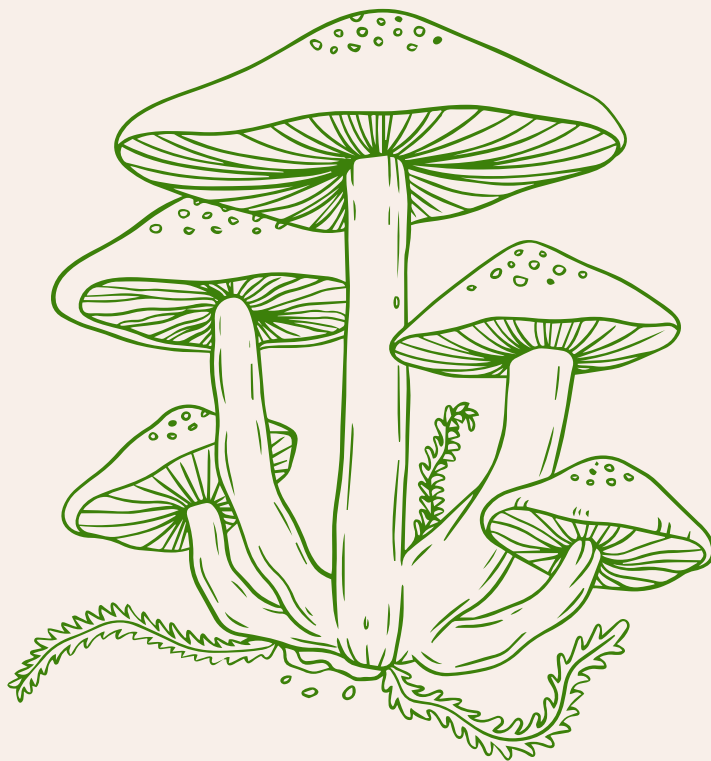


SporeStrike



Aria Das, Avni Iyer, Abhay
Shukla, Dominic Wang



The Team



Aria Das



Avni Iyer



Abhay Shukla



Dominic Wang

Fungal Infections:



Destroy:
**20% of all
crops**
Cost:
\$200 billion
Take food from:
4 billion people



Current Solutions

- X Inefficient**
- X Expensive**
- X Inaccurate**



Sporestrike



- ✓ **Targeted**
- ✓ **Efficient**
- ✓ **Data Driven**





Introducing: **SPORESTRIKE**

SporeStrike System



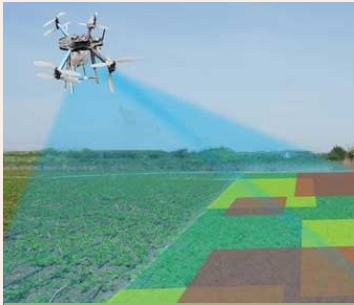
Agricultural
drone
battery
(LiPo)

Sensor 2:
Fungal
impedance
analyzer

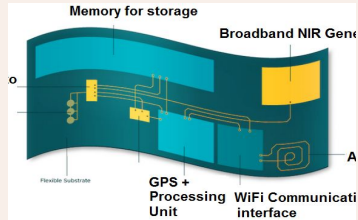
Sensor 1:
hyperspectral
imagery
analysis

Fungicide
dispensers (with
gimbals)

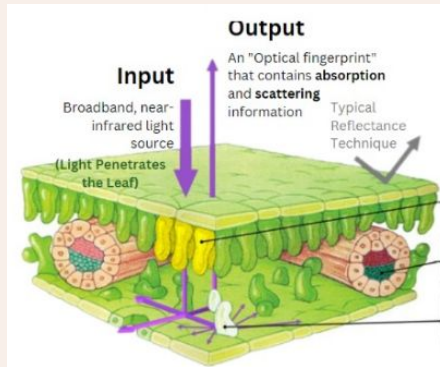
Modeling Phase: 99% accurate



Hyperspectral
sensor scans
4ftx4ft area



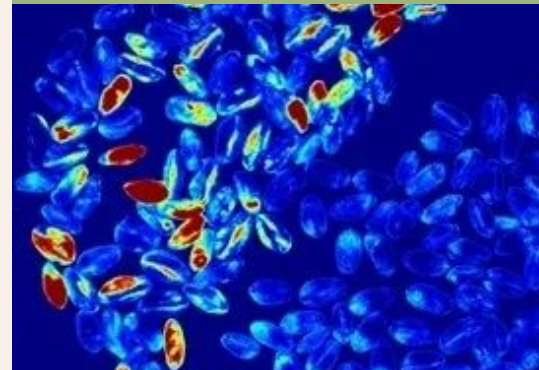
FHE stores
optical data
and location



Li Ion Battery

Returns to homebase

ML determines infection
coordinates



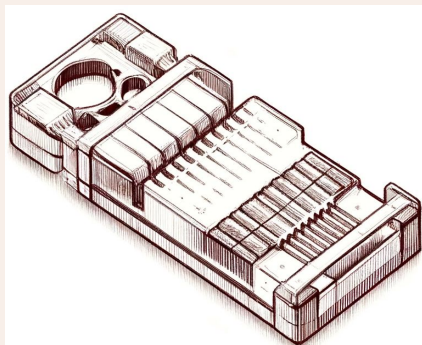
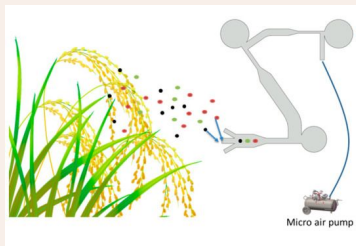
NOT DETERMINISTIC OF
FUNGUS TYPE

