EVA – Powered by Viscon

Ephemeralised Versatile Agrobotics

Greentech 2025
Innovation Prize sumbmission

VISCON GROUP

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EVA, Ephemeralised Versatile Agrobotics is a next-generation scouting robot for high-tech greenhouses, autonomously monitoring pests & diseases, reducing crop loss & pesticide use, for healthy crops.

Date of launch: 10-06-2025 (12 am) at Greentech
Embargo on any communication prior to that day.

Description of the EVA scouting robot

EVA is Viscon's latest innovation in agrobotics. This autonomous robot operates independently, requiring minimum human intervention for scheduling. It drives and positions itself in any high-tech greenhouse, detecting pests as small as 0.012 mm at 50 meters per minute. EVA provides daily dashboards and weekly reports on pest pressure, monitoring damage over time. Benefits include an increase in detection, 50% labor cost savings, 30% crop loss reduction, and 25% crop input savings.

The unique robot features and USP's are:

- Covers 4.5 to 4.8 hectors in 20 to 22 hours (Dependent on the greenhouse construction)
- Accurate detection of pests and diseases (+- 5 cm)
- Smallest size of the pest that can be detected 0.012 mm
- Drives at least 50 meters per minute
- Active obstacle detection: avoiding interruption of any human workflows
- Autonomous rail change
- Autonomous level 4: requiring additional infrastructure for global navigation (see matrix for a detailed definition)
- Day and night driving & detection
- Minimal down time is 2 hours for data transfer
- Swappable batteries/ charging time of 4 hours
- Trained AI and data models (in partnership with Fermata)
- Data collection of 2TB per 4.5 to 4.8 hectors
- Daily dashboards with 1 day old data
- Weekly reports with year-over-year insights
- (depending on growers, potential data history storage possible)

Crops for detection:

- Tomatoes (current)
- Peppers Q2 2026
- Future scope cucumbers and strawberries

List of issues (pest, diseases & damage) the robot can detect:

- Thrips damage
- Spider mites
- Cocoons
- Aphids
- Whiteflies
- Mechanical damage
- Mosaic
- Pest damage
- Powdery milde

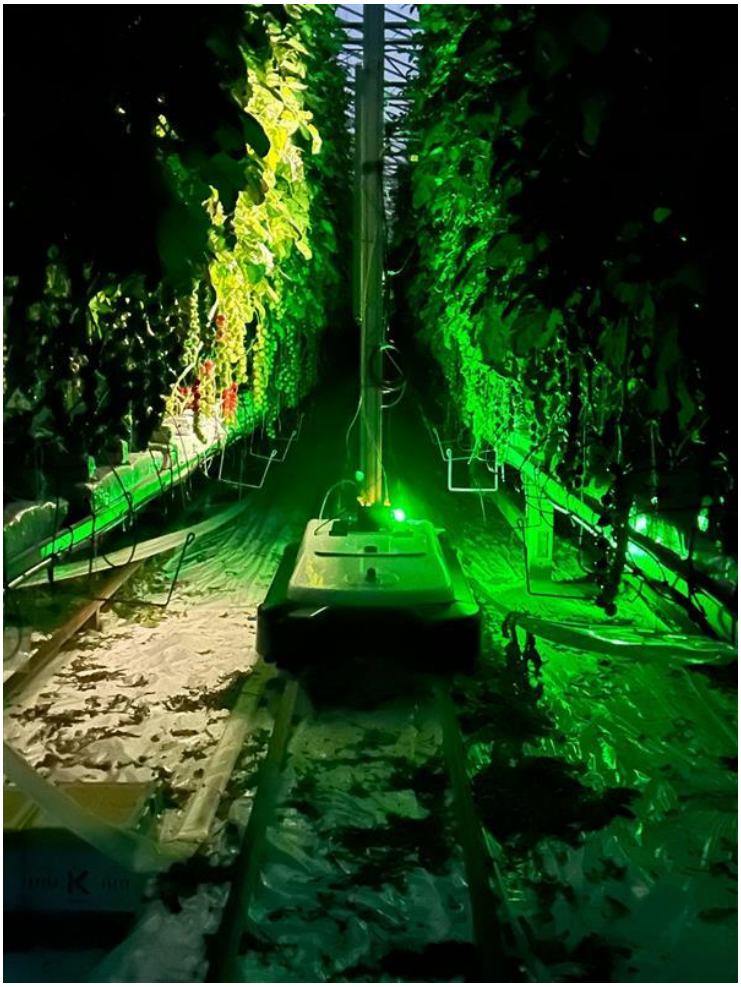
- Nuritent issue
- Mealybug
- Identification of sticky traps
- Bud rot
- Septoria
- ToBRFV
- Botrytis

