SEE BEYOND THE SEED™

The data layer for the source of agriculture.

Physical AI that reads the biology inside every seed, non-destructively, in real time.

SECTION I

The problem

Agriculture has digitized almost every input except the one it all starts with - the seed.

$80B+ lost annually

to an incomplete understanding of seed biology, across four points in the value chain.

$1B+
Propagation over-sowing

$4B+
Destroyed in testing

$50B+
Slow breeding cycles

$30B+
Commodity mispricing

A seed can germinate and still never make a productive plant.

Propagators can't tell which seeds will be viable and which won't before sowing, so they plant far more than they need and discard the rest, along with the water, bench space, labour and resources it took to grow.

50%

more seed sown than plants delivered

$1B+

wasted on over-sowing each year

To test a seed, you have to destroy it.

Because of this, seed companies can only test a handful of seeds, then assume the rest of the lot would test exactly the same. These methods describe small sample averages rather than seed-to-seed variability, resulting in inefficiencies and hidden losses.

30%

of high-value inventory destroyed just to test it

$4B+

lost to destructive testing each year

Ten years to build a variety. Most of it is waiting.

Breeding programs are limited by the space and time it takes for plants to grow before deciding which to cross into the next generation. Seed companies still invest up to $250M in genomics just to shave a couple of years off that cycle, proof of how valuable each season saved really is.

70%

of the program spent waiting for plants to grow

$50B+

in lost breeding efficiency

Priced on the average. Never on the seed.

Grain is graded from a small sample, often less than 0.01% of a batch, and sold on the lot average. The best seed in the batch earns the same price as the worst, so the premium of the high-quality seeds within the lot quietly disappears.

$30B+

in premium value lost to averaging

Seeds are biological black boxes.

Agriculture measures the seed, but only in batches. To test a seed you have to destroy it, so the whole industry judges billions of seeds from a small handful, and decisions worth billions of dollars get made on a guess about what is inside.

THIS RESULTS IN BATCH-LEVEL ASSUMPTIONS WITH

- Critical problems, such as disease, being missed
- High-value inventory destroyed or de-valued
- Individual variance reducing efficiency and yield

$700B+ SECTOR, STILL JUDGING SEED BY SAMPLE

Every measurement layer minted a platform winner. Seed biology is the last unclaimed one.

1960s	1990s	2000s	2010s	NOW
Soil chemistry	**Weather data**	**Genomics markers**	**Aerial sensing & IoT**	**Seed biology**
	Climate Corp · $1.1B	Corteva, Bayer seed IP	Semios	insporos

SECTION II

The solution

Open the black box, non-destructively, on every seed, in real time.

Physical AI to read the biology inside seeds.

insporos non-destructively measures biological signals within individual seeds, predicts plant outcomes, and sorts in real time, in-line with current processes.

QUALITY
Germination, vigour & emergence

RISK
Disease & abnormalities

VALUE
Plant phenotypes

IN-LINE BIOLOGICAL SORTER

The first system to measure, predict and sort by biological outcome, not appearance.

SECTION III

Value to customer

The same four segments that lose $80B+, each one an entry point with immediate ROI.

Find the bad seed before it is planted.

insporos identifies diseased and defective seed at the seed stage, saving the water, bench space and labour wasted on over-sowing.

The result is **immediate ROI** and optimized operations from day one.

LOSS-LEADER DATA STRATEGY · SEEDS THE FLYWHEEL

90%+ reduction in over-sowing

Test without destroying.

insporos replaces the majority of destructive testing, removes only the non-viable and defective seed, and returns the rest to inventory. Degraded warehoused seed lots can also be brought back up to germ standards, and sold.

By pairing seed biology with previous treatments, coatings and growth outcomes, end-to-end performance data guides product development. Production routes segregated lots to the right treatment zone and sells them where they will perform best.

$3B+ of inventory recovered

Predict traits at the seed, not the field.

insporos predicts plant traits of interest directly from seed, optimizing breeding pipelines for robust, sustainable varieties.

It also lets breeders pair seed biology with environmental data to decide which product lines to pursue, cutting time to market by **up to 3 years**.

$50M+ saved per varietal

Price on quality, not the average.

insporos predicts premium drivers like protein, oil and amino acid profile, enabling batch sorting and tiered pricing of commodities.

This unlocks the premium grain value currently **lost in batch averaging**.

$30B+ in premium value unlocked

SECTION IV

Traction

The industry is already at the table, with trials running and LOIs in hand.

The industry is already running our seeds.

