



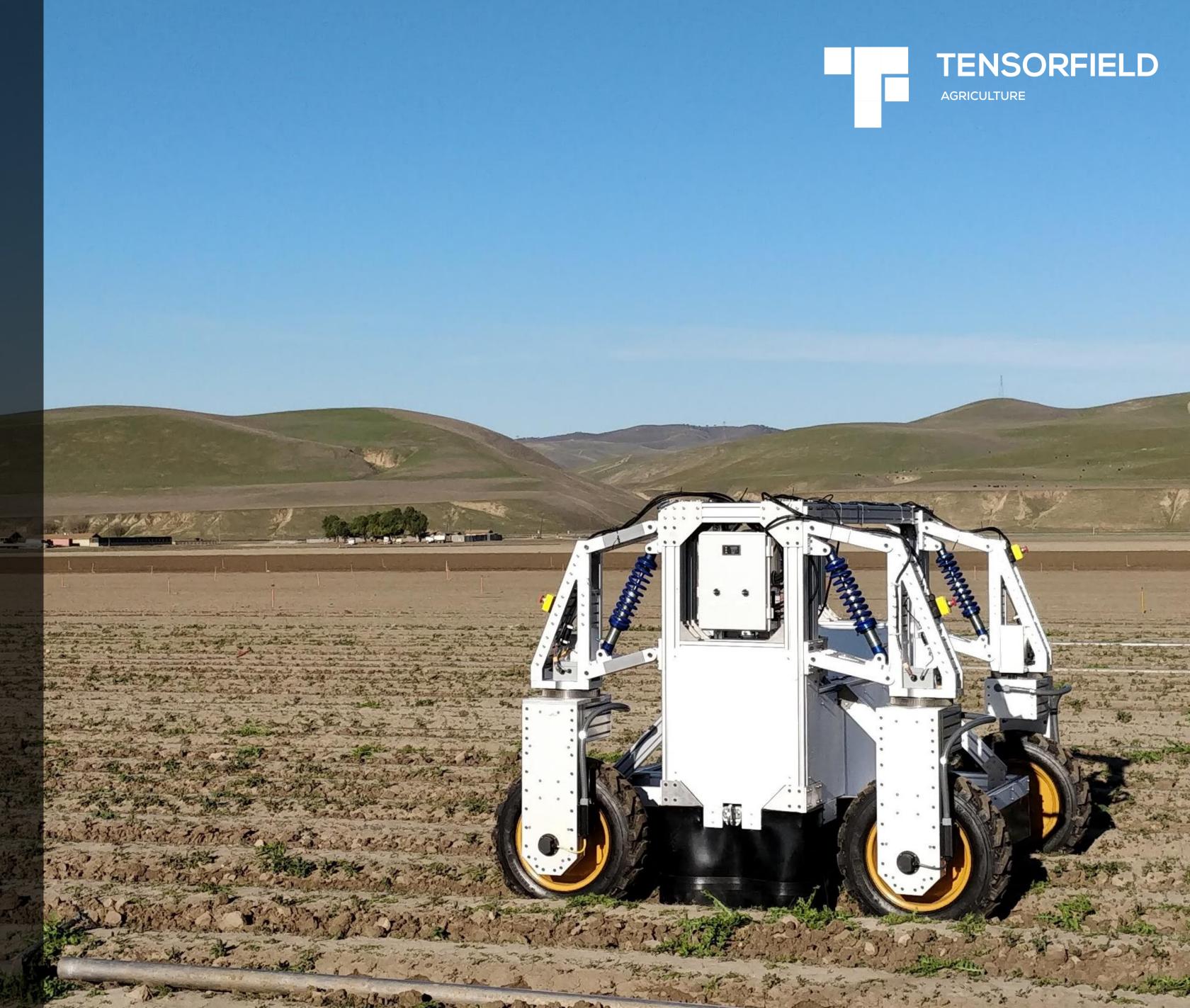
TensorBotV2



1x robot

40x crew

- Precision micro-spray robot
- Replaces hand-weeding
- Trials in California





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Mechatronics engineering

SFU

SIMON FRASER UNIVERSITY



Cheehan Weereratne

Computer vision & deep learning





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Biz dev & mech engineering

