GreenLight Biosciences

Novel biopesticides offering a targeted approach to pest control based on dsRNA technology

IR-4 Industry Technology Session

Brian Manley, Ph.D.: Director, Regional Product Development – North America

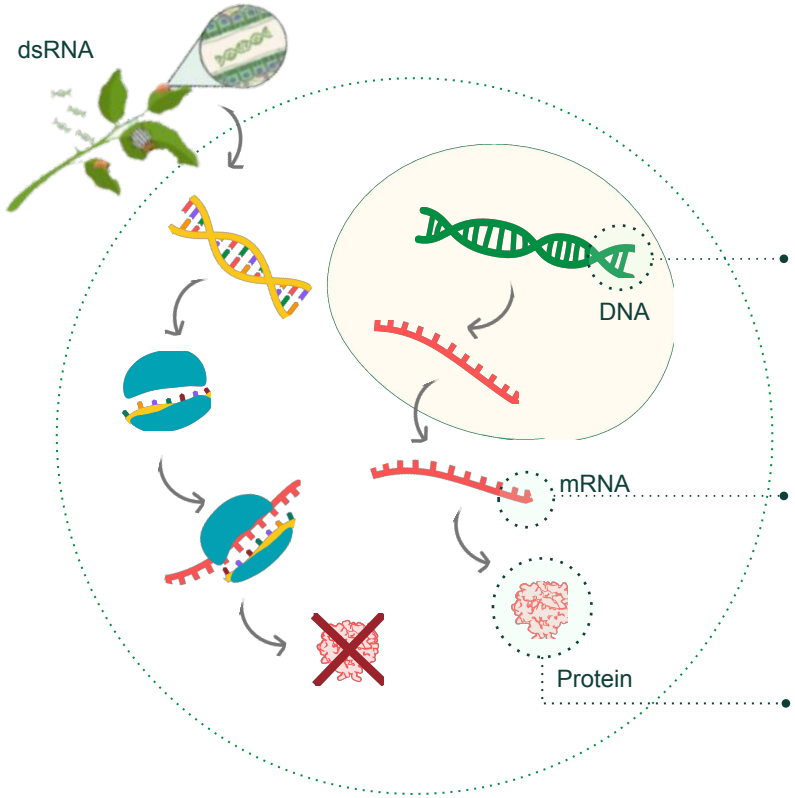
GreenLight Biosciences™

How does RNA work?

STARTS BY TARGETING SPECIFIC FUNCTIONS IN PESTS

In agriculture, RNA products inhibit key processes inside target pests or disease

1. The highly specific dsRNA is absorbed by target pest gut cells upon ingestion.
2. Within the cell the dsRNA is processed by a pest's own protein complex into siRNA (small interfering RNA).
3. The active siRNA binds to mRNA with a matching sequence.
4. The message encoded in the mRNA is effectively blocked. Production of a specific protein vital to the target pest is prevented.



- Inside the nucleus of each cell is the genetic blueprint, encoded in DNA
- This information is transcribed (copied) into messenger RNA (mRNA)
- Which gets translated by the cell's machinery to make specific proteins

RNA in Agriculture[1]

- Highly effective and selective
- Does not persist in water and soil. RNA degrades within days in the environment
- Easy to use, safe for farm workers
- Can be rapidly developed
- Can be formulated with existing chemistries, fitting well into existing pest management programs

1. Based on GreenLight Biosciences Field Trial Data

RNA based crop protection could have significant benefits over conventional chemistry

We believe that RNA has the potential to be a integral component in crop protection