Second
Phase

Extermination Phase: 97% accurate



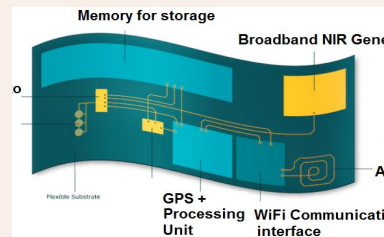
Drone collects
spores via
microfluidic
chip



Impedance
analyzer collects
Current
resistance data



9V Li Ion battery



FHE uses
resistance data
to determine
infection



Drone releases
fungicides

Increase yield 20%
Save farmers \$63,200



Business















MODEL

Target Market








Competitive Analysis



	Sporestrike	Croptix	PCR Testing	Satellite Imaging	Manual spraying
Low Cost					
High accuracy in detection					
Targeted disease elimination					
Time efficient					
Simplicity of operation					

Manufacturing



Component	Manufacturing
Agricultural Drone	 The logo for Freefly, featuring a stylized white bird or wing shape above the word "FREEFLY" in a bold, sans-serif font.
FHE	 The logo for Nextflex, featuring the word "NEXTFLEX" in a bold, sans-serif font with a colorful arc above the "X".
Hyperspectral Camera	 The logo for Specim, featuring the word "SPECIM" in a bold, sans-serif font with a colorful arc below it. Below the arc, it says "A Konica Minolta Company".
Impedance Analyzer	 The logo for Keysight, featuring a red waveform icon to the left of the word "KEYSIGHT" in a bold, sans-serif font.
Microfluidic Chip	 The logo for Vantiva, featuring the word "vantiva" in a bold, sans-serif font with a colorful starburst icon to the right. Below the word, it says "Pushing the edge".

Key Partners



Prototyping



Funding, Research, Data



Market knowledge, networking



Marketing Plan

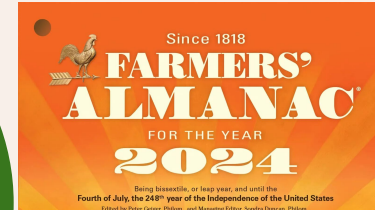


Agricultural
Conventions
and Farmers
Co-ops



Search &
Social Media

Print &
Almanacs



Cost Breakdown



TOTAL MATERIALS COST

\$5,437

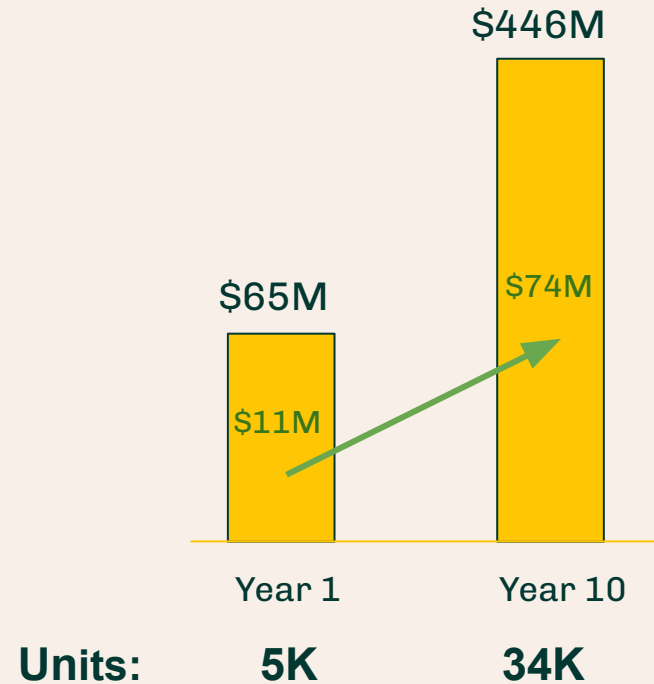
Component: Drone hardware	Per Unit Cost
Hyperspectral Camera Attachment	\$4,600
Microfluidic Chip Attachment	\$800
9 V Battery for Impedance Analyzer	\$3.00
FHE	\$5.00
Processor	\$1.70
WiFi Antenna	\$5.00
Fungicide Dispenser	\$19.00
Near Field Communication Antenna	\$2.80

Financial Plan



Per Unit Economics

Sale Price	13,048
Cost of materials	5,437
Total Item Cost	10,873
Gross Profit	2,175



Change the face of farming globally:

Spore



Strike

Questions?

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