

Water Quality Program Updates

California Strawberry Commission

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The Strawberry Certification Program

Project:

- January 2017 -June 2020 (3 yrs.)
- \$613,244 from State Waterboard through Region 3

Goal:

- Develop a pilot certification program for strawberries focused on implementation of BMPs that address water quality.
- Open to growers in Santa Maria, Salinas & Watsonville

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Goals and Objectives

Goal: Establish a voluntary certification program for strawberry growers to comply with water quality regulations.

Approach: Define and implement best practices for irrigation, nutrient, and pesticide management.

Result: Recognize & reward strawberry operations that use effective irrigation, nutrient, and pest management BMPs to improve water quality.

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Project Timeline



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Team Strengths

In house Research and Education Programs

- 11 full-time staff (2 PhDs, 2 PCAs, 3 bilingual staff)
- Partnership with Strawberry Center at Cal Poly, SLO
- Staff based in each production region
- Full integration of research and training programs
- Up to 90% of the industry participates in training programs

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Implementing Change

The California Strawberry Commission affects change in the industry through our in-house research and training program.

Success Story Examples

Water
Management

Pesticide
Management

Water Quality
Certification
Program (?)

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Water Management

Goal: Train irrigators and ranch managers to implement irrigation best management practices (BMPs).

Approach: Conduct hands-on training for farm employees on essential irrigation management skills.

Result: Conducted all-day training workshops that educated over 700 irrigators in the industry.



Bug Vacuum Optimization

Goal: Reduce insecticide use for lygus bug control.

Approach: Optimize performance of the bug vacuum.

Result: Increased vacuum performance by 4-fold and most growers have adopted this management method.



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Sprayer Calibration Program

Goal: Improve performance of spray equipment in the strawberry industry and minimize non-target effects on water quality.

Approach: Develop and deliver on-farm training for proper calibration and maintenance of spray equipment.

Results: In 2018, we have trained and calibrated over **50%** of the industry.

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Hands-on Training



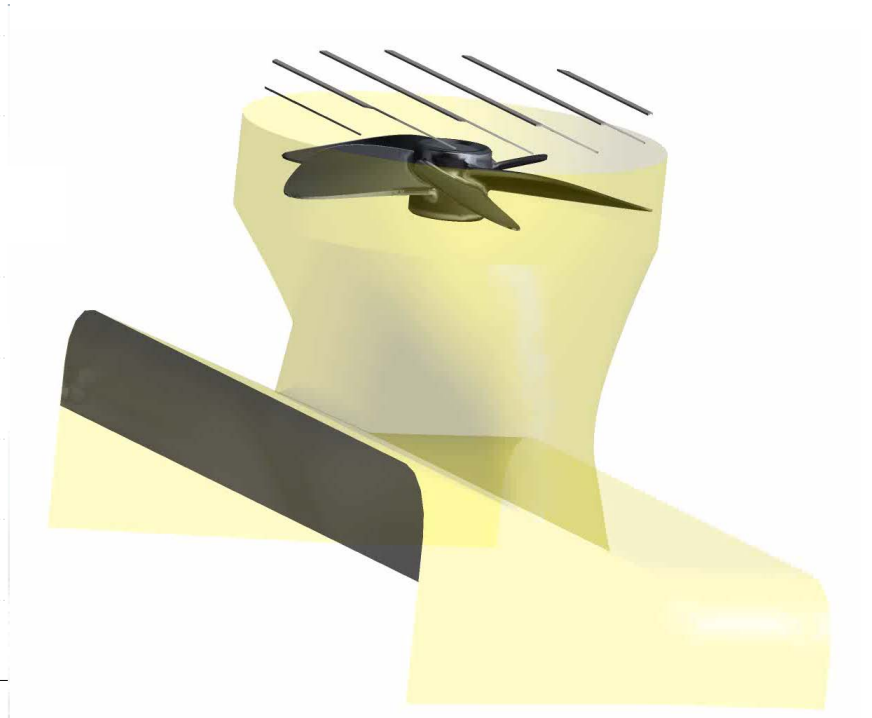
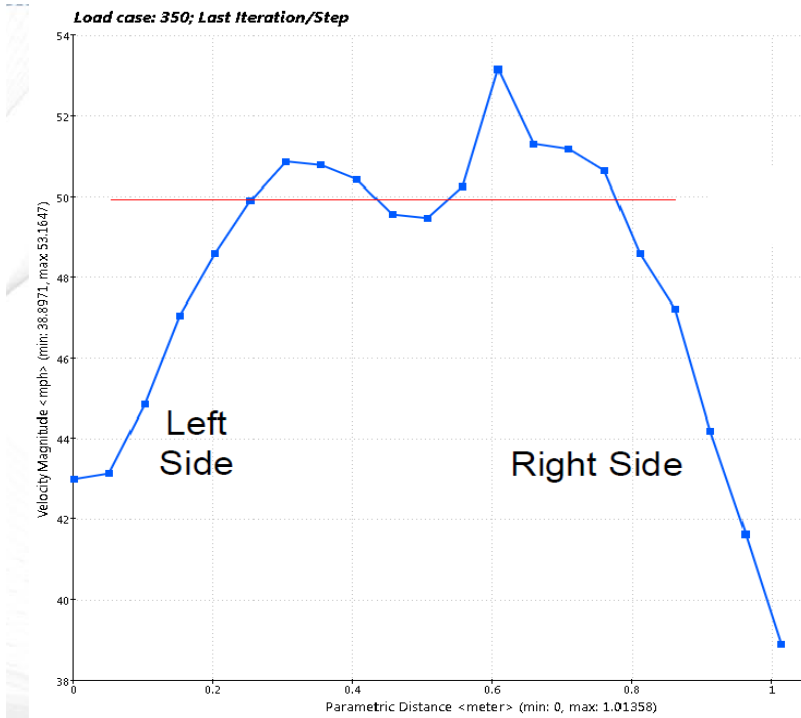
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Further Improvements