EFFECTIVE

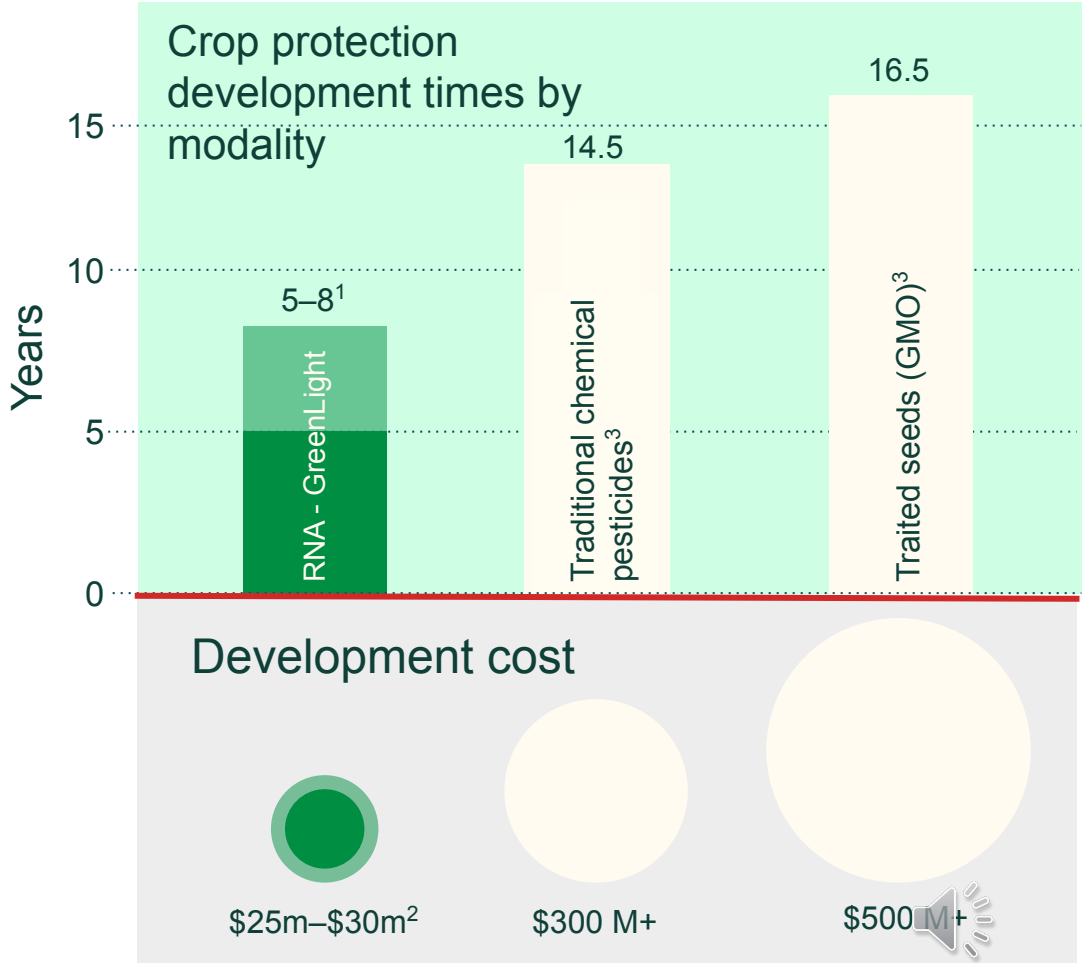
GreenLight's RNA solutions have shown in field efficacy equal or better than conventional standards

ENVIRONMENTAL SAFETY

RNA degrades within days of application and can be designed to target only pest species

RAPID DEVELOPMENT

Development of RNA actives can be done rapidly, allowing for nimble responses to emerging threats.



1, 2. Internal GLB Estimates; 3. Sparks et al., 2016, Perspectives on the agrochemical industry and agrochemical discovery; Pest Management Science 73(4)672-677.

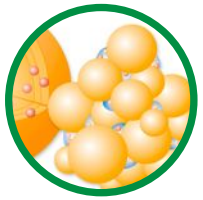
GreenLight Biosciences is the leader in RNA for crop protection

- Proven proprietary pipeline that spans across insecticides, fungicides, acaricides, and herbicides

GreenLight Bio Solutions

Calantha™

- Description: dsRNA product for potato beetle. Calantha™ is the first foliar-applied RNA product to be recommended for approval by the EPA
- Target pest: Colorado potato beetle
- Launch: 2023

