



ARA™ 620 - AI-Powered UHP Sprayer

Equipped with Plant-by-Plant™ AI, ARA™ 620 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 6.20 meters and a driving speed of up to 7.2 km/h, ARA™ 620, the Ultra-High Precision Sprayer can cover up to 4 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

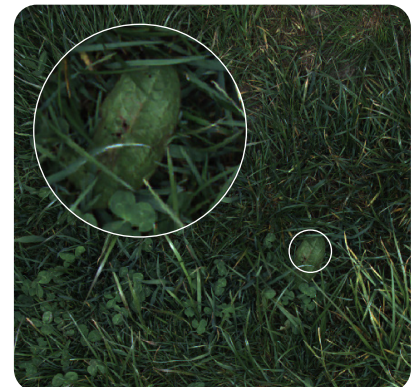
Minimal Recognition Size



Weeds (Mono & Dicots)
≥ 2 mm



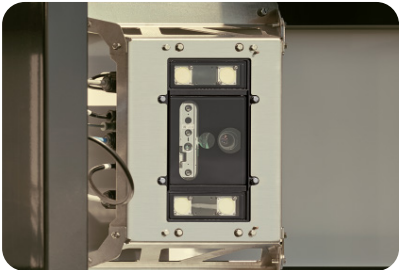
Crop
≥ 2 cm



Dock | Thistle
≥ 5 cm

Plant-by-Plant™ AI Technology

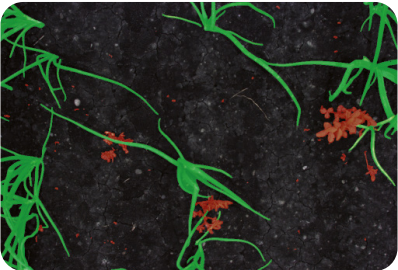
1. Sense



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.

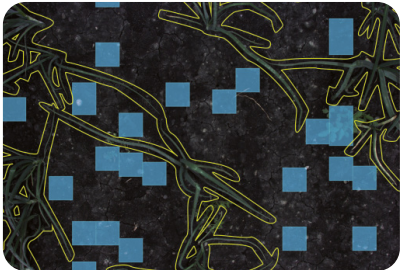
2. Decide



■ Crop ■ Target weed ■ Treated area ■ Safety zone



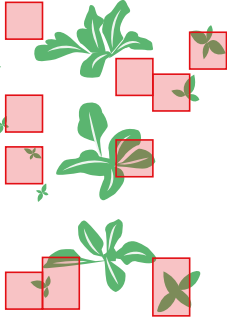
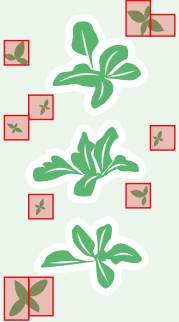
Plant-by-Plant™ AI analyzes every pixel to distinguish crops from weeds with accuracy, ensuring each spray targets only what's necessary.

3. Act



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	ARA™ 620
				
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 lawns, for monocots and dicots.

Speciality Crops



Onion



Carrot



Lettuce
Thinning

NEW



Broccoli
Thinning

NEW

NEW



Cauliflower
Thinning

NEW

NEW



Green and red
head cabbage

NEW



String bean



Spinach



Chicory

Target Weeds



Dock



Thistle



Dock and Thistle



Volunteer potato



Monocot/
Dicot weeding

NEW

Other Application Modes



All plants

UPDATE



Target size

Broadacres Crops



Sugarbeet



Rapeseed (Canola)



Corn

Upcoming



Leek



Garlic



Red beet



Sweetcorn



Celery/
Celeriac



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.

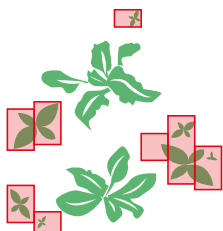
Ecorobotix Crop Care Procedures



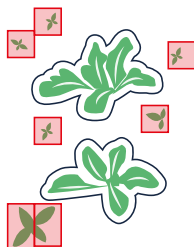
Angus HILL
Agronomist and Farm Support Consultant

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%.

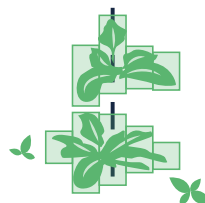
Crop-Specific Modes



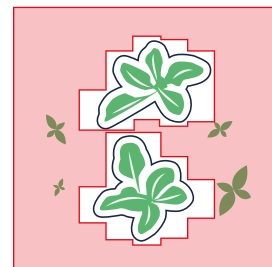
Application of selective herbicides **on weeds even close to crops.**



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



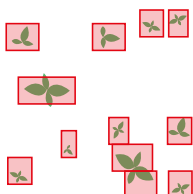
Application of fungicides, insecticides, fertilizers and biostimulants **on the crop only.**



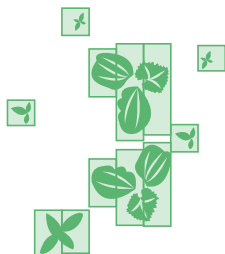
Spray all but crop **with an adjustable safety zone.**

Universal Functions (Non Crop Specific)

Function All-Plants

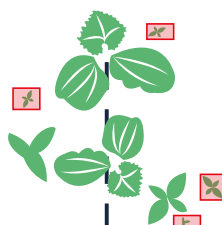


For preplanting: herbicide application.