Vacuum
Improvements

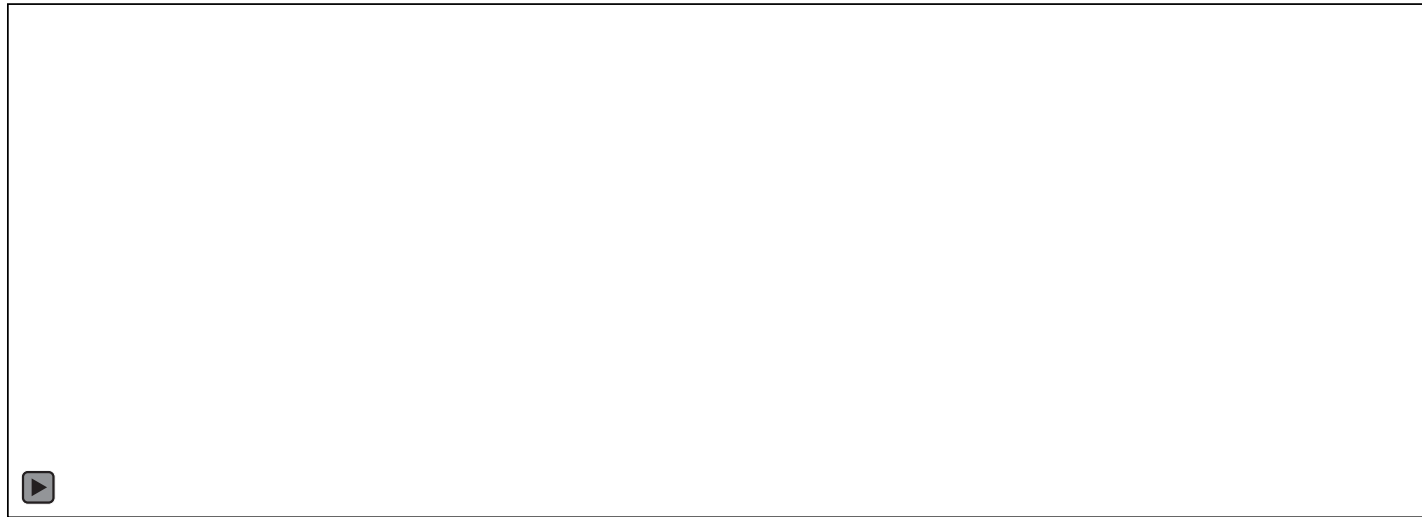
Spray Rig
Design

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Modeling Current Uptake of Lygus Bugs

Suction Under Original Bug Vacuum



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Spray Rig Optimization

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Focus on four Variables

∅ Nozzle Type

∅ Position

∅ Pressure

∅ Solution



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Certification Project Timeline



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CSC Strawberry Certification Program

Goal: Establish a voluntary certification program for strawberry growers to comply with water quality regulations.

Approach: Define and implement best practices for irrigation, nutrient, and pesticide management.

Result: ?

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