Trading regions:
America & Europe

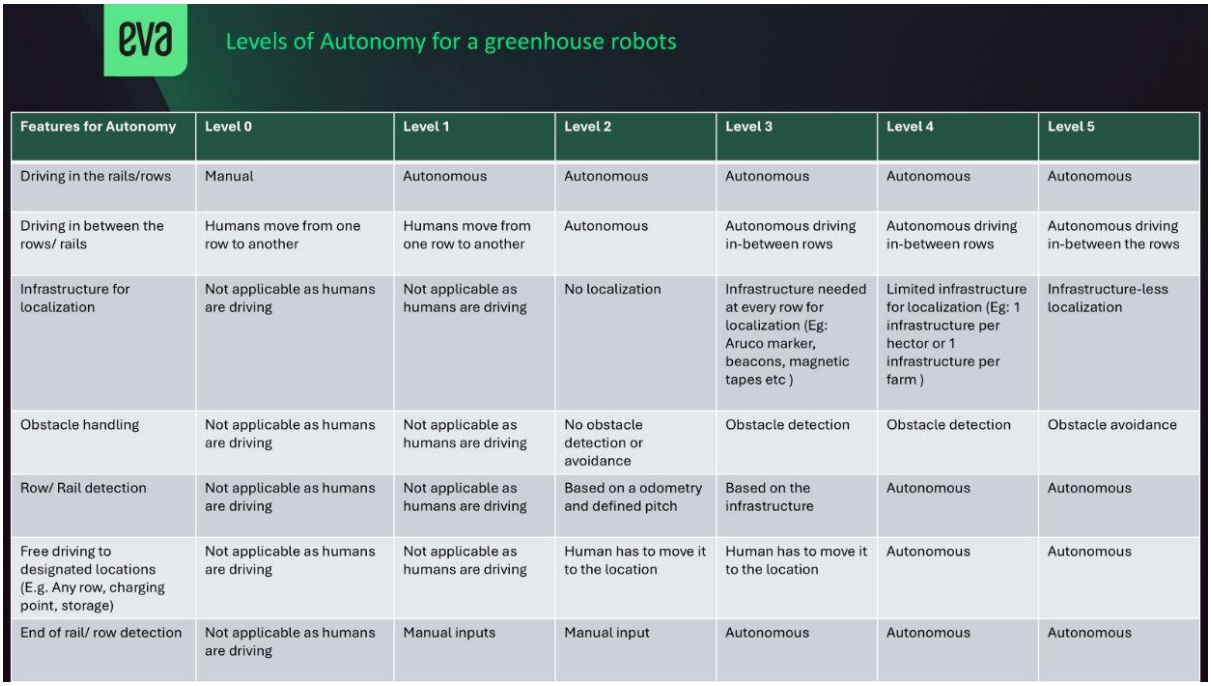
Product category:
Ai and robotics, Machines

Routes:
AI & Robotics

Visual:
EVA scouting robot at greenhouse location by night



Annex:
Autonomous definition



Levels of Autonomy for a greenhouse robots

Features for Autonomy	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
Driving in the rails/rows	Manual	Autonomous	Autonomous	Autonomous	Autonomous	Autonomous
Driving in between the rows/ rails	Humans move from one row to another	Humans move from one row to another	Autonomous	Autonomous driving in-between rows	Autonomous driving in-between rows	Autonomous driving in-between the rows
Infrastructure for localization	Not applicable as humans are driving	Not applicable as humans are driving	No localization	Infrastructure needed at every row for localization (Eg: Aruco marker, beacons, magnetic tapes etc)	Limited infrastructure for localization (Eg: 1 infrastructure per hector or 1 infrastructure per farm)	Infrastructure-less localization
Obstacle handling	Not applicable as humans are driving	Not applicable as humans are driving	No obstacle detection or avoidance	Obstacle detection	Obstacle detection	Obstacle avoidance
Row/ Rail detection	Not applicable as humans are driving	Not applicable as humans are driving	Based on a odometry and defined pitch	Based on the infrastructure	Autonomous	Autonomous
Free driving to designated locations (E.g. Any row, charging point, storage)	Not applicable as humans are driving	Not applicable as humans are driving	Human has to move it to the location	Human has to move it to the location	Autonomous	Autonomous
End of rail/ row detection	Not applicable as humans are driving	Manual inputs	Manual input	Autonomous	Autonomous	Autonomous

Note:
For any information regarding EVA or Viscon Group or the embargo date please contact Viscon Group :

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