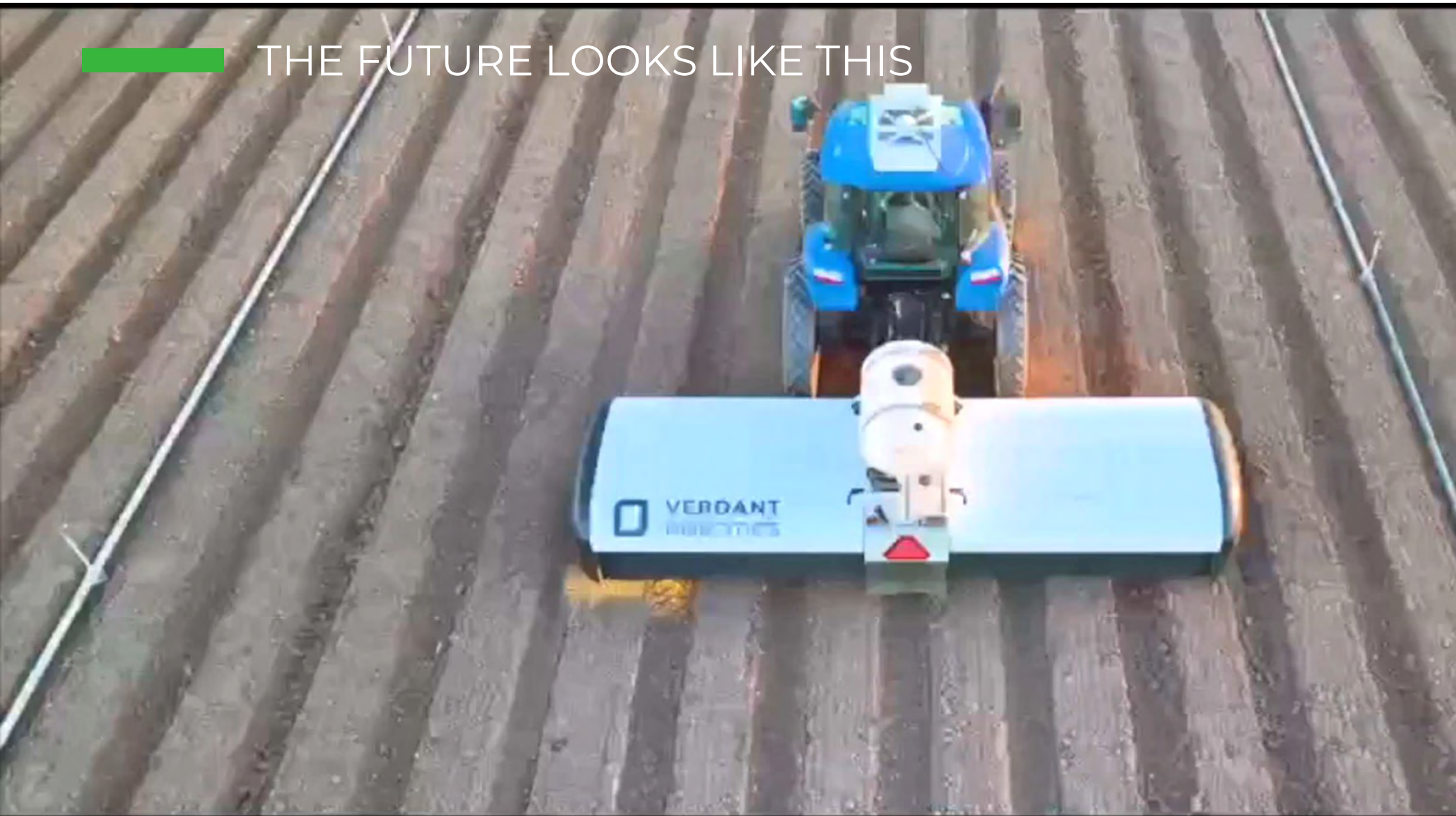# VERDANT ROBOTICS

EFFICIENT, FLEXIBLE, RELIABLE

THIS IS NOT WHAT THE FUTURE LOOKS LIKE

THE FUTURE LOOKS LIKE THIS

IT STARTS WITH PROCESS
IMPROVEMENT TODAY

Optimize the Cost and need for labor-intensive practices

Improve Profit Margins by Lowering Input Costs

Increase Productivity by Improving Production Efficiency and Resource Use

Quickly Adapt to Changing Conditions by Delivering a High Degree of Operational Flexibility
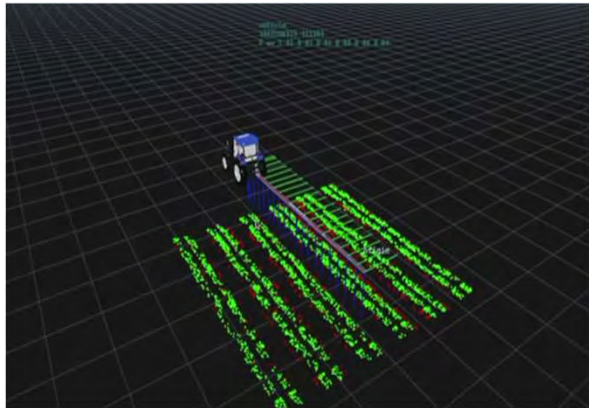
AND LEADS TO PROCESS

TRANSFORMATION TOMORROW

Maximize Yield from existing acres without increasing inputs

Improve Quality and Value of specialty crops

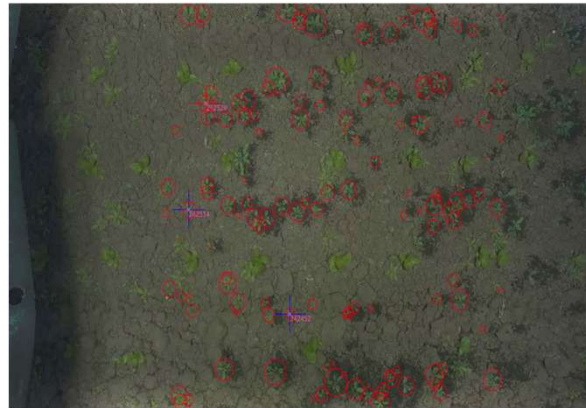**Easily Scale Regenerative Agriculture** practices

Applied Agronomics Engine that unlocks innovative use cases

How We Do It

INDEX

Utilize expert field leadership in localization and mapping, alongside computer vision and machine learning, to develop and sustain an accurate, sub-centimeter model of plant physiology over time.

ACT

Implement our patent-pending, ultra-precise spraying system for optimal input delivery. Achieve millimeter-resolution targeting to manage crop-load and cultivate larger, more lucrative fruit and vegetables.