10

commercial trials running

+7 IN THE PIPELINE

$1.25M+

LOI pipeline

3 LOIs READY TO EXECUTE

4

top incubators in 2026

YES!DELFT · STATION F
MASSCHALLENGE · SVG THRIVE

INDUSTRY OPINION

”What does the industry look like in the immediate future?”

"The integration of AI into seed testing would reshape the landscape of seed science and technology."

ISTA · BERT VAN DUIJN · ISTA ADVANCED TECHNOLOGIES

"Vision technology and image analysis play a major role."

PETER BOURGONJE · ENZA ZADEN

"Digital phenotyping, data-driven breeding methods, and artificial intelligence."

RIJK ZWAAN · INNOVATION TEAM

"Scalable, reliable tests for seed quality... advanced technologies in seed quality testing."

BAYER CROP SCIENCE

80%+
software margins

A hardware moat captures data no one else can, then software margins compound on top of it.

BEACHHEAD

Propagation

Seed analysis as a service, up to **50¢ per non-viable seed**

Loss-leader strategy: low-cost analysis in exchange for high-quality, high-volume data that powers seed-company & commodity products

LOSS-LEADER · DATA FLYWHEEL BEGINS HERE

TARGET

Seed companies

Volume-based pricing for production / QA (per seed, per acre)

Trait-based pricing for breeding

Hardware lease included in analysis contracts

EXPANSION

Commodities

Pricing as a **% of value unlocked**

Prediction of premium drivers

Batch segregation

SECTION VI

Market

Three expanding SAMs, one platform underneath all of them.

A wedge into a $50B+ market.

BEACHHEAD SAM

Propagation

$1B+

ARR

Beachhead and strategic GTM intermediary. Bottom-up, using per-seed pricing at 30% of ROI.

TARGET SAM

Seed companies

$9.4B+

ARR

Bottom-up over a few crops only: high-tech greenhouse tomato, pepper, cucumber plus hybrid corn, canola, soy and wheat.

EXPANSION SAM

Commodities

$30B+

ARR

Includes select commodities with premium pricing drivers. Bottom-up analysis based on typical batch variance and a %-capture model for premium value unlocked.

We start with ROI, then expand into the data layer for seeds.

A defensible, wholly-owned IP base.

PATENT PORTFOLIO

2 core provisionals

Updated March '26 · PCT due March '27

3–5 utility patents

Narrower filings in late '26

FTO verified

Prior-art search complete · model strategy split across a provisional and trade-secret

BEYOND PATENTS

- Large, growing database of proprietary seed knowledge
- Bespoke AI models kept as trade secret
- International trademarks on company name and logo
- Living IP strategy, guided by experienced IP counsel
- **Wholly owned, free from university ownership**
- **Potential for a larger IP portfolio & licensing program**
  - · Trait discovery & genetics licensing
  - · Hardware & software licensing, via retrofit into industrial sorting
  - · Environmental + seed data for seed-company recommender systems

A data layer for the source of agriculture.

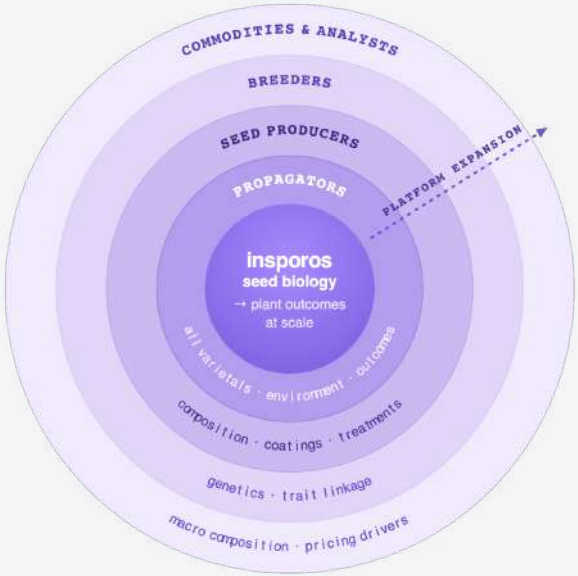
Each segment adds a new **dimension** of data, not just more of it. No single company can access or recreate this dataset.

01 First-mover advantage with first-of-its-kind physical AI

02 Successful pilots already running with large industry players

03 Pursuing regulatory approval in parallel for certified testing

04 Environmental, coatings and treatment data integrated for recommender systems and product development



Data is gathered, the science is solved. Now we scale throughput.

