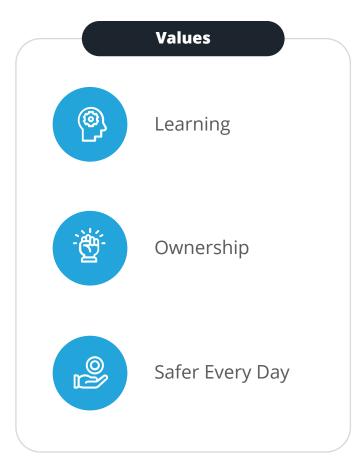


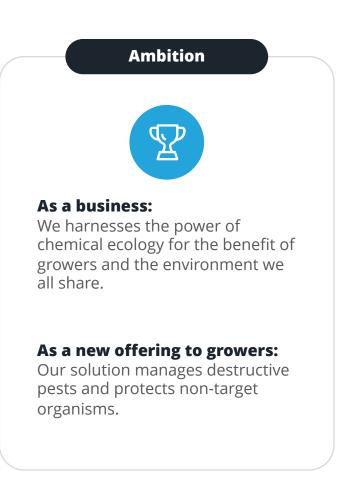


# **Provivi's Vision: Fragrances for Insects**









# **Key Reasons to Invest in Provivi**



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Design for **prevention** rather than remediation positions pheromones **upstream** of insecticides

**LARGE TAM** 

Proven cost-effectiveness enables targeting broad acre row crops unlocking 1 billion acres global TAM

**COMMERCIAL SCALE-UP** 

Commercial traction for **fall armyworm**, which has recently become the #1 pest of corn globally

**ACTIVE PIPELINE** 

Next generation **biodegradable** formulations compatible with existing farming practices

**FLEXIBLE GO-TO-MARKET** 

Partnerships with **Ag majors** in tree fruits in Europe, rice in Asia and direct sales in Americas

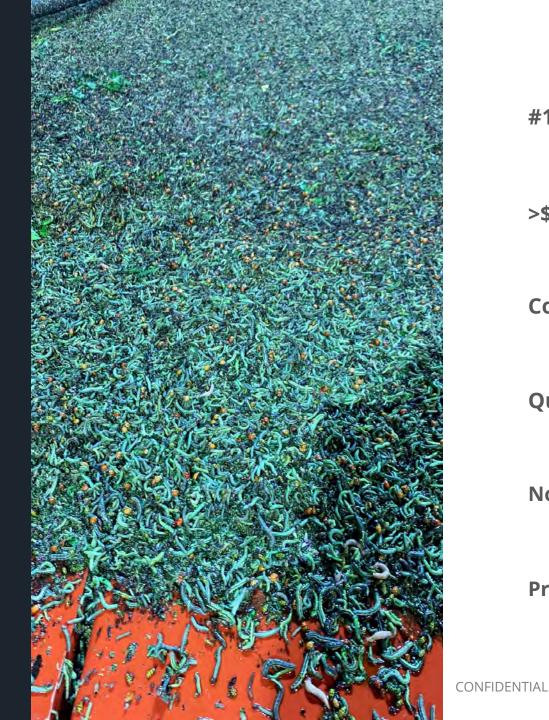
**BIODIVERSITY PRESERVATION** 

Replacement of synthetic chemistries when **insect populations** are under severe threat

Our vertically integrated tech platform gives us an edge over traditional incumbents: 17 product registrations, 247 patents filed, and 3 formulations launched



# Fall armyworm



#1 pest of corn globally

>\$1B opportunity

Corn, cotton, soy, and many more...

