



SOLAR
ANDRESEN



CATERRA.CH & SOLAR-ANDRESEN.DE

AUTONOME LASERHACKE | FARMDROID | AGRAR ROBOTIK

catterra robotics



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Catterra
Laser
Weeder



 **SOLAR
ANDRESEN**



INTRODUCTION



1. SE-A: Solar Solutions, Robotics, Consulting

2. Our job at SE-A Agrarrobotik?

3. Cattera:

Who is Cattera

How does AI-Laser-Weeding work?



SE-A AGRO-ROBOTIC

- Since **2020** Service & Sales FD20
- **90+** FarmDroids
- **Crops:** leman balm, poppy seeds, chives, & the normal stuff: sugar beets, onions, beet root etc.

-
- 1x Laser **Weeder Cattera** since **2025**
 - „We test on our own fields!“
 - Distributor for Cattera

cattera
robotics



CATTERA
GRASSHOPPER 2025
CROPS: CARROTS
SIZE: 2 ROWS

CATERRA



- Caterra am Strickhof, Zürich
- 20 employees software/hardware
- 2025: 11 „Grasshopper“
- 2026: 9 „Honeybee“
- **2027**: up to **60** mashines
- Focus: carrots, onions, red beets and spinach



Scale the
fleet



24h robot
runtime



Diverse
crops

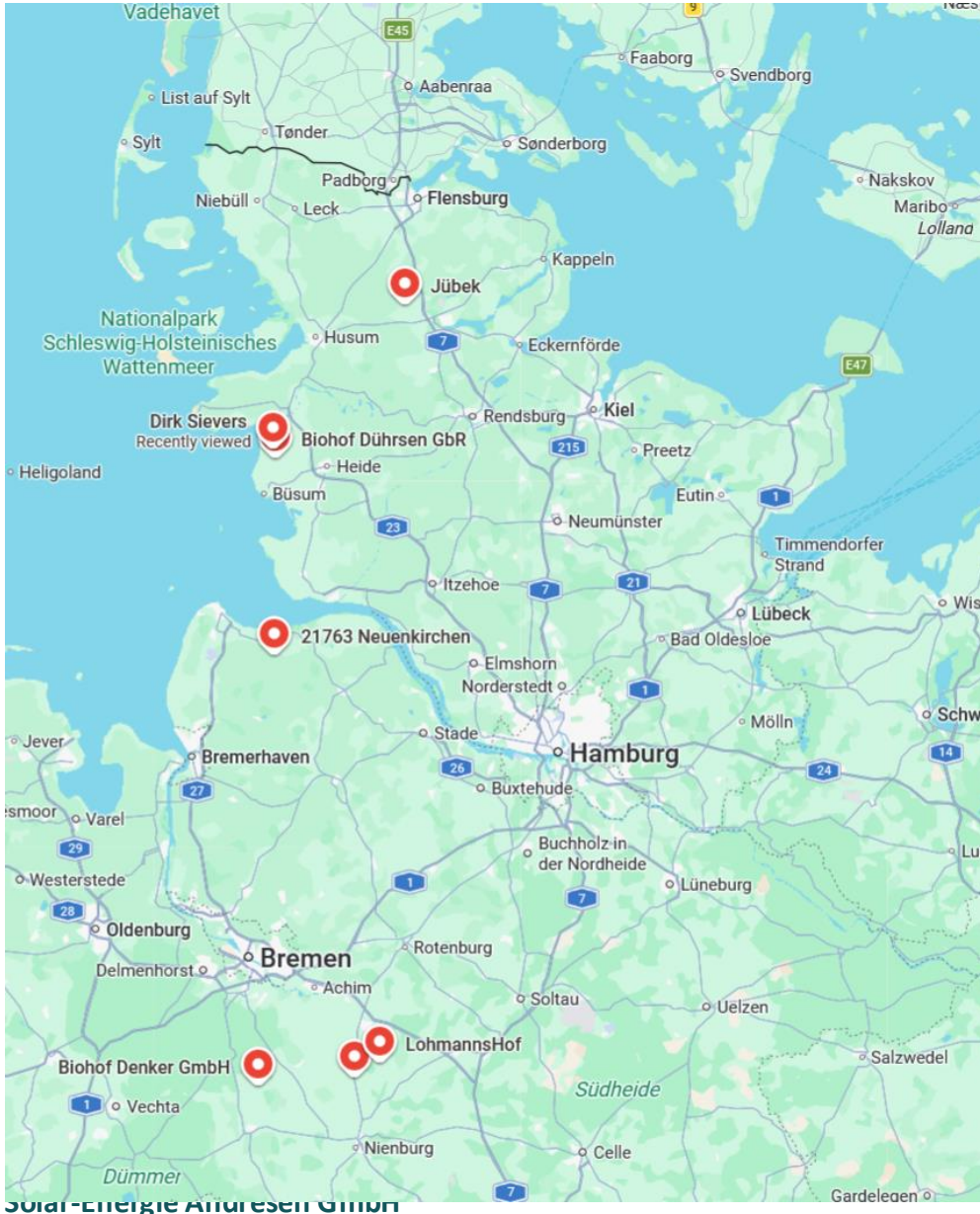
„HONEYBEE“ SPEC SHEET