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Key Backers



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Founder & CEO
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Ash Patel
Founding Partner
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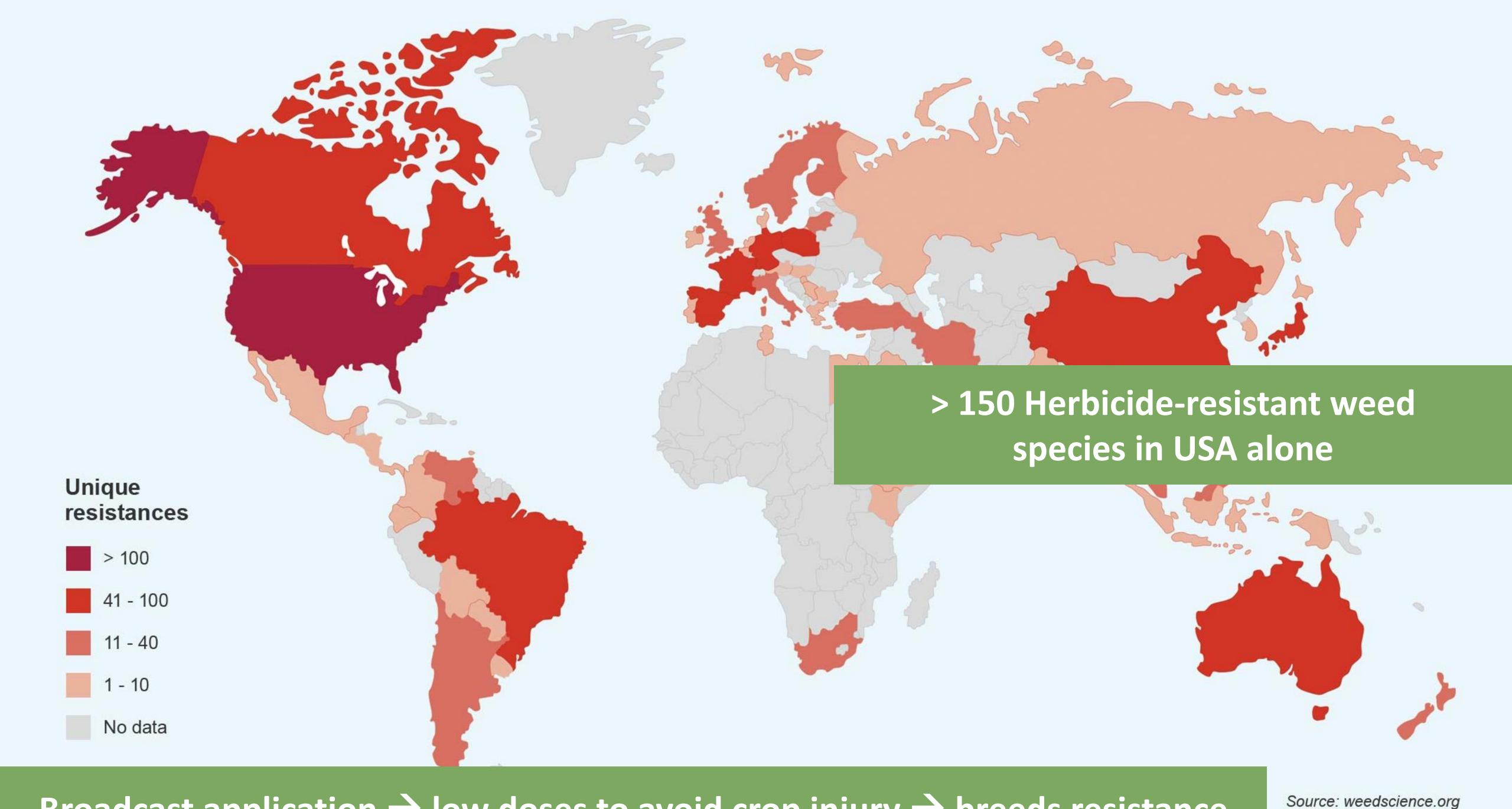
Tom Shields
Venture Partner
AgFunder

