ARA™

ecorobotix

ARA1200 · AI-Powered UHP Sprayer

Equipped with Plant-by-Plant AI™, ARA1200 Ultra-High Precision Sprayer applies crop protection products only where needed. It's the only smart sprayer that safely uses non-selective herbicides, reducing input and labor costs while boosting yield.



Product Flexibility

Plant-by-Plant AI™ offers the ability to apply non-selective herbicides with an adjustable safety zone.

Increased Yields

By leaving the crops untouched, our technology helps achieve healthier and more abundant crops.

Boost Your Bottom Line

Reduce crop protection use by up to 95% and save on manual labor costs.

Fast ROI on your Investment

See returns in just 2 to 4 years, depending on farm size.

A Revolution in Precision Agriculture

With a working width of 12.00 meters and a driving speed of up to 7.2 km/h, ARA1200, the Ultra-High Precision Sprayer can cover up to 8 hectares per hour.



Increased Spraying Efficiency

ARA™ achieves a 6 × 6 cm spot spray. This precision allows you to come closer to the crop and hit more weeds, even between the crops, without harming them.

ARA 6 × 6 cm spray pixel in real size

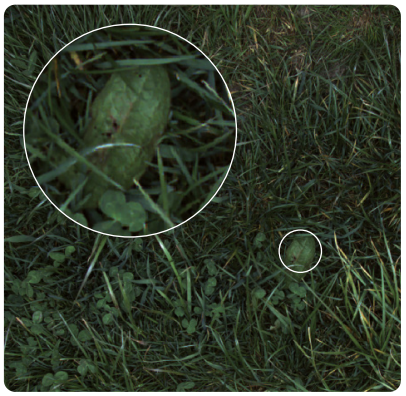
Minimal Recognition Size



Weeds (Mono & Dicots)
≥ 2 mm



Crop
≥ 2 cm

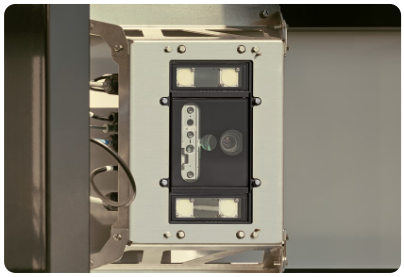


Dock | Thistle
≥ 5 cm

Plant-by-Plant AI™ Technology

Plant-by-Plant AI™

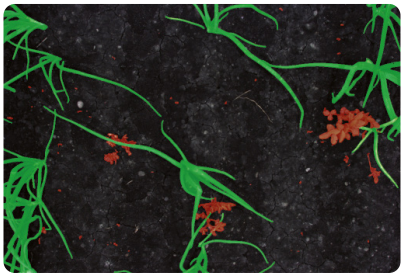
1. Sense



Vision Box

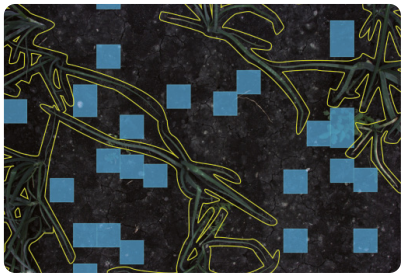
Plant-by-Plant AI™ combines AI and six advanced camera modules, with 3D and RGB cameras ensuring a uniform image for instant data analysis.

2. Decide



Plant-by-Plant AI™ analyzes every pixel to distinguish crops from weeds with accuracy, ensuring each spray targets only what's necessary.

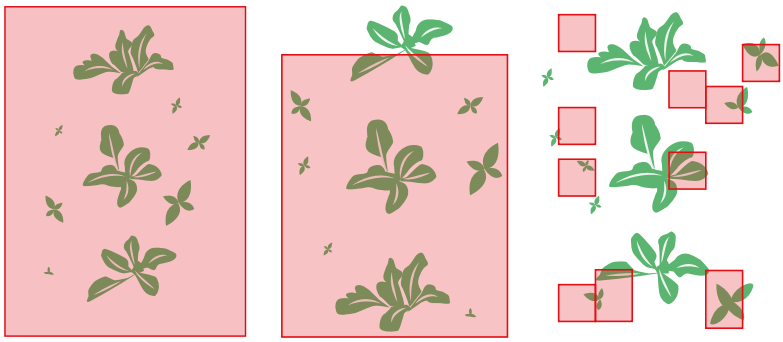
3. Act



Crop · Target weed · Treated area · Safety zone

With protective zones, Plant-by-Plant AI™ enables safe use of non-selective products, maximizing weed control, minimizing crop stress, and boosting yield.