HoneyBee“ Model 2026

- Work Width: 3 mtr
- Width: 1,50 to 2,0 mtr
- Capacity: 0,5 - 0,8 ha per day
- Laser: 160W at 450 nm
- Battery: 10x Packs (for 24h)
- 2 Batterie Sets
- 950 kg (in total)
- Laser Class 4 (curtains) required for safety



CATERRA JOBS IN GERMANY



„HONEYBEE“ ADVANTAGES:

- 8 customers: Carrots / Onions 2026
- Easy Transport HoneyBee
- Fast introduction to customer
- No tractor required
- Online check-up of the robot
- Daily summaries
- Swap Batteries once for 24h operation
- Service remote or local

VIDEO





laser45 (10) ⌵

Before

After

<

1/10

>

-

100%

+

Exit

targets: 14 ts: 2026-09-03T10:59:57+00:00 pair: 1788433182499_laser45 laser: laser45

📄



laser45 (10) ⌵

Before

After



1/10



100%



Exit

targets: 14 ts: 2026-09-03T10:59:57+00:00 pair: 1788433182499_laser45 laser: laser45



Layers

1



Report weeding issue

5



Record next N stops

WEEDING: TIMING IS IMPORTANT!



CATERRA SEQUENCE

1. **drive**
2. Lower hitch
3. image
4. plant detection
5. aim with Laser
6. laser
7. raise hitch
8. **drive**