LIKE MICROARRAY TECHNOLOGY...

... WE AUTOMATE DISCOVERY...

...BUT ACROSS ACRES AT THE MACRO-SCALE

DISCOVER

In collaboration with our farming partners, we discover innovative treatment and cultivation strategies that generate fresh revenue streams – our technology reveals value beyond the reach of manual labor.

Bullseye Technology Stack

A fusion of advanced Hardware and Software

DETECTION

State-of-the-art
Visual AI

Utilizing cutting-edge Visual AI, our advanced vision system delivers compressed depth images, and precise tracking of low-level features. This visual data stream empowers applications to make exceptionally **accurate decisions regarding spray locations and quantities**.

TRACKING

Spatial AI

The Spatial AI layer is a crucial link between sensing and action, utilizing advanced intelligence for precise plant classification and real-time motion estimation. This integration **sharply increases weeding accuracy**, ensuring precise targeting and spray efficiency.
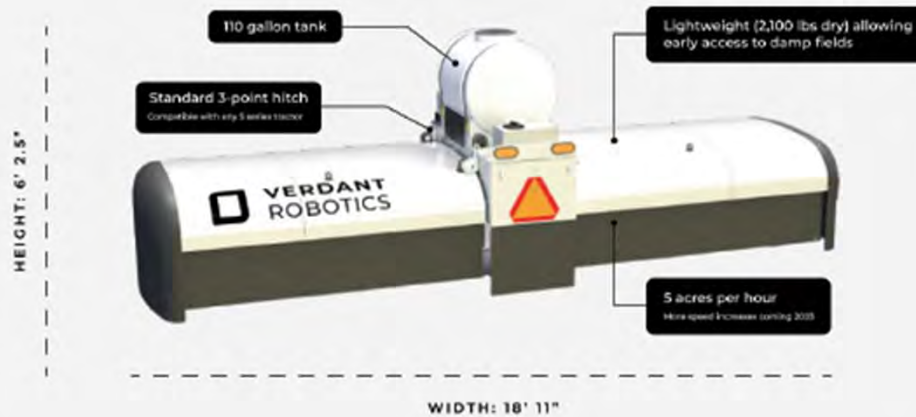
LIQUID DELIVERY