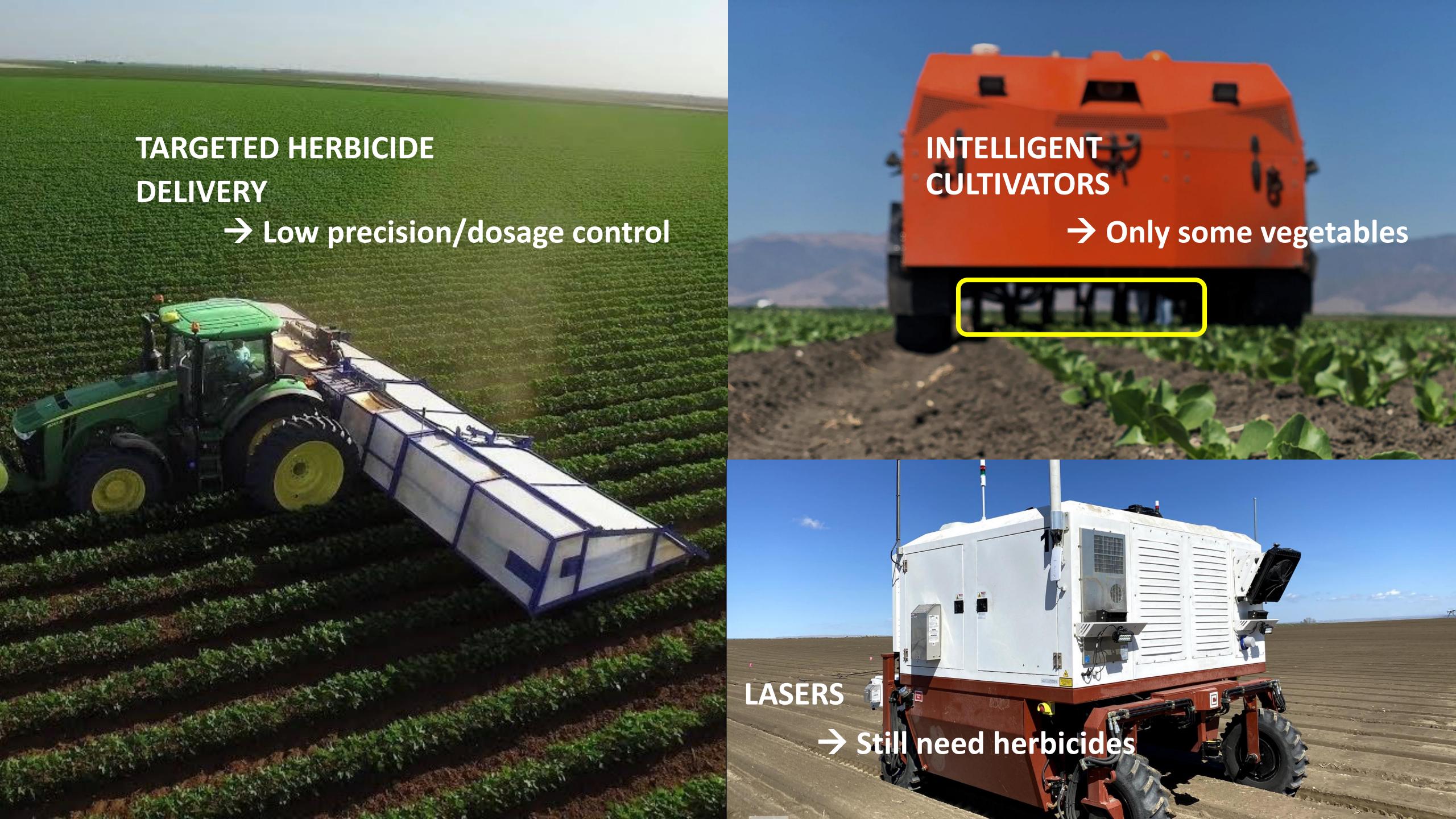


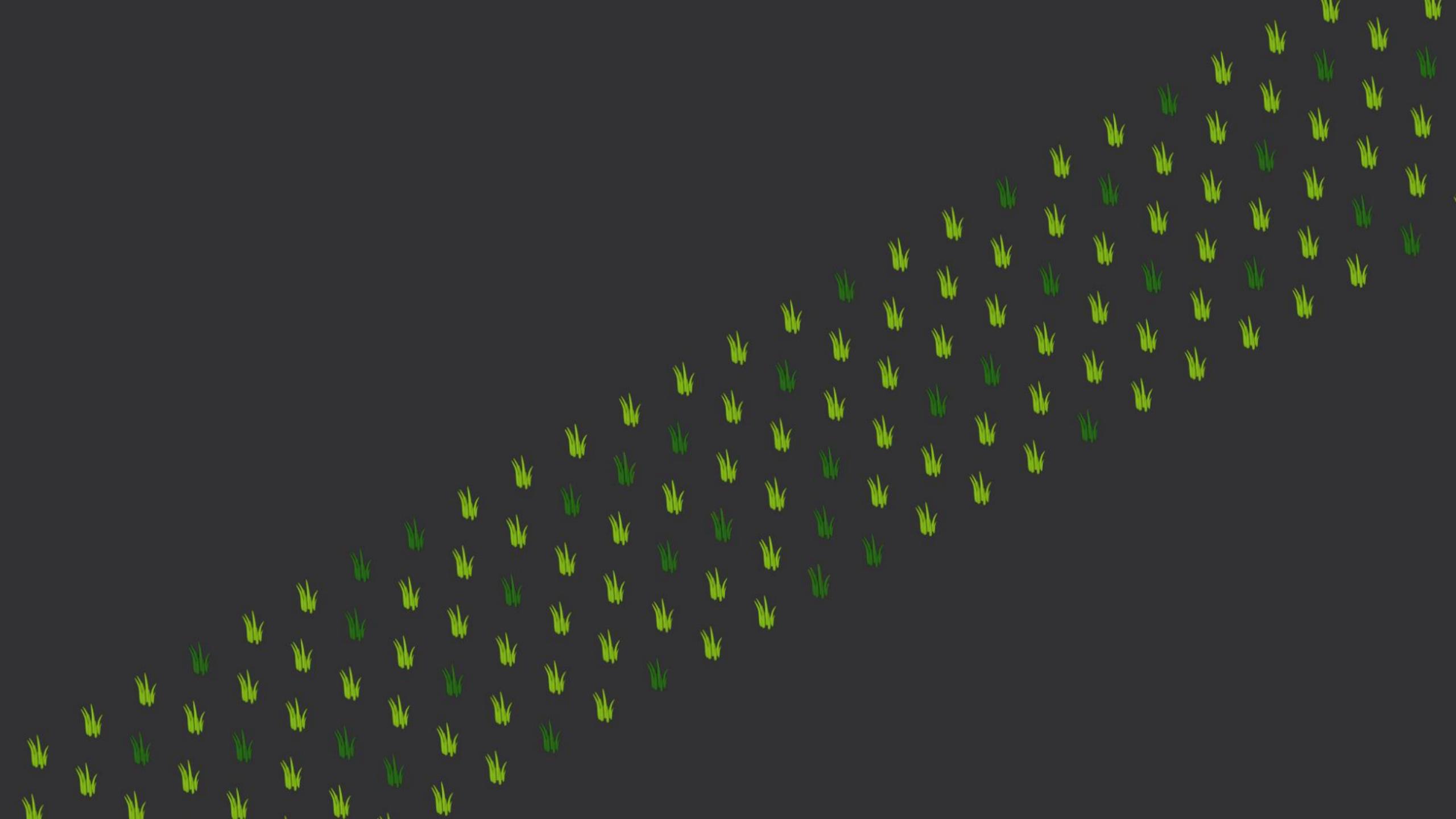






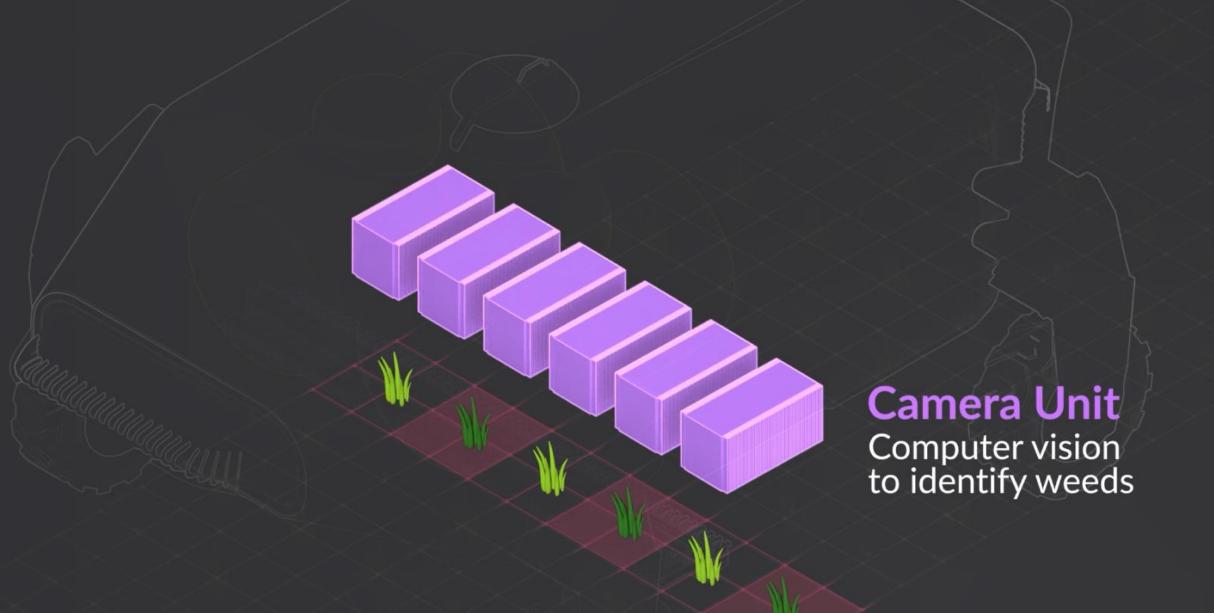


