DRONELAND AUSTRALIA

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Capture Field Trials Analytics

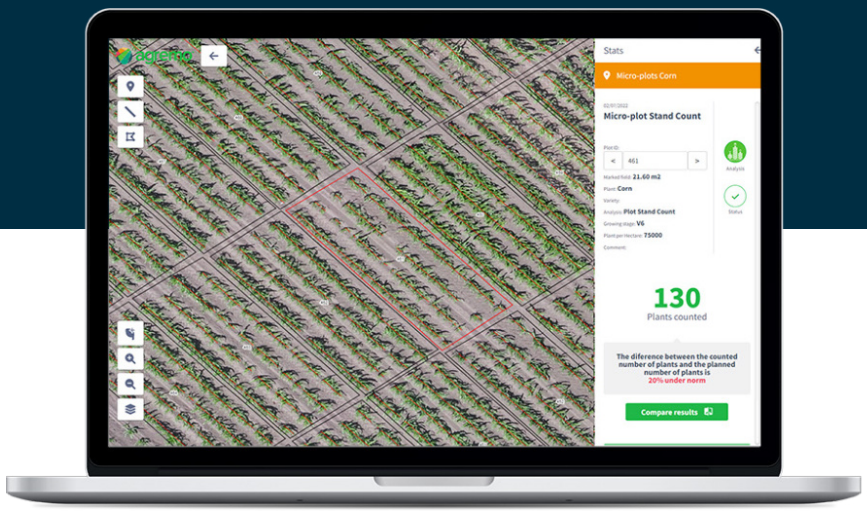
Tool for better understanding research plots

Improve the research and development process for seed and agrochemicals

The Agremo AI tool improves the efficiency of field trials inspection and enables bias-free field trial analytics for CROs, Seed, and Agrochemical input producers.

Avoid subjectivity with bias-free reports and:

- Remotely track the crop progress of all trial plots throughout the year
- Collaborate with geographically dispersed teams and colleagues
- Process thousands of trial plots for the time cost of just a few
- Get quantification & visualization of important crop parameters
- Ease the labor-intensive process of walking the trials.



Disease Detection

Plant Stress

Stand Count

Flowering Estimator

Plant Vigor

Drought Detection

Canopy Cover

Weed Detection

Plant Gap Detection

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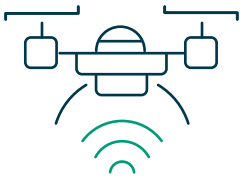
Improve the effectiveness and accuracy of trial plot data collection with Agremo AI.

Checking trial plots on foot is an inefficient, labor-intensive process prone to mistakes. Agremo AI allows you to improve your technique - You can count plants on thousands of plots in a fraction of the time you do now.

Imagine counting plants in a couple of thousand plots in just a few hours at the highest available accuracy.



KWS ADAMA BAYER syngenta Nufarm ICBA Sunoko

"Agremo Stand Count analysis shows how successful seeding was and how many plants farmers will be able to harvest. In addition, withal can help understand different sowing rates in different plots to achieve the highest yields."

Zdravko Hojka PhD
Agroservice and Product Manager
(Maize and Oil Crops), KWS SAAT AG

Plant number per plot & row

Gain access to one of the best on-the-market stand count solutions and determine the exact number of plants on the selected plot area. Get the accurate plant numbers in rows for each plot. Evaluate the germination with AI Stand count with actual counts over each plot, and use the information for your research and trial plot performance grading.

Evaluate pesticide efficacy

Agremo's AI solution maximizes research efforts. In addition, the collected information serves as an additional layer for decision-making, helping agrochemical companies and CROs determine the success of their trials.

Measure the fertilizer efficiency and hybrid performance

With Canopy Cover and Plant Vigor analyses, you can easily identify poor performance hybrid plot trials or measure the fertilizer and plant stimulant performance.