DEMO · PRESENT

NOW

2,000 / day

Automatic seed distribution & data handling

High-throughput designs complete

POC across seed types

COMMERCIAL · POST-RAISE

200,000+ / day

Instant results

Automatic calibration

Customer deployments begin

Commercial launch

FUTURE · OEM SCALE

Tonnes / hour

Light-based sensors can leverage proven mechanical engineering in high-throughput sorters

Full-stack, end-to-end build
Co-development with legacy optical sorters possible

As the platform scales, so do our predictions.

Every data dimension unlocks new prediction capabilities.

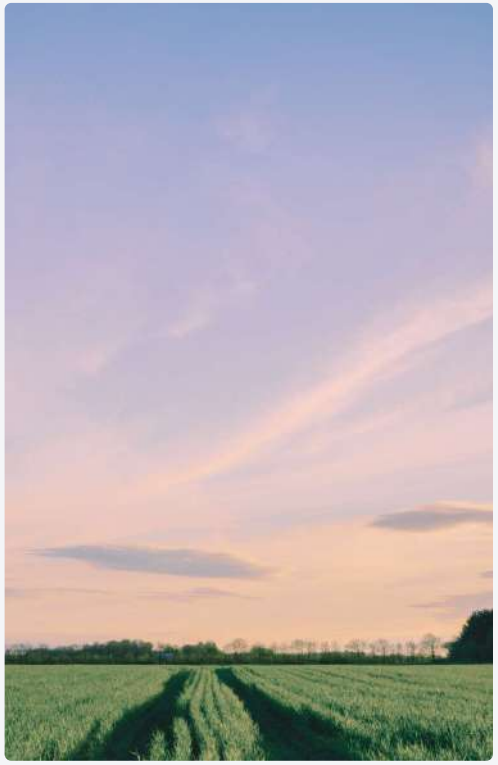
TODAY

Greenhouse seeds

Select hybrid row crops

EACH NEW DIMENSION UNLOCKS

- Phenotype / genotype linkage
- Climate resilience
- Optimized coatings
- Nutritional composition
- Batch segregation
- Premium drivers



	insporos Demetron™	SeQso acq. 2025	SeedX
PLANT VIGOUR	**97%** <5% false neg	95% · 25% FN	90% · 30% FN
DISEASE DETECTION	**Surface & internal**	Surface	Surface
ABNORMALITIES	**Plant & seed**	Plant & seed	Seed
MACRO PREDICTION	**Protein, oil, sugars**	None	Protein
SEED DESTRUCTION	**NONE**	X-ray, batch	Batch pretrain
THROUGHPUT	**2 seeds/sec** physics scales to match industry throughput	75 seeds/sec	70 seeds/sec
SEED TYPES	**Tomato, pepper, cucumber, strawberry, corn, canola, wheat, barley, hemp, cannabis**	Tomato, pepper, cucumber	Tomato, pepper, wheat

Founded by experts in AI and materials chemistry, backed by a board and advisors who have built, scaled and sold companies before.

Dr. Mallory Flynn

CEO · COFOUNDER

PhD, Mathematics & Statistics

Amanda Ackroyd

CTO · COFOUNDER

PhD (ABD), Materials Chemistry

Tom Urban, MBA

INDUSTRY EXPERT

Pioneer Seeds + DuPont leadership

Dr. Michael Gilbert

SCIENCE + GROWTH

Founder & former CEO of Semios, a precision-ag unicorn

Clayton Weir, MBA

DATA + STRATEGY

Cofounder & ex-CEO, FISPAN

SECTION X

The round

A validated system, paying trials, and a clear path to commercial revenue.

SEED ROUND

$2M USD

TARGETED CLOSE

Q3 2026

Seed round to commercial launch.

WHAT THE ROUND BUILDS

+ First commercial sorters
+ Execute existing LOIs and convert pilot customers
+ 3–5 throughput-scaling patents
+ North America & Europe deployment

WHAT IT UNLOCKS

- First commercial recurring revenue
- Throughput expansion & partnerships
- Expanded IP portfolio & licensing program
- New crop types & disease-algorithm validation
- 10+ new pilots: propagators, breeders, production QA
- **24 months runway to Series A ready**

insporos

see beyond the seed.™

info@insporos.io

SECTION XII

Appendix

Impact, value chain, GTM, market sizing, deployment and scaling.