Existing Spraying Methods with Crop Presence



	Broadcast Sprayers	Smart Sprayers	Spot Sprayers	ARA1200
Precision	No	Low	High	Ultra-High
Reduction of phytotoxicity	No	No	Low	High
Non-selective herbicides	No	No	No	Yes, possible

ARA, the Ultra-High Precision Sprayer sets the benchmark for precision: plant by plant treatment only where it's needed. The result? Unmatched performance with drastically reduced product use and costs, while maximizing yield.

Ecorobotix Crop Algorithms

Precise spraying of herbicides, fungicides, insecticides, biostimulants, and liquid fertilizers in row crops, vegetables, grasslands, and turf, for monocots and dicots.

Specialty Crops


Onion


Carrot


Lettuce
Thinning


Broccoli
Thinning


Cauliflower
Thinning


Green and red head cabbage


String bean


Spinach


Chicory

Target Weeds


Dock


Thistle


Turf


Volunteer potato


Monocot/
Dicot weeding

Other Application Modes


All plants


Target size

Broadacre Crops


Sugar beet


Rapeseed (Canola)


Corn

Upcoming


Dock and Thistle


Leek


Garlic


Red beet


Sweetcorn


Celery/
Celeriac


Processing tomato


Ragwort


Escarole


Radish


Potato


Cotton


Wheat (Dicot)


Soy


Lines detection

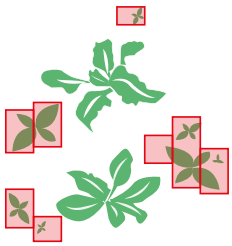
Our upcoming algorithms are in the final stages of development and available for free trial during this period.

Crop Care Procedures

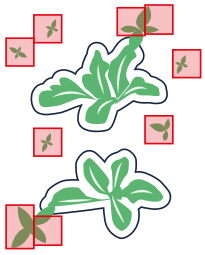


Angus HILL
Agronomist and Farm Support Consultant
We have done over 1750 ha of onions with ARA with savings up to 96% on raw chemical input. Due to reduced phytotoxic crop impact, we would expect yield benefits of at least 10-15%.

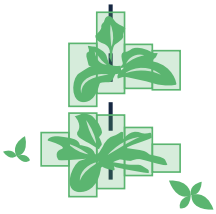
Crop-Specific Modes



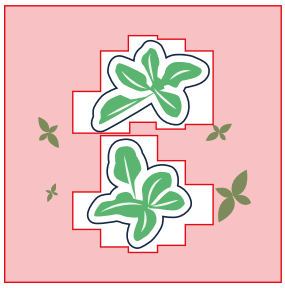
Application of selective herbicides **on weeds even close to crops.**



Application of non-selective herbicides **with an adjustable safety zone.**



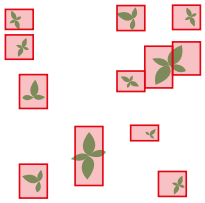
Application of fungicides, insecticides, fertilizers and biostimulants **on the crop only.**



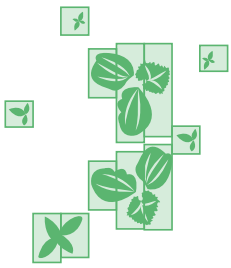
Spray all but crop **with an adjustable safety zone.**

Universal Functions (Non Crop Specific)

Function All-Plants

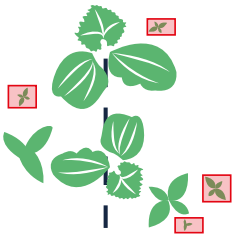


For preplanting: herbicide application.

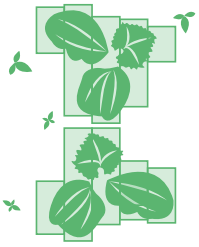


Application of fungicides, insecticides, fertilizers and biostimulants **on all-plants.**

All-Plants Combined with Target Size



Size-based **herbicide** application.



Size-based application of **fungicides, insecticides, fertilizers and biostimulants.**

Thinning Algorithm

Application to remove excess plants and ensure ideal spacing and density.

Thinning under normal conditions



Thinning with multiple plant management (removing overlapping plants)





Engineered for Versatility, Built for Reliability

Day or night, ARA1200 keeps your beds spotless, tackling weeds with a 12.00 meters working width.

A close to ground-level application and protective covers reduce spray drift, making ARA usable even in moderate winds within legal limits of your region.

DENNIS GROSSHANS
Vegetable Grower, Gemüsebau Grosshans
With ARA, we've been able to skip one or two broadcast herbicide applications and treat weeds precisely instead, reducing crop stress and improving field uniformity.

Simulated product for illustration purposes. Final product may vary.

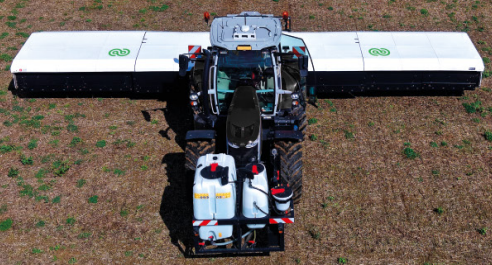


Just plug-in and go!