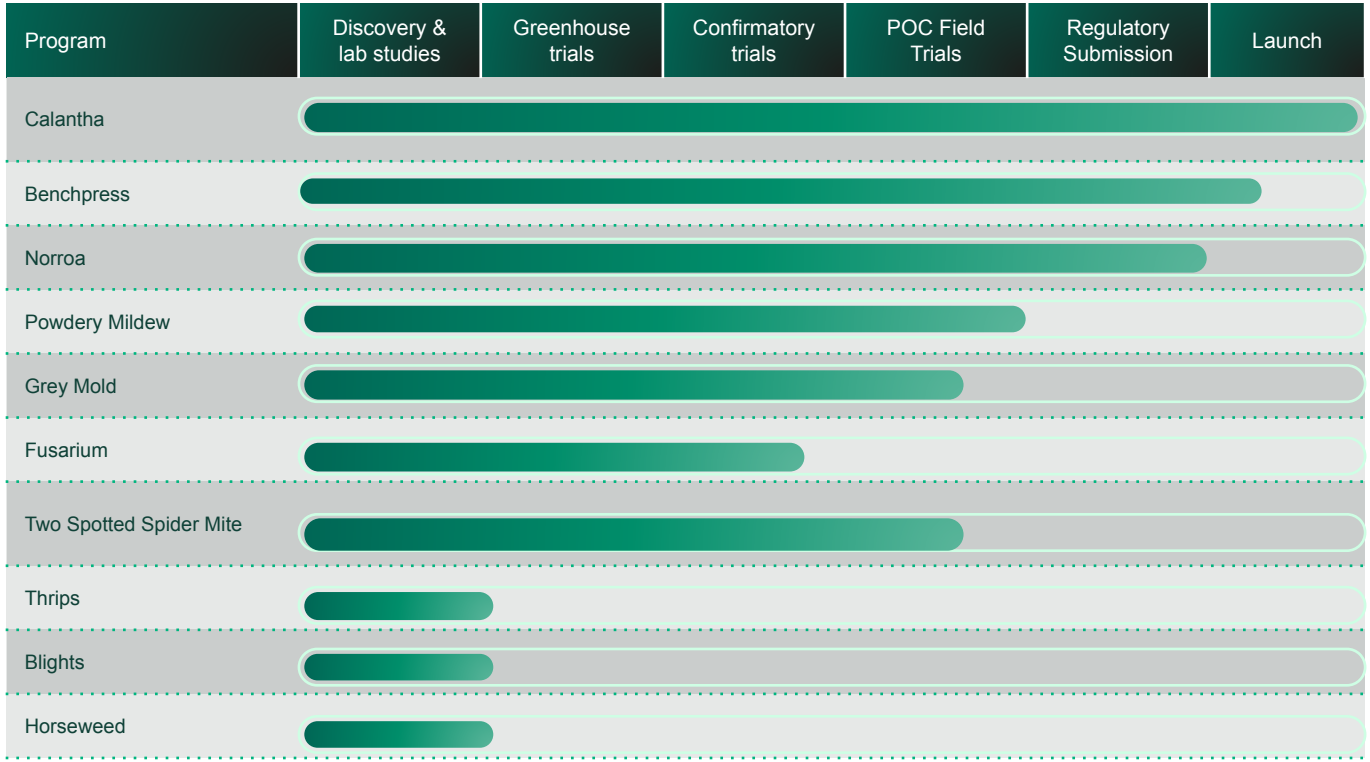


Benchpress™

- Description: Biological adjuvant for enhanced insect control
- Launch: 2024

Norroa™

- Description: Mite control for bees. Designed to help address colony collapse syndrome by preventing proliferation of varroa mites
- Target pest: Varroa destructor mites
- Expected launch: 2025



GreenLight Bio has solutions to capture market share in the $79B crop protection market

Calantha™
A novel biocontrol for Colorado potato beetle

Effective, precise, and environmentally friendly

GreenLight™ Biosciences

Calantha™

Powerful new mode of action

Calantha™ is a new foliar bio-insecticide that provides effective control of Colorado potato beetle (CPB) in potatoes, meeting industry standards for tuber yield and defoliation protection.

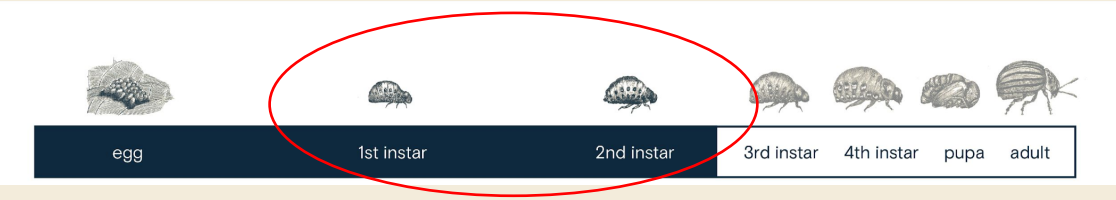
Calantha™ is powered by ledprona, belonging to a new class of insecticides based on RNA, offering a novel mode of action (IRAC Group 35).