XII

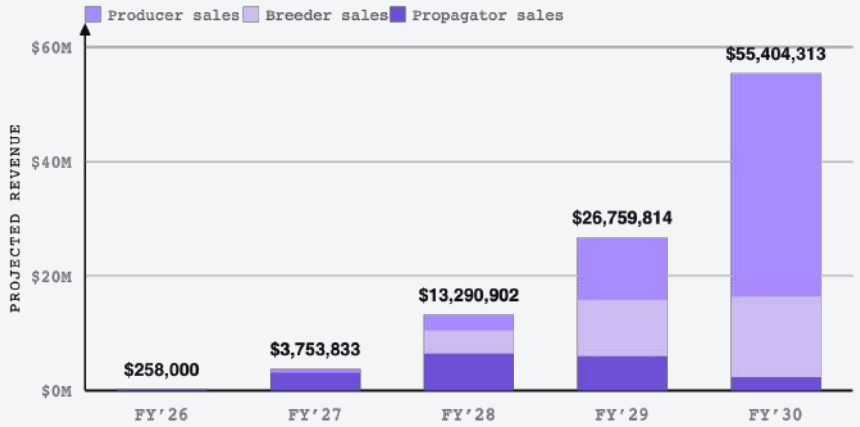
Proprietary AI system with low marginal costs after deployment.

- Model includes only customers we already have relationships with
- Per-seed pricing on greenhouse + select row crops only
- Low marginal cost after deployment
- Commodities upside excluded until 2031

$55.4M

projected revenue by FY'30, 21 piloting customers by end of 2027

PROJECTED REVENUE BY CUSTOMER TYPE · USD



98 Mt CO_2e saved

in just three propagation crops, globally.

Hundreds of Mt
across horticulture

Gigatonne-scale
across agriculture

Customer clarity: the vegetable seed sector.

SEED COMPANIES

R&D, breeding, production & QA

Develop new varieties, then package and sell seed.

FUTURE CUSTOMER

SELLS SEED →

GROWERS

Buy seed & contract propagation

Purchase seed at $0.70–$3 each.

INFLUENCER

→

PROPAGATORS

First 40–60 days of plant life

Grower pays per viable plant delivered.

★ BEACHHEAD · insporos enters here

→

GROWERS

Grow to maturity & harvest

Raise delivered plants over ~11 months.

INFLUENCER

Propagators are the strategic intermediary.

Insporos benefits everyone in the chain, but propagators are the wedge. These facilities plant **50M–1B seeds a year**, spanning every commercially relevant varietal.

That's the fastest path to large-volume data collection for robust algorithms, while delivering value from day one.

It is a deliberate **loss-leader data strategy**: propagators can be served at low or no margin, because the high-volume, robust seed biology data they generate is what powers the higher-margin seed-company and commodity products.

50M–1B

seeds planted per facility, per year

STRATEGIC INTERMEDIARY

Data + revenue + access to every varietal, in one place.

Strategic GTM intermediary: propagation.

CANADA & US

$150M

9.9% CAGR · 2026

EUROPE

$1.3B

addressable propagator spend

SEED ANALYSIS AS A SERVICE

50¢

up to, per seed, at 30% of ROI

One LOI, **5 propagator grow trials**, with over **$250k of seed invested in kind**.

Seed production: a $9.4B ARR target.

SELECT ROW CROPS

$8B

ARR

Hybrid canola, hybrid corn, wheat, soy only

HIGH-TECH GREENHOUSE

$1.4B

ARR

Tomato, pepper, cucumber only

$30B

ARR OPPORTUNITY

Often less than 0.01% of commodity batches are ever tested, so premium value is lost in the averages. Crops like wheat, corn and canola are sold on quality drivers such as protein and oil content.

Insporos predicts those drivers, enabling batch sorting at scale, captured as a % of the premium value unlocked.

01 · AT CLEANING / GRADING

Inline module

Drops into existing cleaning and grading lines, adding biological classification that informs routing in real time.

02 · AT SORTING

Standalone biological sorter

A dedicated insporos sorting stage for high-value or risk-sensitive seed and grain.

03 · WHOLE-LINE OEM

OEM co-developed system

Built natively into next-generation processing equipment with legacy optical-sorter partners.

High-throughput engineering already exists.

Grain cleaners and sorters have processed tonnes per hour for decades. Insporos' hardware is **light-based**, and scales to thousands of seeds per second on that same proven mechanical base.

Sortex H
Bühler · grain sorter
40 t/h

TriQ Plus
BoMill · cleaner / sorter
15 t/h

SEA.IQ Plus
Cimbria · acquired 2024
3 t/h