Quantify the percentage of weed coverage in trial plots

Analyze the weed coverage per plot with Agremo Weed Detection. You can evaluate the success of herbicide efficacy more accurately and conveniently and use the results for further grading processes.

Quantify the Plant flowering on a plot level

Easily quantify crop flowering levels for each plot more efficiently. Use the data for conclusions on pollinator saturation, head position, and nutrient impact.

NDVI on a plot level in addition to the AI reports

Check the plant health indices calculated for each plot individually and download the whole report. See vegetation indices: VARI, EXG, GLI Index, Visual NDVI, NDVI, SAVI, RENDVI.

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Here is how it works

DRONE FLIGHT

Use any drone brand, including RGB camera. Our Global drone pilot network can do the flights if you don't own a drone.

GENERATE MAPS

Drone images have to be stitched into a required 2D map in GeoTiff format. Agremo has an integrated engine for creating 2D maps, or you can use any other commercially available image stitching solution.

ANALYZE PLOTS

Request an Agremo AI analysis on plots of your choice. AI reports are usually delivered within 24h, while NDVI reports are in real-time.

AI REPORTS

You will get an AI report without human subjectivity. Results are available visually on the app, and you will get a CSV and SHP file.

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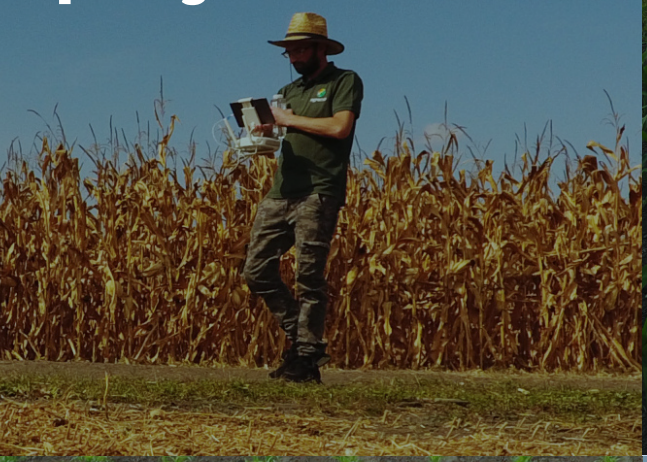
We will support you during the project.

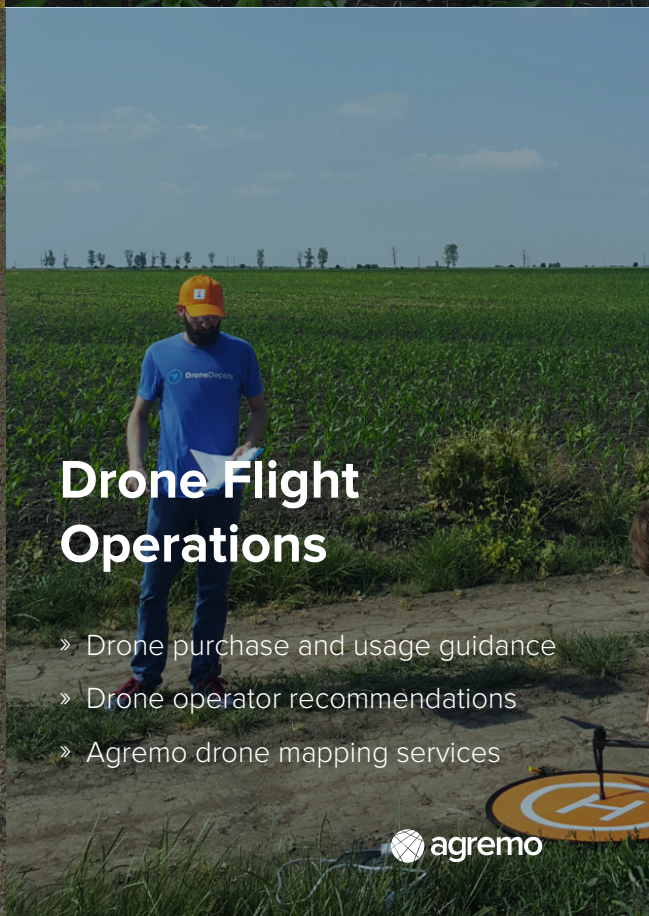


Implementation & Custom Development

- Full integration guidance
- Custom-made solutions

Project Support & Management

- Professional advice on mapping
- User onboarding and additional training
- Customer Support service