big weeds

target

crop



ACCESS & CONTROL

Dashboard > Jät Jobs >

Test_1_28-10-2025_11:36 Inaktiv

Damm 150cm Karotte 2 Rows 3cm 92m

Fortschritt

1 / 3 Reihen

Feld anpassen Job abschließen

Reihen Heatmap Pfad

Karten Legende Reihen bearbeiten

Sprakebüllfeld

30 m

Grasshopper 10 Nicht zugewiesen

Statistiken Vorher & Nachher Ausfall Aufzeichnungen

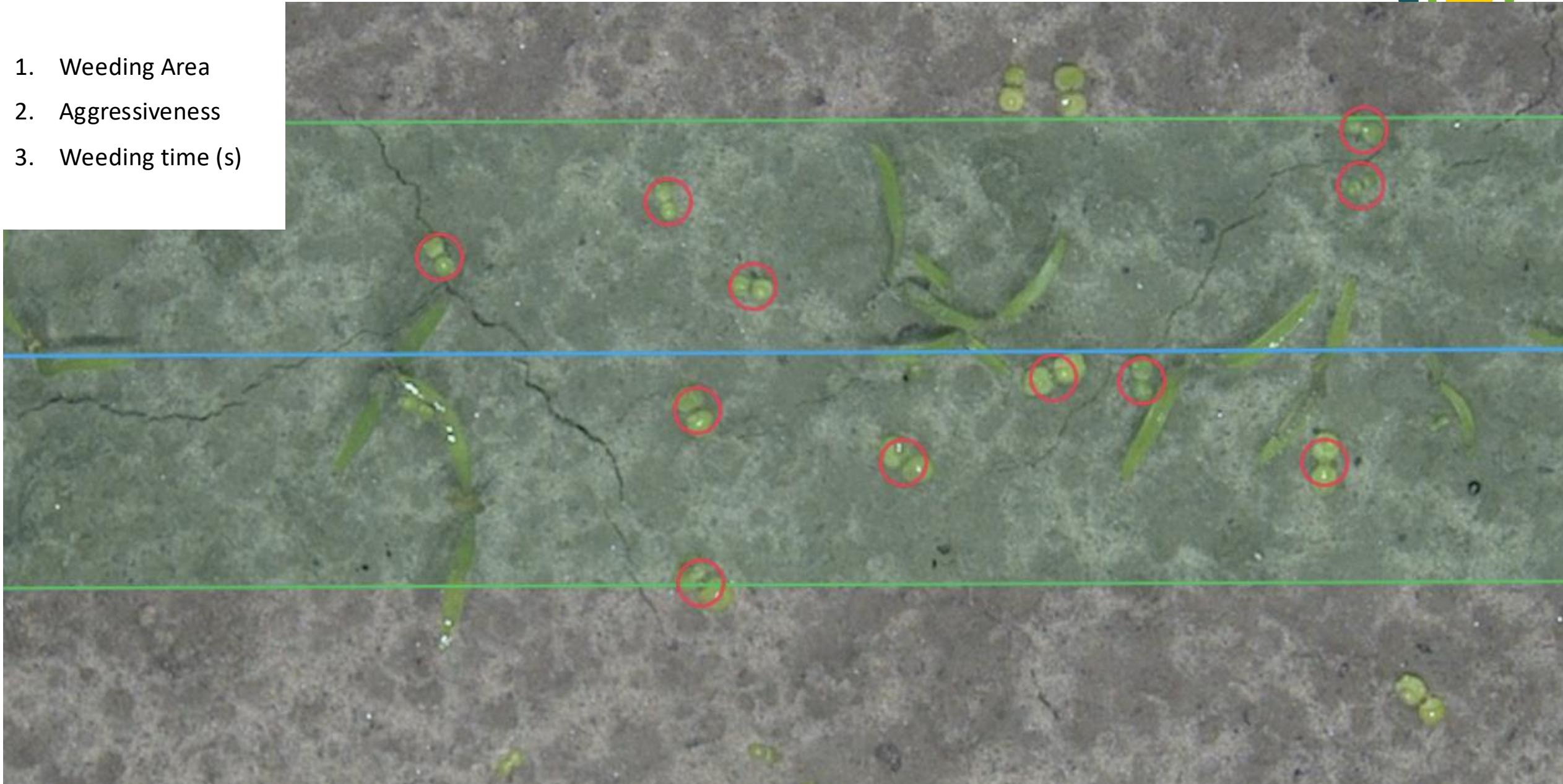
Verbindung	Reihenende-ETA	Autonomie
online	-	AUS
Batterie	Fahren	Aktivität
100%	INAKTIV	-