**Quickly develops resistance** 

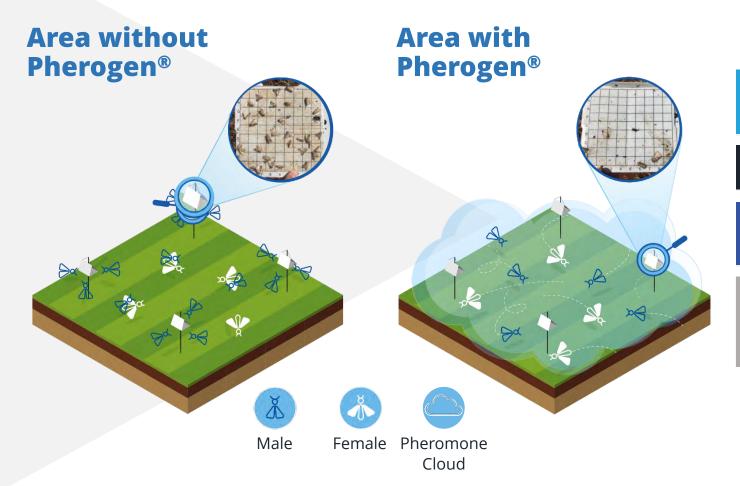
Not present in Africa & Asia before 2016

**Provivi: 1st to market mating disruption** 



### Pheromones Are Species-Specific, Non-Toxic, & Preventative

Pheromones are the chemical language invented by nature that act as messengers (e.g., sex pheromones released by female insects to attract males)



#### **Mating Disruption**



Pheromones are released in sufficient amounts to create an invisible cloud permeating the field



Males are unable to find the females



Reduces the rate of pest reproduction while preserving biodiversity



The reduced occurrence of damaging pest stages decreases crop damage and the need for insecticide applications, resulting in grower cost savings

# **Proven Value Proposition**



Win-rates = % of growers able to derive a benefit from our product

Win-rates	Mexico-Corn	Indonesia-Rice	Brazil-Cotton
1. Reduced use of insecticides	75% (N = 653)	54% (N = 70)	TBD
2. Lower crop damage	75% (N = 144)	N/A	75% (N = 63)
3. Yield protection	75% (N = 167)	56% (N = 70)	82%* (N = 56)

We price to value: growers experience 3x ROI...

...and key intangibles: reduced exposure, protection of biodiversity, season-long control

<sup>\*</sup>Brazil data based on yield estimates. Harvests due in August.

# **Proven Ability to Scale**



#### SynBio and Metathesis Platform



>2x
Reduction in
Synthesis Steps



Nobel Prize-Winning Technologies



Pheromones
Produced at
Industrial Scale



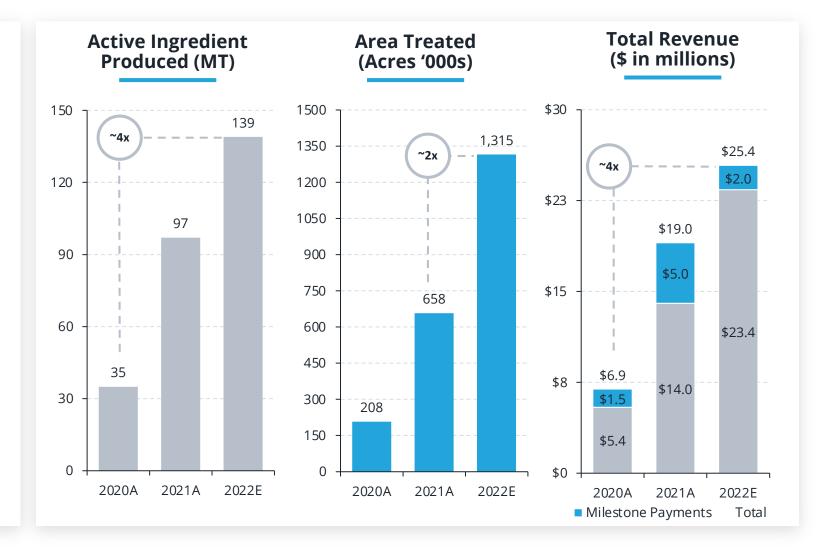
**247**Patents filed and 74 Issued



Strategic Toll Manufacturing Partnerships



Product Portfolio Pheromones



# **Industry Estimates \$3-4B Market by 2030**



FMC recently acquired Biophero for \$200M; Provivi has a broader platform & a head-start