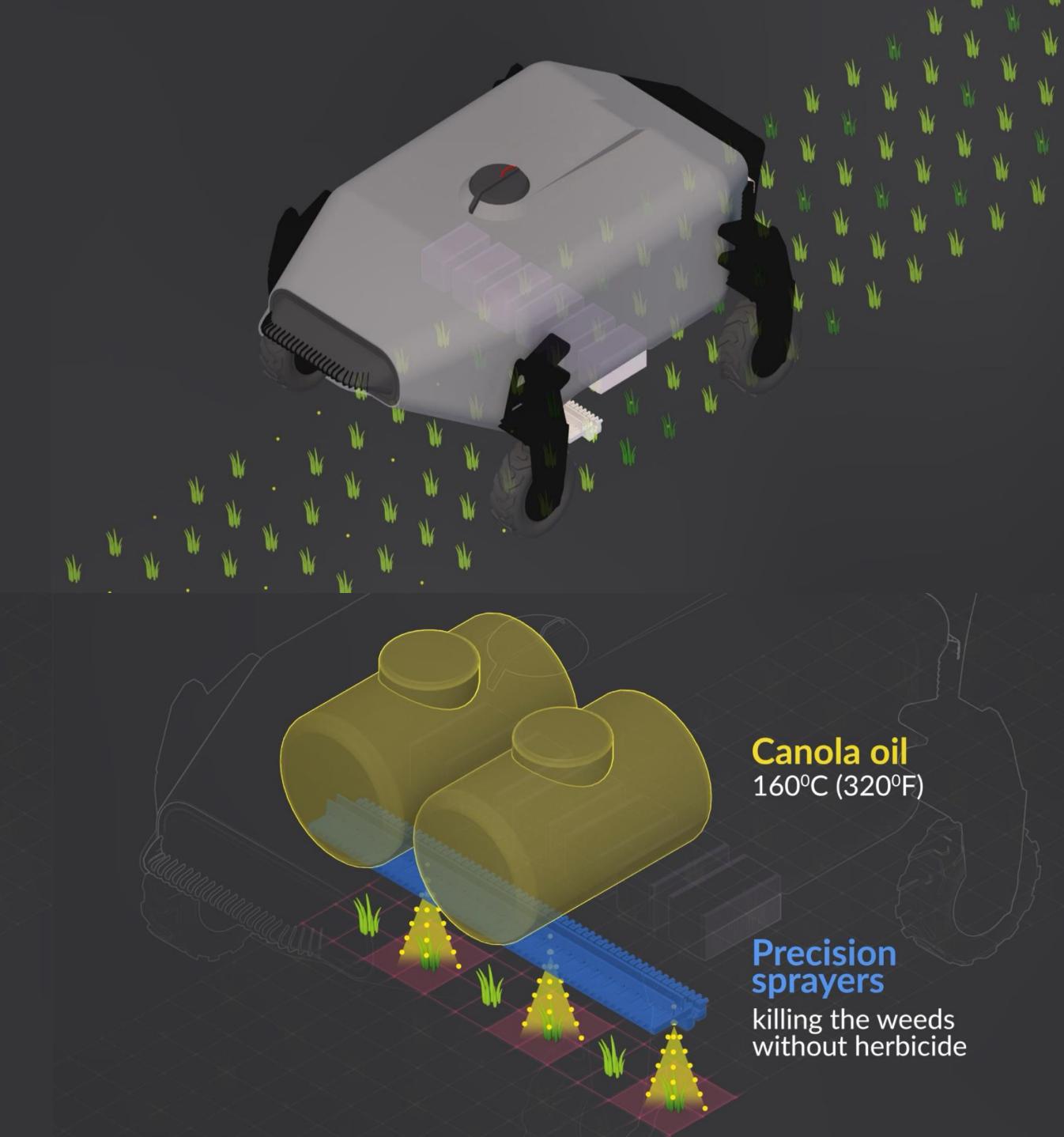






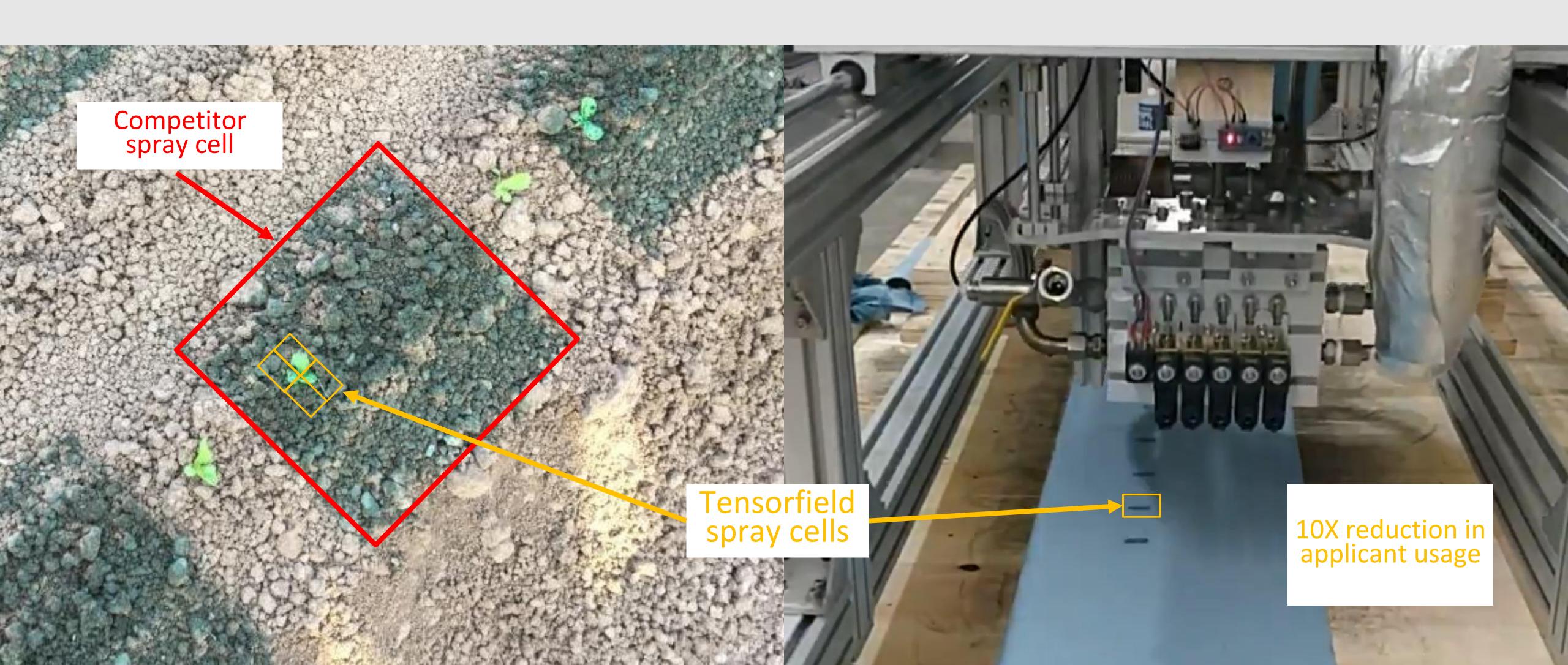
