

SOLASTA^{BIO} 

SOLASTA[®] Bio Precision Insect Control

Better for your crops.
Vital for our planet.

SOLASTA[®] Bio Peptide-based Bioinsecticides

Paula Pinto

Chief Strategy Officer



SOLASTA Bio: innovative peptide solutions

Established in 2021



Design and development of target-selective, non-toxic peptide based bioinsecticides with efficacy comparable to chemical standards

Unparalleled know-how in insect peptides enables rapid Discovery

- Data science driven selection of targeted peptides for insect species
- Rapid Technology Platform
- Patent Protected Peptides

Extensive, proprietary database of peptides, broadly covering target insect orders

Rational design, allowing for selectivity and rapid identification of peptide candidates

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Benefits of SOLASTA Bio's Technology Platform



Peptide based bioinsecticides: efficacious with added benefits

SOLASTA Bio Small Peptides

- **Target selective**, based on what insects already have (*peptides and receptors*)
- **Nature identical**, non-toxic, very small proteins (sequences of amino-acids)
- Impact target insect *physiology and behavior*, leading to death
- **Break-down** in the environment into amino-acids with no persistent residues, complete cropping flexibility

Initial Target Pests



Aphids



SWD



Lepidoptera



Planthoppers

Expected Grower/User Benefits

- **Safe to pollinators** and other beneficials
- **Non-toxic** for mammals and humans
- **Ease-of-use** and **Residue-free**
- Novel modes of action
- **Tool to mitigate resistance** and to **reduce chemical loading** through IPM programs

First Registration on-track



USA EPA Regulatory Submission planned for H1 2026

Scope:

- **TGAI (active Ingredient) and End-Use Product Registration**
- **Patented Active Ingredient**
- **Targets Aphids in Leafy Vegetables**
- **Biochemical Like Classification**
- **New Mode of Action through ingestion**
- **Regulatory Studies are underway**

Toxicology Considerations:

- **Designed to be non-toxic to mammals, aquatic organisms and birds due to *lack of similar peptide structures or molecular targets***

Ecological Safety Considerations:

- **Designed to be safe for bees. No toxicity demonstrated in:**
 - **Honeybees** (CRO testing, FERA Science, UK)
 - **Bumblebees** (in-house testing with OECD guidelines)
- **No observed impact on beneficials in field trials.**

Environmental Persistence:

- **No expected build-up of residues in plant or soil; readily biodegradable into *non-toxic amino-acids***

Maximum Residue Limit:

- **Potential for MRL Exemption due to high safety profile and rapid breakdown**

SOLASTA Bio's Peptides



Based on *non-toxic* insect peptides that govern *insect physiology and behavior*

Small Peptides: A Versatile, Cost-Effective Platform for Insect Control

- **Agile Platform, Not a Single Product**

A flexible solution adaptable to any insect species

- **Field-Tested Performance**

Efficacy comparable to conventional chemical insecticides independently tested

- **Species-Specific Safety**

Endogenous insect peptides, confined to insects and some arthropods. No toxicity to mammals or humans.

- **Scalable IP Strategy**

Can be developed for any arthropod species, selectivity for pests and safety for beneficials

- **Regulatory Alignment**

Biochemical-like regulatory pathway confirmed in the U.S., supporting streamlined approval.

- **Innovative Modes of Action**

New, non-toxic mechanisms with a lower likelihood of resistance development

No random screening. Rationally designed for target specificity and safety



Paula Pinto

cos@solastabio.com