Precision Spraying
Turrets

Our innovative 2-axis turrets deliver precise and controlled spraying, **guaranteeing the accurate application of the right amount of liquid in the correct location**. Capable of delivery different sizes and types of spray (variable rate microliter application).
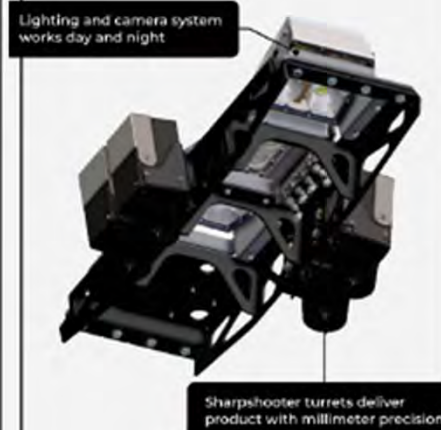
VERDANT ROBOTICS

The Sharpshooter

World Ag Expo
Top-10 New Product Winner
2024
International Agri-Center

Hardware Overview

MODEL B WORKING CONFIGURATION

HEIGHT: 6' 2.5"

- 110 gallon tank
- Standard 3-point hitch
  Compatible with any 5 series tractor
- Lightweight (2,100 lbs dry) allowing early access to damp fields
- 5 acres per hour
  More speed increase coming 2025

VERDANT ROBOTICS

WIDTH: 18' 11"

SPRAY BOX

- Lighting and camera system works day and night
- Sharpshooter turrets deliver product with millimeter precision

TRANSPORT CONFIGURATIONS

Designed to fit DOT size regulations on standard Gooseneck trailer

HEIGHT: 10' 2"

- Easy access for material loading and cleaning out the tank

WIDTH: 5' 8"
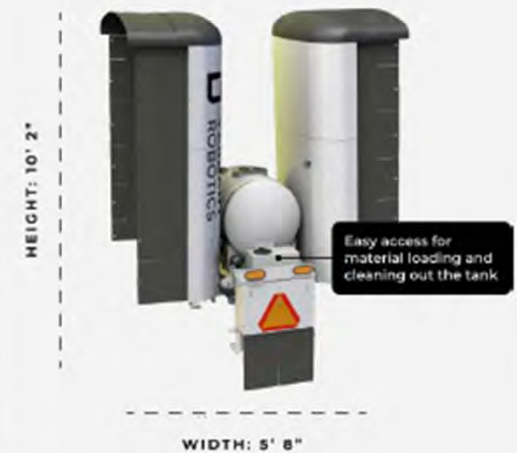
Designed for Ease of Use

Smart & Easy

Easy to Attach

Attaches to any tractor via the category two 3-point hitch and PTO.

Easy to Adjust

SprayBoxes can be moved, added or removed to fit your bed widths and planting configurations. Each SprayBox slides easily on mounted rails for quick adjustment.