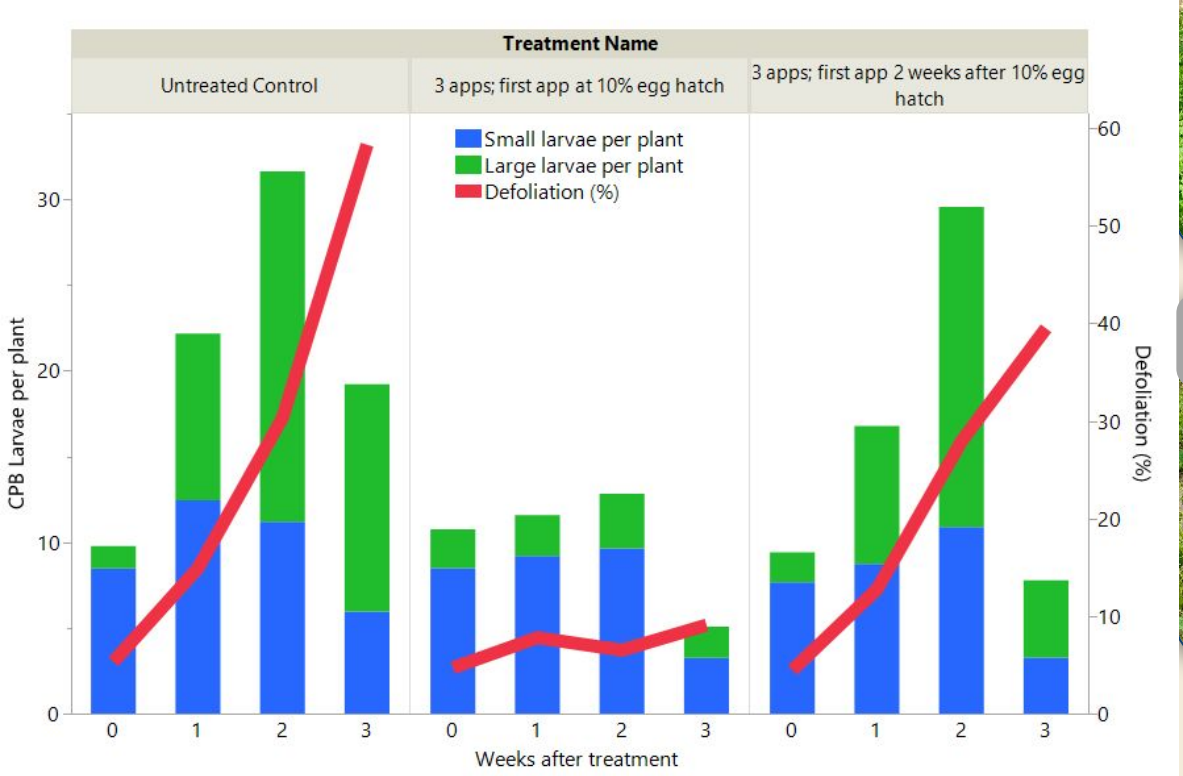
Introducing Calantha™ in the product rotation is a new key tool for resistance management, improving the toolbox with more options for farmers to effectively control Colorado potato beetle (CPB)

The active ingredient, classified as a bio-insecticide, is effective at a use-rate of a few grams per acre - significantly lower than most currently used insecticides.