Drone Flight Operations

- Drone purchase and usage guidance
- Drone operator recommendations
- Agremo drone mapping services

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Included Tools for Field Trials

Plot Creation Tool
The tool allows you to conveniently generate your plot borders with just a couple of clicks. You can change the number of rows and columns and the size of the plots to fit the layout of your trial. In addition, you can easily name the plots and assign the values and information essential for your research to each plot border.

Plant Health Vi
Visualize, monitor and manage your plants with four vegetation indices available: VARI, EXG, GLI Index, Visual NDVI, SAVI, RENDVI, NDVI.

Report Export
Report Export- Get the full micro-plot analysis report in CSV and Shapefile. The reports contain data-rich visualizations and they can be accessed offline. Easily open the analysis history, download analysis reports in CSV file format and have trial performance data at your fingertips.

Collaboration Tool
Share every analysis report and leave a comment for your colleagues. Not only can you get accurate field trial data, but you can also collaborate with your team within the same field analytics tool.

Map Comparison Tool
Compare two different analyses reports on the same map of one experimental field. Upload multiple maps of the same field to compare the same analysis report at different growing crop stages.

List of traits per crop

Field Trials Recommended Analyses							
	Cereals	**Corn**	**Soybean**	**Sugarbeet**	**Canola**	**Sunflower**	**Lettuce**
Stand Count		✓	✓	✓		✓	✓
No. of Plant per Row		✓	✓	✓		✓	
Gap Length		✓	✓	✓		✓	
Plant Vigor	✓	✓	✓	✓	✓		✓
Canopy Cover	✓	✓		✓	✓		
Weed Cover	✓	✓	✓	✓		✓	✓
Yellow rust	✓						
Yellowness		✓	✓	✓	✓		
Lodging	✓	✓				✓	
Flowering		✓			✓	✓	
Plant Size							✓
Plant Height		✓				✓	
Vegetation index	✓	✓	✓	✓	✓	✓	✓

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Field Trials Insights package

The Field trials Insights package is designed to support researchers and breeders during data collection for plot-scoring in plant breeding and chemical efficiency trials.

Package Specification

Available analyses: Stand Count, Canopy Coverage, Plant Vigor, Weed detection, Plant Stress, Flowering (canola).

Vegetation Indices: RGB (NDVI, VARI, GLI, EXG), Multispectral (EXG, VARI, NDVI, OSAVI, GDVI, SAVI, GNDVI, SR, RGVI, MERCER, RENDVI, ARVI, SIPI)

Subscription validity: 12 months
Supported sensors: RGB and Multispectral
Number of maps: unlimited
Processing time: 24-48h

Included tools

- Plot creation tool
- CSV data export
- SHP
- Maps & Results sharing
- Map comparison
- Co-branded platform and reports
- Measurement tools - area & line

Optional add-on: Image stitching engine for the creation of 2D drone maps

Pricing

The Field Trials solution is a license-based model for one user with an applied fair usage policy.

A team license model includes a minimum of 5 users, with a price security option, or any additional member joining the team.

The user's license includes User training and Project Support.

Please send us a Request For Quote with the number of users and the number of plots you have in your trials.

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About us

Our platform is just one of the reasons why our clients love working with us.

We firmly believe that great progress needs to have great people behind it.

This is why we have agricultural consultants working with data analysts, passionate drone operators and savvy software engineers.

This unique blend of agriculture and technology enables us to know how to make the **right decisions at the right time**.

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