Easy to Operate

The tablet-based user interface is intuitive and easy to use. All setup, testing and operational features are at your fingertips.
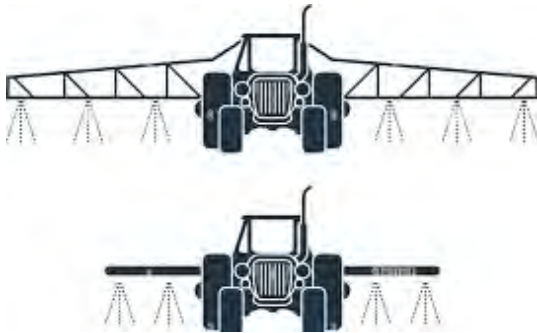

VERDANT ROBOTICS
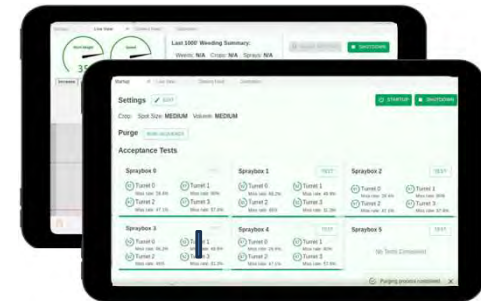
Easy to Acquire

Smart & Easy

Purchase

$550,000 + $75,000/yr Service & Technology Fee
*Financing available: Loans & Leases

Custom Service Providers

Machine will be available for hire from Custom Applicators

Split Ownership

You can co-own a unit with a counter season grower to low total cost of ownership

VERDANT ROBOTICS

The Sharpshooter

New Advanced Precision Suite	
Customizable Safety Buffer:	Set a customizable safety buffer around each crop, ensuring precise application of treatments while preventing accidental spray on the plants.
3D Crop Shield:	Creates a protective safety cone around each plant to avoid spraying through leaves, targeting weeds with accuracy while preserving the crop's integrity.
Plant-line Detection:	Uses advanced algorithms to predict the location of potential plants, enhancing the accuracy and confidence in targeting weeds and applying treatments.
Volumetric Fluid Control:	Adjust the fluid volume for each shot, reducing by 50% or increasing by up to 300%, with easy-to-use slider controls in the interface to tailor applications to field conditions.
Adaptive Spray Size:	Automatically adjusts the spray volume based on the size of the weed, ensuring efficient use of inputs and avoiding unnecessary waste.
Speed Optimizer:	Provides real-time feedback to the driver on optimal speed based on weed density, ensuring no weed is missed and maximizing machine productivity.
Targeted Banding:	Focuses precise shots on hard-to-reach areas where conventional tillage equipment can't operate, delivering targeted treatment exactly where it's needed most.
Crop-Specific Mode (Small/Large Crop Mode):	Specify the desired size range of crops to be sprayed, ensuring accurate application to crops of a specific size while avoiding smaller or larger plants.
Agronomic Performance Report:	Generate custom field reports based on machine performance, providing detailed insights into weed density, treatment coverage, and overall efficiency for each field.

VERDANT ROBOTICS

Millimeter-level Shot Accuracy

95% of the shots are within 5mm of the target

Different sizes and types of spray available (variable rate microliter application)
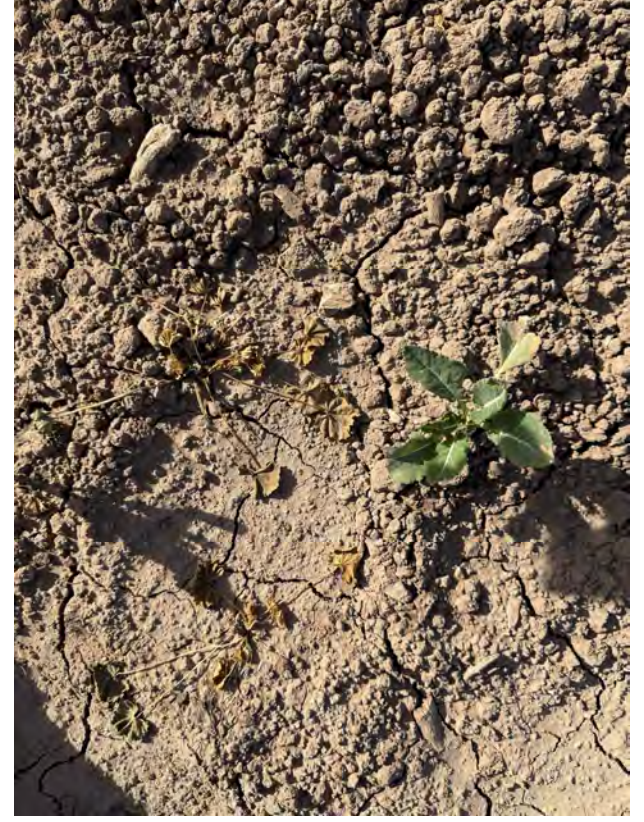