How It Works







Micro-Spray Demo





Thermal Pulsing

Canola oil heated to 160°C

Faster heating time & higher temperature than water

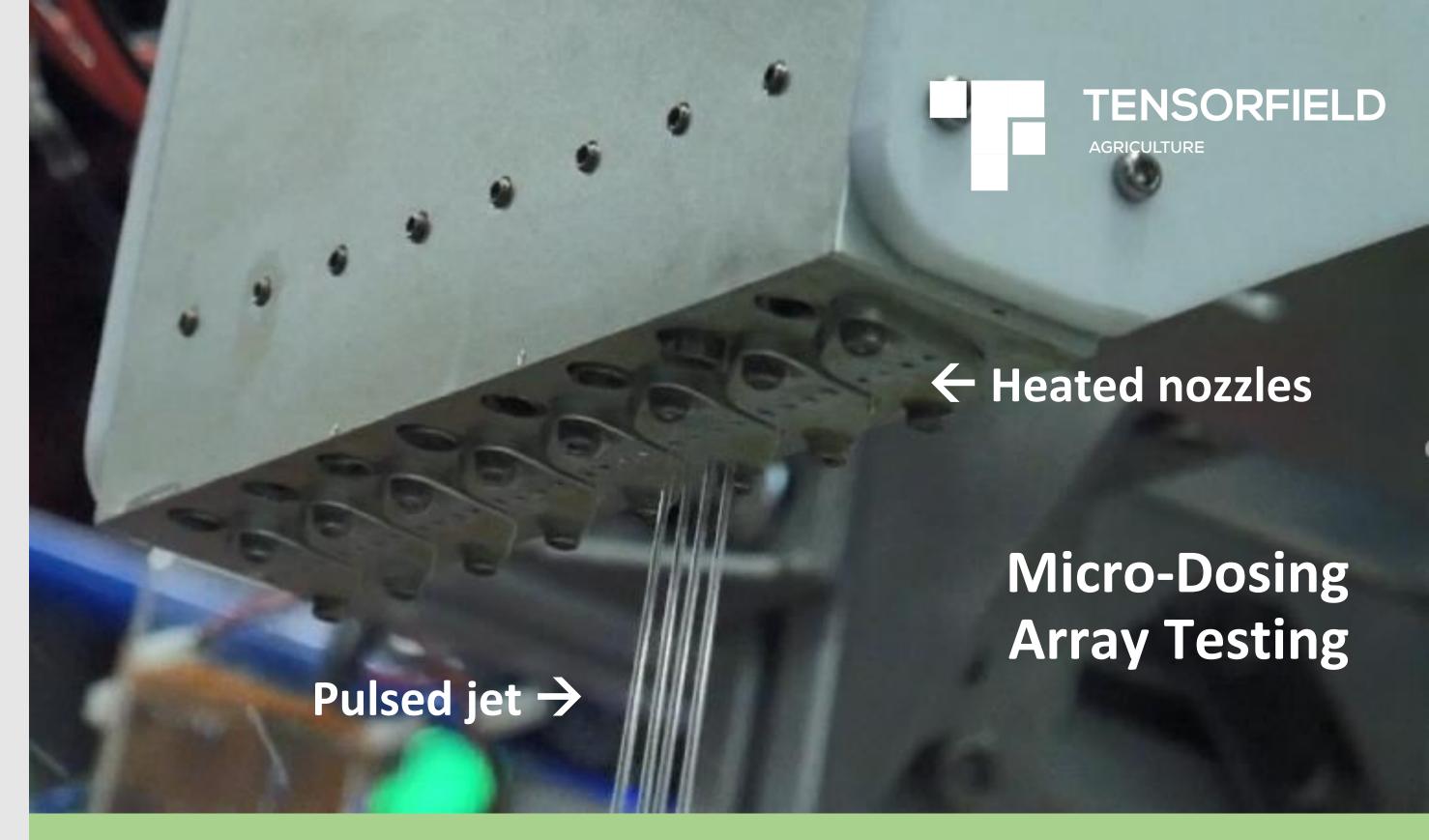
Excellent surface adhesion to plant tissues