ARA, the Ultra-High Precision Sprayer attaches to your tractor and is controlled in a few clicks via tablet. Select the crop and treatment, and ARA adjusts all settings automatically for speed and turns, with dose control ensuring stable spray concentration.

All-in-One Cloud Platform

Take full control of your crop management with our cloud platform for UHP Technology. Real-time data, maps, planning, and fast support, all in one place.



As-Applied Maps with RTK GPS Technology

Higher positioning accuracy for detailed as-applied maps. Ideal for providing full traceability for regulatory compliance, subsidy applications and precise invoicing data for contractors.

Simulated product for illustration purposes. Final product may vary.

Technical Data

Technical Name	ARA1200 S G2 UHP Sprayer
Sprayer Dimensions Length × Width × Height	Transport mode (closed): 3.55 m × 2.45 m × 3.50 m Working mode (opened): 3.75 m × 12.40 m × 1.50 m Wheel spacing: adjustable from 1.5 to 2.25 m*
Spray Working Width	Adjustable up to 12.0 m
Spray Boom	288 high-precision spray nozzles spaced 4 cm apart
Weight Sprayer	2,300 kg
Weight Front Tank (TS1500)	750 kg (empty)
Front Tank Volume (TS1500)	1,500 l total 400 l clean water 1,100 l mixture
Induction Hopper	The front tank is equipped with a 15 l induction hopper by default
Top Towing Speed	Up to 7.2 km/h
Tractor Connections	Front Hydraulic: 30 l/min Rear Hydraulic: Load-Sensing, min. 20 l/min PTO: 3 kW max. (4 hp) of energy required Rear Linkage: Cat III
Area Output	Up to 8 hectares/hour, day and night
Efficiency	Up to 95% saving on plant protection products (depending on weed density)
Control and Configuration	Via the Ecorobotix UI App on a wireless tablet
RTK GPS	Improved machine positioning with a precision up to +/- 3 cm

*Optional extension wheel kit for track widths up to 3 m

Specifications for information purposes only, subject to change without prior notice.



Simulated product for illustration purposes. Final product may vary.

New Tank Systems

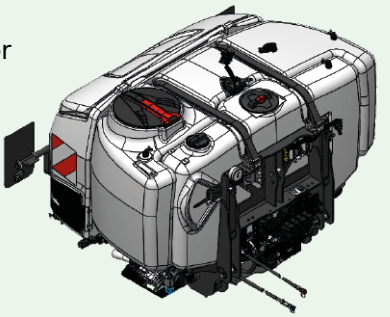
Spray with fewer stops thanks to a tank built for real field conditions. Rinsing is quick and automatic, while smarter handling keeps operators safe.

Greater Autonomy. Higher Productivity.

Up to 3 hours of spraying autonomy and three tank capacities reduce refill stops and maximise productivity.

Fast Filling. Safe Handling.

An integrated induction hopper speeds up mixing and reduces operator exposure, with optional CTS for added safety and compliance.

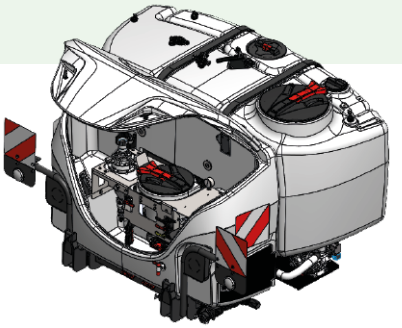


Automated Cleaning. Reliable Performance.

Tablet-controlled continuous rinsing ensures fast, consistent cleaning, reducing residues and clogging risks.

Smart Water Management.

Fill from an external water source and automatically transfer the exact amount needed, simplifying logistics and reducing transport trips.



Three Tank Sizes to Match Your Needs

The new tank will be available in three capacities to match your autonomy requirements. All versions include 400 l of water (200 l for rinse water and 200 l for further in field preparation), while the spray mixture capacity adapts to the needs of your farm.

UPCOMING 2028

TS900
900 liters
500 l mixture + 400 l water

UPCOMING 2028

TS1200
1200 liters
800 l mixture + 400 l water

UPCOMING 2027

TS1500
1500 liters
1100 l mixture + 400 l water

Ecorobotix SA
CEI3
Rue Galilée 6
1400 Yverdon-les-Bains
Switzerland

Certified B Corporation

SOLAR IMPULSE EFFICIENT SOLUTION SEPTEMBER 2024

A local distributor is likely closer than you think.

Get in touch to learn more!

ecorobotix.com/contact-us/

V2026-09-02 15:01 ENG © 2026 Ecorobotix. All rights reserved.
This information is supplied without any guarantees and can change without prior notification.