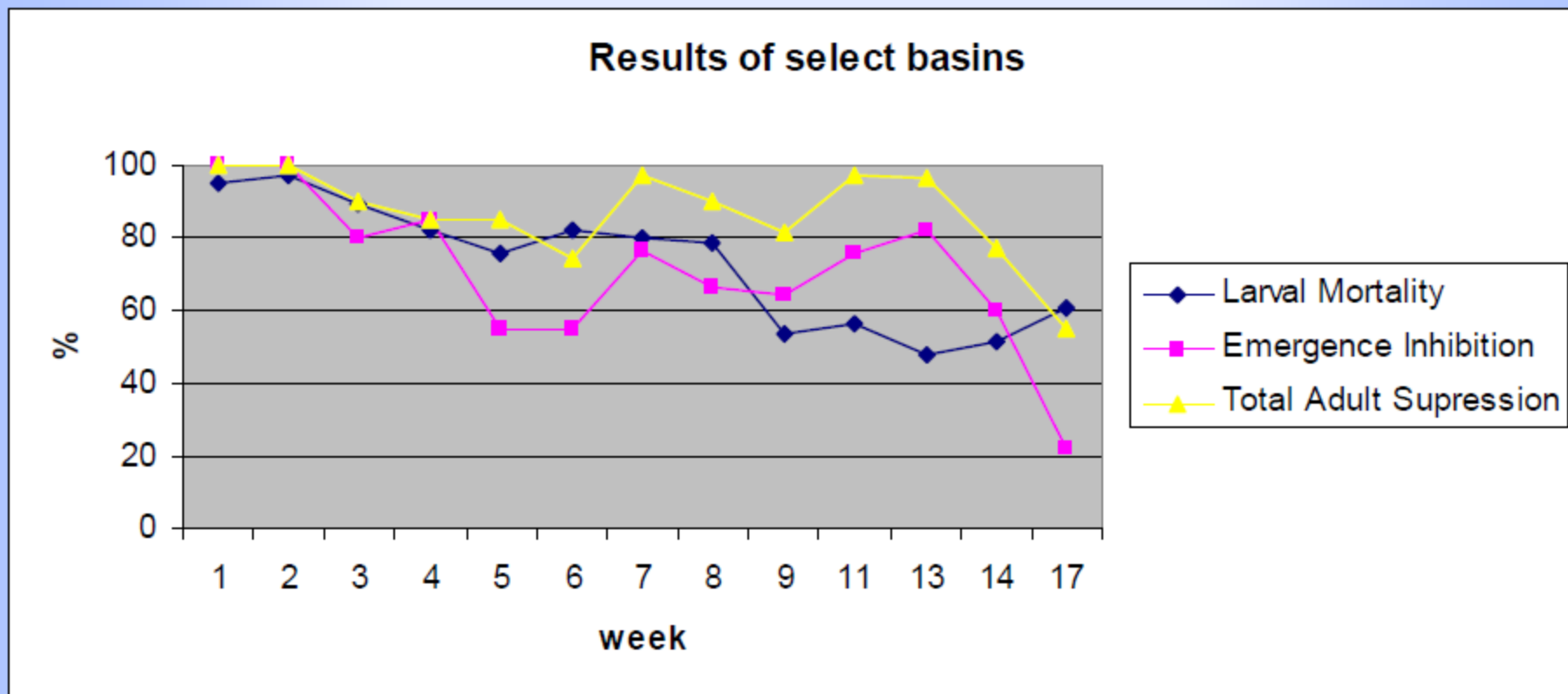
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# Population Distribution over the 30 basins



# Mortality Results



# Issues

- Varying water depths and organic load
- Sampling logistics
  - Public areas
  - WNV activity



# Discussion

- Product
  - Volume vs surface area on label
  - Formulation “light” for our organic/high water flow basins
- Evaluation of control
  - Adult emergence suppression calculations
  - Monitoring length of time for emergence of collected pupae
- Another active ingredient to incorporate into our IVM rotation



# Acknowledgements

- Dr. Barry Tyler
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- Catch Basin Staff at Sac-Yolo MVCD





# Questions ?