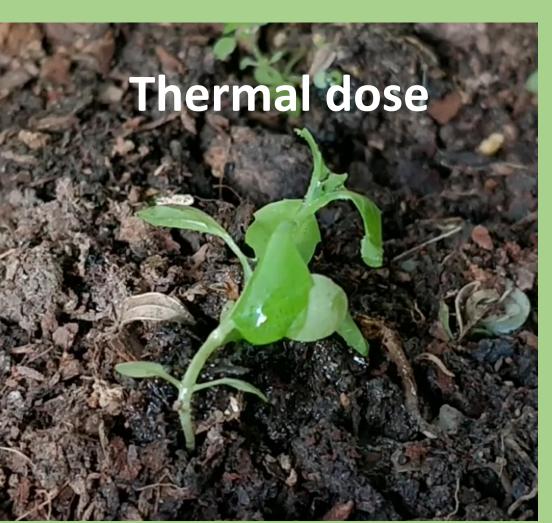
Organic-approved

Prior Testing

Successful trial in 2012 by UC Davis (Ken Giles & David Slaughter) & in 2017 by Bonn-Landtechnik

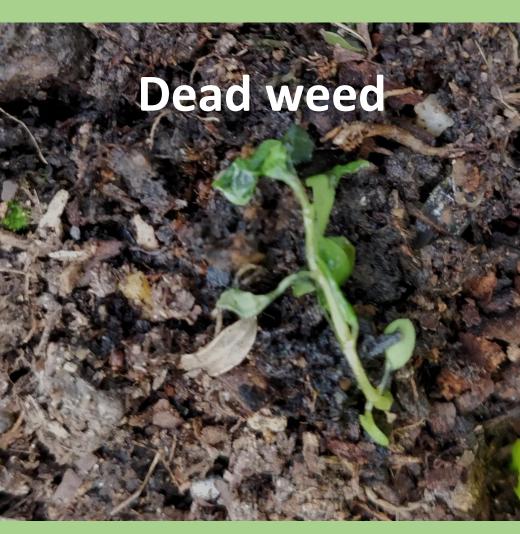
Rapid mineralization of oil within weeks (Institute of Soil Sciences of the University of Bonn)