WEEDING: CROP LINE & TARGETING



1. Weeding Area
2. Aggressiveness
3. Weeding time (s)



Christiansens Biohof Rote Bete_18-08-2026_08:44

Completed

Progress · Christiansens Biohof Rote Bete

100%

4 / 4 rows

Dam 1.5m Beetroot 3m 1 8cm

Daily Metrics

Final Report



Honeybee 14

Unassigned

2

Recent Activity

Statistics

Before & After

Downtime Tracking

Autonomy

OFF

Connection

online

Battery

0%

Activity

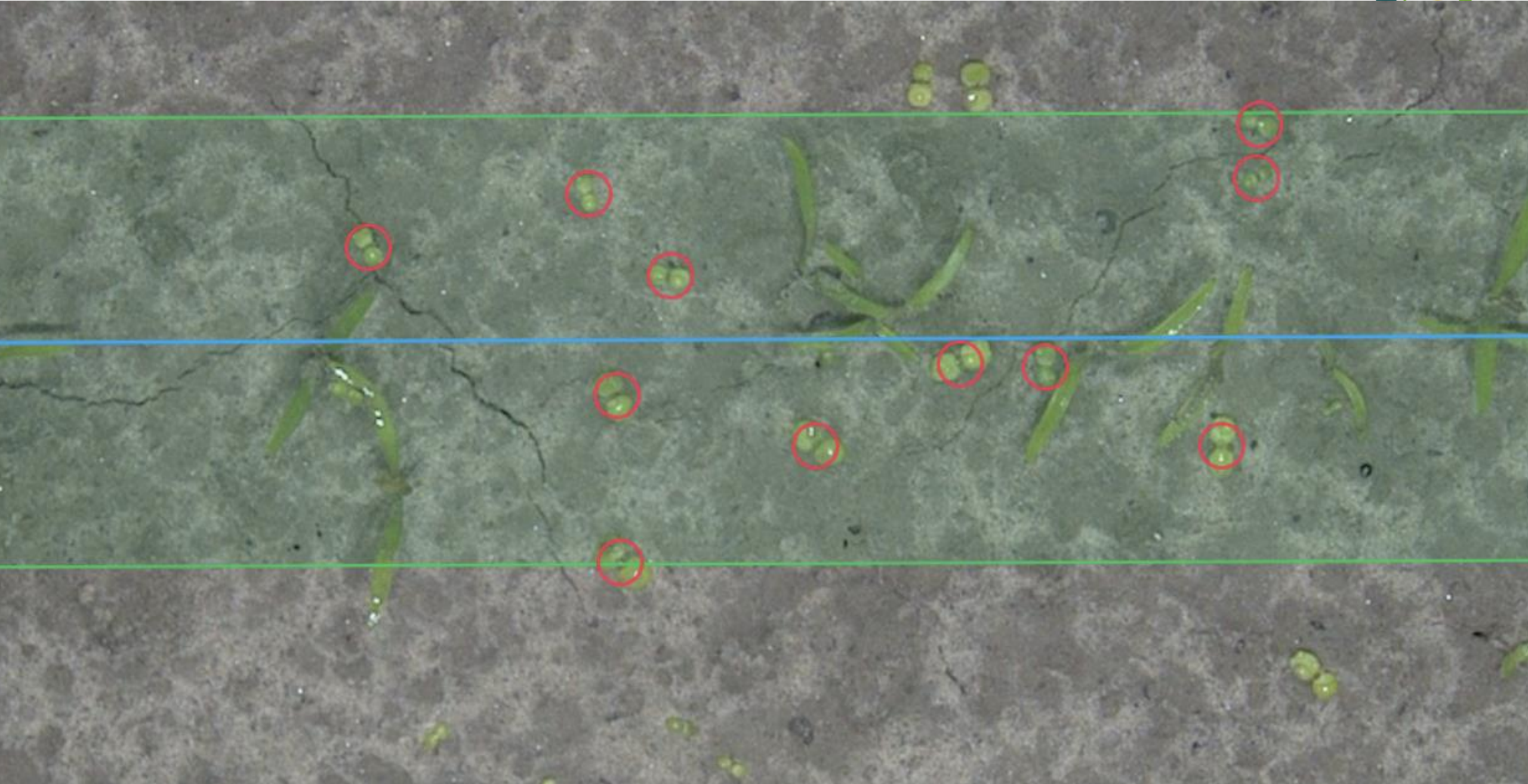
IDLE

Row End ETA

-



WEEDING BAND



CONTROL & REPORTING



targets: 50 ts: 2026-07-16T01:45:10+00:00 pair: 1784166264249_laser60 laser: laser60

Layers 1  Report weeding issue 5 Record next N stops





✦ KI-generierter Inhalt

TAK FOR BESØG!

SPØRGSMÅL?

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