Positive feedback from potato growers that used it in 2024

Early application is important for Calantha™

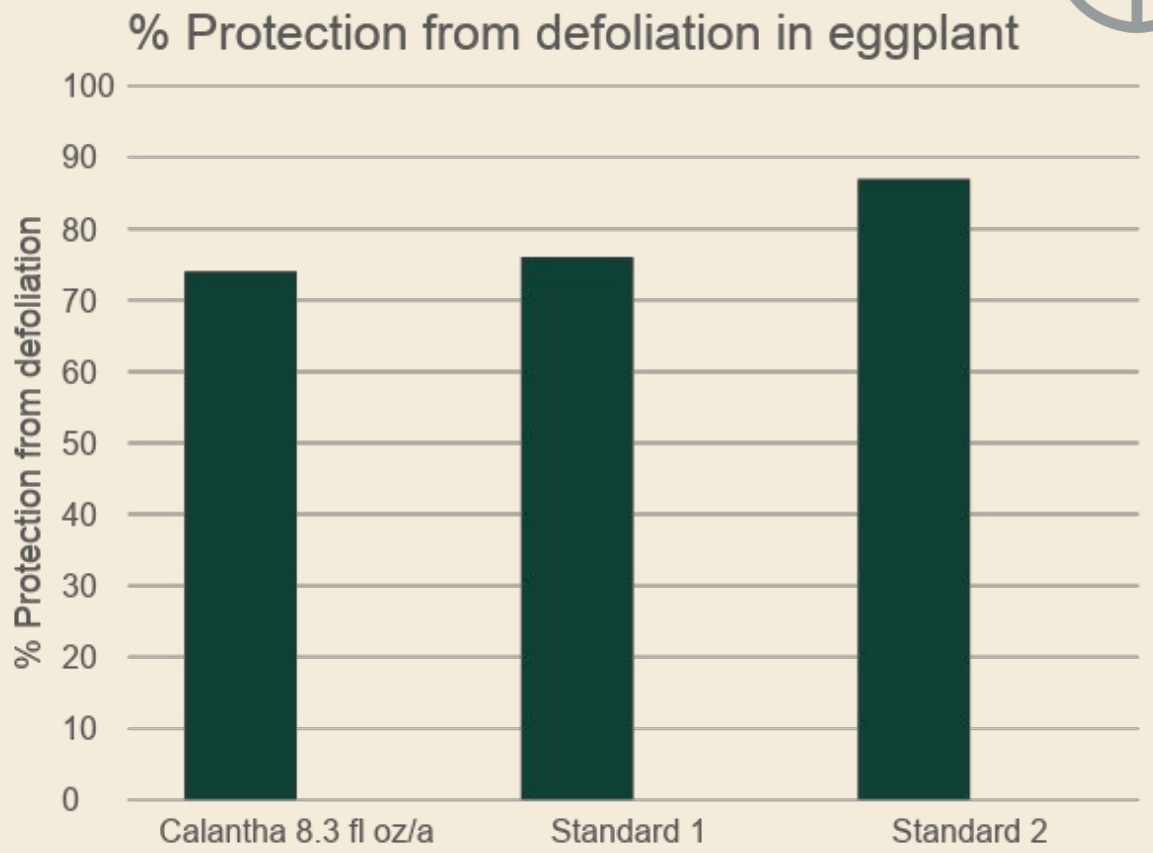




Photos from 2021 Trial in Wisconsin - 10% egg hatch application June 10th – 3 applications of Calantha in each treatment with delayed starts - Photos taken ~3 weeks after 10% egg hatch. In Wisconsin, CPB development occurred much quicker than normal due to above average temperatures in that year. Data summarized across 9 trials in 2021 & 2022 (ME, MI, NY, OR, WA, WI)

Calantha also protects eggplant from CPB feeding damage

- 3 trials conducted in 2019
  - Eggplant, tomato, pepper
- No phytotoxicity in any crop
- Little or no CPB damage in tomato or pepper
- Calantha reduced CPB large larvae counts and protected against defoliation in eggplant and tomato



- Mean % protection from defoliation relative to untreated from 3 trials in eggplant in 2019
- 3 foliar applications with 7-day interval
- 3 trials: NY, PA, ND
- Rate used is lower than current use rate in potatoes.
- Calantha is only approved for use on potato and has not yet been approved for use on any other crop.

Summary

Calantha on potatoes:

- *New effective solution against CPB*
- *Powered by brand new technology and mode of action*
- *Fully compatible with farmers' standard practices*
- *Minimal handling restrictions for applicators*
- *No preharvest interval & no detectable residues*
- *Excellent selectivity to beneficials and pollinators tested*

Calantha on eggplant (and other solanaceous crops):

- *Tolerance exemption expected in eggplant and other solanaceous crops*
  - *Subgroups 8-10 (A, **B**, C) (Fruiting Vegetable Group)*
- *GreenLight Biosciences, Inc. supports an IR-4 submission*

Visit us at: www.calanthaag.com

Thank You

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Brian Manley, Ph.D.
Director, Regional Product Development – North America
bmanley@greenlightbio.com

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