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.

e.g. 1

Thinning under normal conditions



e.g. 2

Thinning with multiple plant management (removing overlapping plants)



Engineered for Versatility,
Built for Reliability

Day or night, ARA™ 620 keeps your beds spotless, tackling weeds with a 6.20 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.

Just plug-in and go!

ARA™, the Ultra-High Precision Sprayer attaches to any 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.

Technical Data

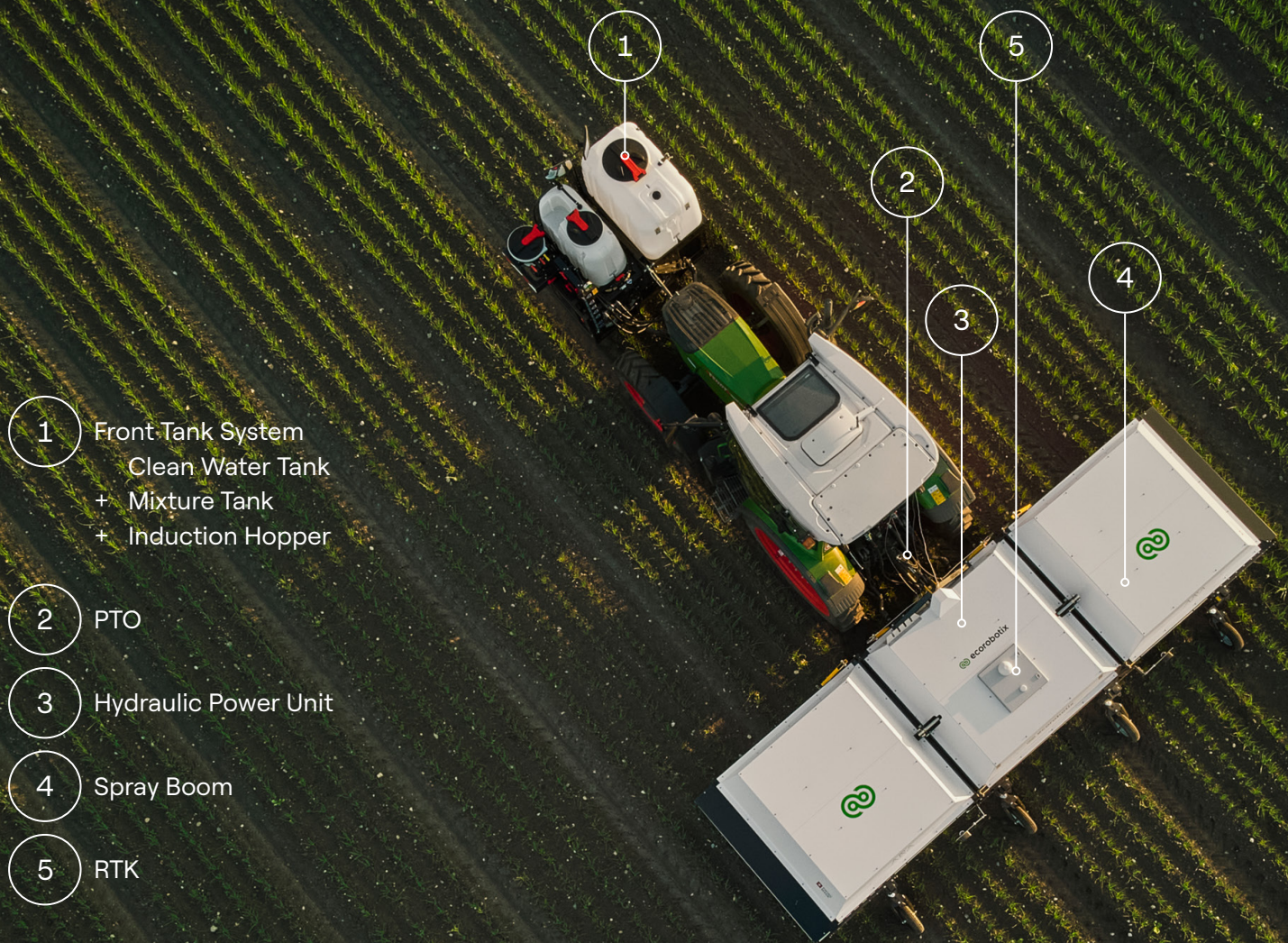
Technical name	ARA™ 620 S G2 UHP Sprayer
Sprayer Dimensions Length × Width × Height	3 spraying modules Transport mode (closed): 2.74 m × 2.97 m × 3.20 m Working mode (opened): 2.74 m × 6.46 m × 1.26 m Wheel spacing: adjustable from 1.5 to 2 m
Spray Working Width	Adjustable up to 6.20 m
Spray Boom	156 high-precision spray nozzles spaced 4 cm apart
Weight Sprayer	1,200 kg
Weight Front Tank System	410 kg (empty) and 1,350 kg (full)
Front Tank System Volume	600 l water tank 300 l mixture tank
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	Hydraulic: min. 100 bar PTO: 3 kW max. (4 CV) of energy required
Area Output	Up to 4 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

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







Front Tank System

Safer and more efficient handling. The new induction hopper ensures safe, clean filling at ground level, with easier handling, reduced contact with crop protection products, and no splashes or fumes.



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 Ecorobotix SA



A local distributor is likely
closer than you think.
Get in touch to learn more!

ecorobotix.com/contact-us/