



**GreenLight**  
BIOSCIENCES™

IR-4 Food Use Workshop  
23 September 2019

# About GreenLight Biosciences

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- Start up company based in Medford, MA and Research Triangle Park, NC
- Developing a pipeline of proprietary dsRNA products for agriculture
  - Insects
  - Fungus
  - Plants

# GLB's RNAi is a targeted, effective solution

## Attributes

### New pest control MOA

- **Non-GMO**
- **No effect on DNA**
- **Biomolecule**
- Whereas 'conventional' pesticides may bind to a protein in target pests, RNA **interferes with the production** of a particular protein in a single pest.

### Specificity

- Designed to **only affect target pest** and be harmless to other insects, animals and plants

### Fate Profile

- Short half-life (days) in the environment

### Ubiquity

- RNA is everywhere, in every living thing and all unprocessed food/feed
- Natural food source for bacteria

## Key EPA SAP findings for RNA products

- Dietary RNA is extensively degraded in the mammalian digestive system.
- No significant absorption of dsRNA in mammals
- Minimal likelihood of adverse effects.
- Registration needs based on Biochemical requirements



# GLB product is a sprayable Soluble Liquid dsRNA on Colorado Potato Beetle



- Colorado Potato Beetle are:
  - becoming resistant to conventional chemistries
  - very sensitive to RNAi technology
- Product will be:
  - an alternative to conventional chemistries
  - used stand alone or in combination
  - part of an IPM program





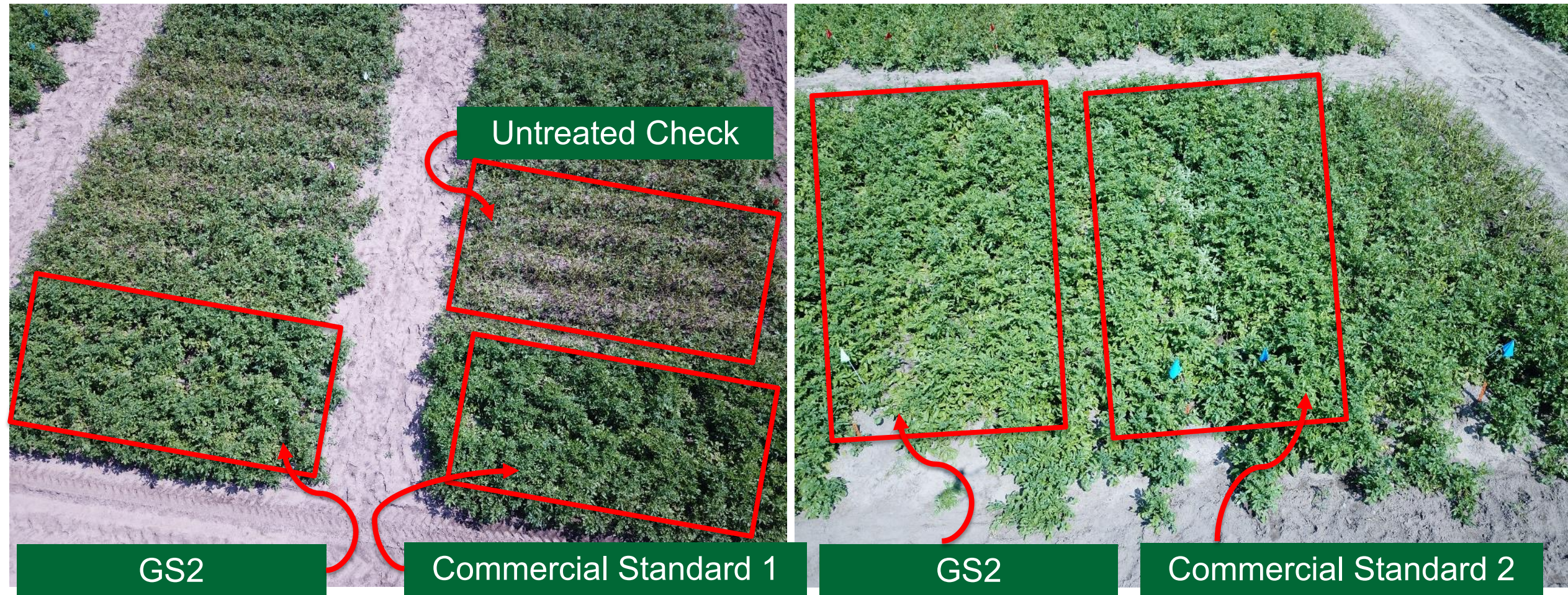
# What to expect from GLB's product

- Effective CPB control and defoliation protection
- At least 8x less ai needed than most standards
- Defoliation protection comparable to standards
- Activity on CPB in label expansion crops appears similar to potato





# GLB product provides CPB protection comparable to commercial standards



*At least 8x less GreenLight ai needed than most commercial standards*



# Questions?

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