	PROVIVI'	BioPhero
Patents and Patent Apps.	193	32
Registrations	17	Zero
Active Ingredient	<b>√</b>	<b>√</b>
<ul><li>Through Biosynthesis</li><li>Through Metathesis</li></ul>	<b>√</b>	×
Formulation Capabilities	<b>√</b>	×
Branded Products	<b>√</b>	×
Product Revenue >\$10 million	<b>√</b>	×
Countries w/ Registrations	6	Zero
Production Vol 2021 (MT)	97	~1
Crop Protection Majors as Partners / Investors	BASF © CORTEVA Syngenta	<b>FMC</b> syngenta

	PROVIVI'	BioPhero
Fall Armyworm	Launched (2020)	Est. 2023 - 2025
Rice Stem Borer	Launched (2022)	Est. 2023 - 2025
Soybean Looper	2025	Est. 2023 - 2025
Tree Fruits and Vines	Launched (2020) Through Al Partnership	N/A

# **Game-Changing Biodegradable Formulations**



Proprietary Platform – ideal, low-cost way to deliver pheromones

#### **Key Features:**

- 1. Decompose into soil after releasing pheromone
- 2. Applied as dispensers or broadcast
- 3. Robust performance achieved in trials in Mexico, Brazil, and Asia
- 4. Low-cost & scalable
- 5. IP protected

Regulatory approval in 2024 & launch in 2025



# **How We're Adapting to 2022**



We've been adjusting our plans to the new realities of this year by:

- 1. Reducing burn
  - 25% cut in Opex
  - While retaining key capabilities in R&D and product development
- 2. Scaling-up manufacturing w/o Capex
  - Strategic partner can ramp-up production to 10-20M acres w/ existing capacity
- 3. Focusing on strategic partnerships for market access
  - Avoids duplicating distribution infrastructure
  - Focuses our resources on product development, COGS reduction, and registrations

## **Traction with World-Class Partners**



#### **Go-To-Market**



APAC)

Partner A
(Europe)
(Provivi supplies Al for Tree Fruits in Europe)

### "1-acre-for-1-acre" (ESG)



#### Manufacturing











#### **Strategic Investors**

BASF Venture Capital GmbH



# **Management Team**





**Pedro Coelho, PhD**Co-Founder and CEO





Peter Meinhold, PhD
Co-Founder and CTO





**Teri Q Gray, PhD**Chief Operating Officer





**Eduardo Sein** Chief Financial Officer







**Juan Lombana**Chief Commercial Officer

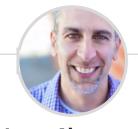




**Ester Dreher** VP – Product







Jarett Abramson General Counsel



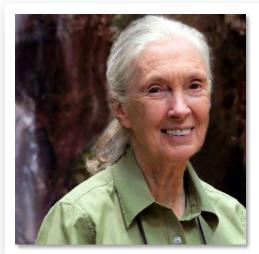


#### **Leadership Accomplishments**

- Developed novel small molecules, from discovery to launch, resulting in breakthrough crop protection products in a cost-effective manner and record timelines, with global coverage, most notably with the diamide family of insecticides
- Previously taken companies public through successful IPOs
- Scaled fast-paced life sciences and tech organizations globally
- Developed and scaled successful synbio-based products
- Developed biotech insect control products and resistance management strategies

# **Expert Testimonials**





"This revolutionary process can control the number of insect pests while preserving biodiversity by targeting only those pests. It involves the use of pheromones to disrupt the mating cycle. No insects are killed, and the ecosystem remains intact."

"Provivi's eco-friendly mating disruption technology gives farmers peace of mind. Knowing their young rice crops are protected, they do not need to spray insecticides early in the season, allowing nature's defenses to develop and protect the maturing crop from potentially serious pests, such as leafhoppers. Fewer insecticides mean lower costs, higher profitability, and a healthier environment."

Dr. Bob Zeigler, PhD, Provivi Advisor and Former Director General of International Rice Research Institute





"The world's \$8 trillion food supply chain is driven by consumers, supply and demand, environmental conditions, and numerous other dynamics. Provivi's unique products provide a new option that will play a role in feeding our growing world."

Kip Tom, Former U.S. Ambassador to the United Nations Agencies for Food and Agriculture