1 hr



Thermal Weeding Demo

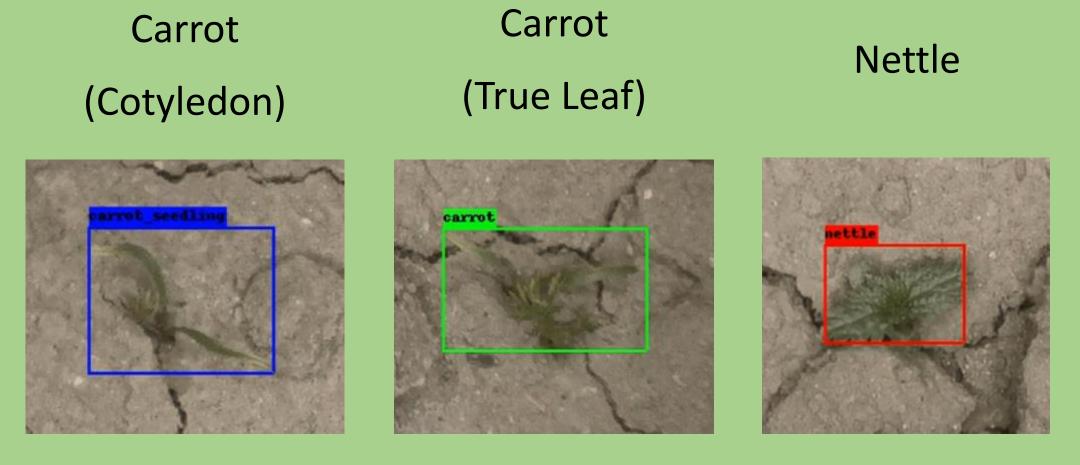


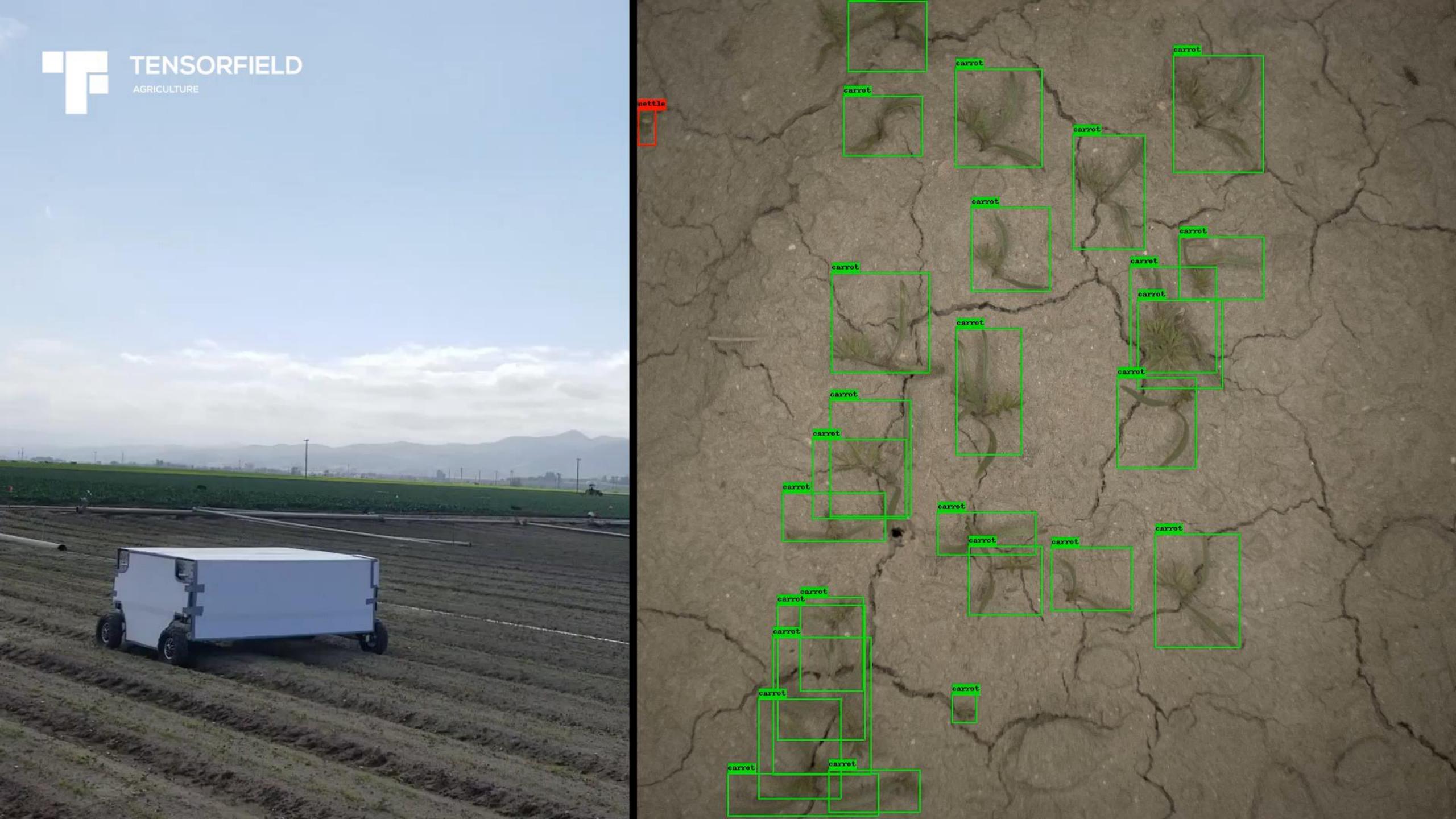


TENSORFIELD AGRICULTURE

Crop & Weed Detection Demo

- ← Footage from carrot farm Chualar Rincon 7/31/20. Link
- ← Analysis at individual plant level







Technology Comparison

Technology	Conventional Spot Spray	Intelligent Cultivators	Lasers / Concentrated Light	Electricides	Thermal Micro-Dosing
Competitors	Blue River, Ecorobotix	Steketee, FarmWise, Robovator	Carbon Robotics, Earth Rover	RootWave/Ubiqutek	Tensorfield
Advantages	Greatly reduces amount of herbicides used vs broadcast application	Effective for specific subset of specialty crop, planting configuration and soil conditions e.g. 6-seedline romaine	Herbicide-free weed control with very high spatial resolution	Herbicide-free approach suitable for burn-down applications	Very high throughput and spatial resolution for any weed density >200k weeds per hour Universal precision sprayer design applicable to any seedline configuration No herbicides or soil disturbance
Disadvantages	Collateral damage due to herbicide overspray in weeding applications Reliant on conventional modes of action Herbicide resistance and consumer engagement is forcing the adoption of non-chemical approaches	Poor spatial resolution: unsuitable for weeding densely grown vegetables Mechanical efficacy highly dependent on soil conditions – collateral damage inevitable Each machine must be mechanically reconfigured for different seedline patterns	Limited throughput of 100k weeds per hour Operator safety Fire risk	Unsuitable for high-resolution targeted applications	Greater power requirements than spot spray/IC approaches















Growing more with less

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