*Dime diameter is 17.91mm

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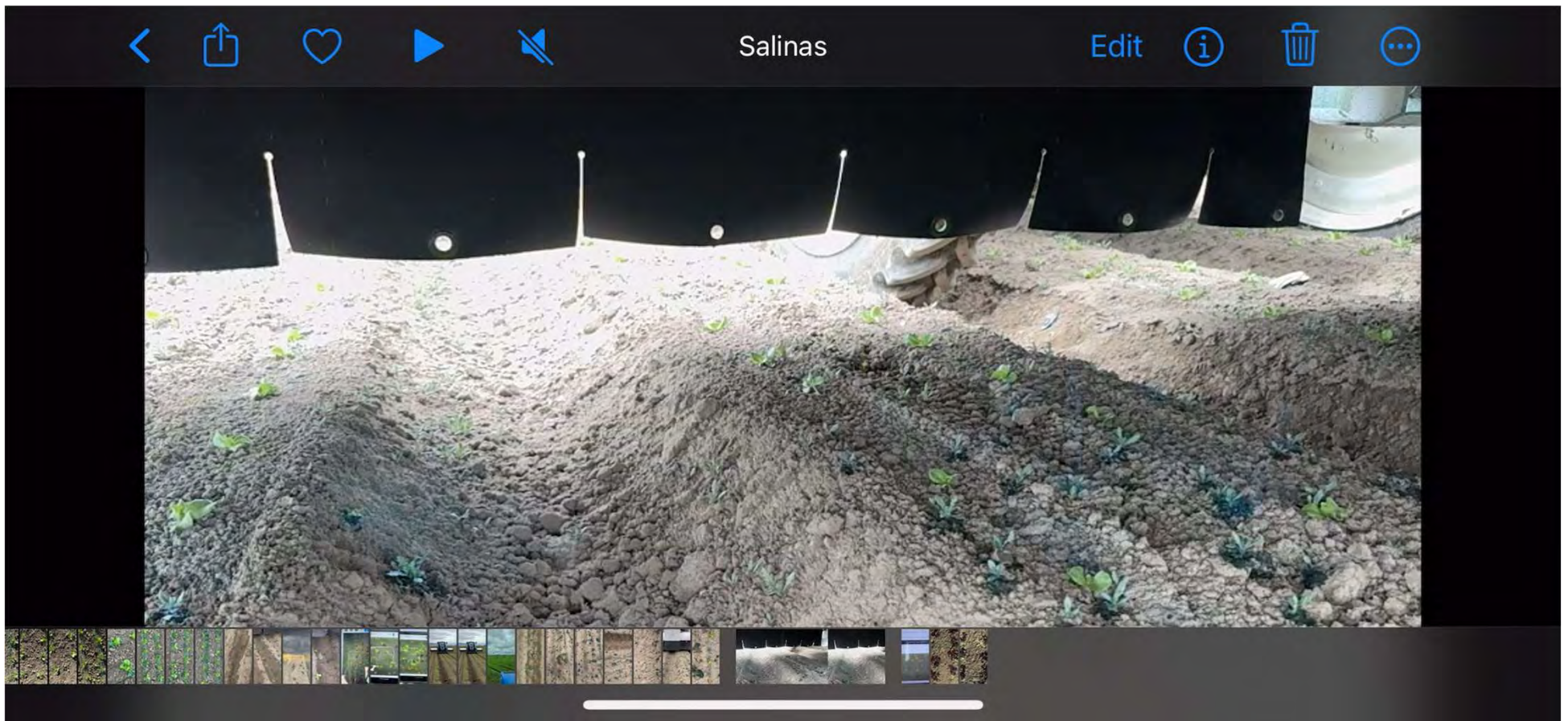
Continuous Excellence

3D Crop Safety Zone and Proactive Shot Angle

- 3D Crop Protection
- Size dependent spray
- Spray next to crop
- Spray under crop

VERDANT ROBOTICS

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Science Platform

Thank You