





# Welcome to RHIZA

RHIZA. The only fully integrated digital agronomy and precision farming service for arable, grassland and high value crop businesses.

By delivering an unparalleled level of insight, RHIZA enhances yields, reduces risks, saves time and optimises inputs. We support growers and agronomists in achieving sustainable and profitable crop production and farming.

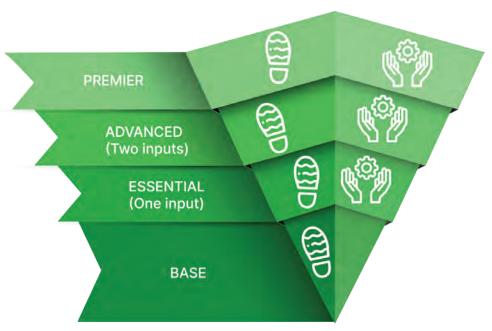
RHIZA combines satellite imagery, hyper-local weather data, pest and disease forecasting, plus physical fieldwork to highlight and adapt to potential in-field variances.

We are driven by science and R&D, ensuring your farm fulfils its potential, both in the short-term and the long-term. No two fields are the same. We look closely at areas where your farm can improve and help you to do it. We don't just recommend production benefits. We highlight areas where you can improve your environmental credentials, enhance your farm's reputation, and increase your bottom line whilst managing risk.

# **Discover RHIZA**

### Step 1 – Select the digital package that is best for you

Get the most accurate information and advice you need, in the ways you need it, precisely when you need it. With four packages available, you can start at any level to suit your business.







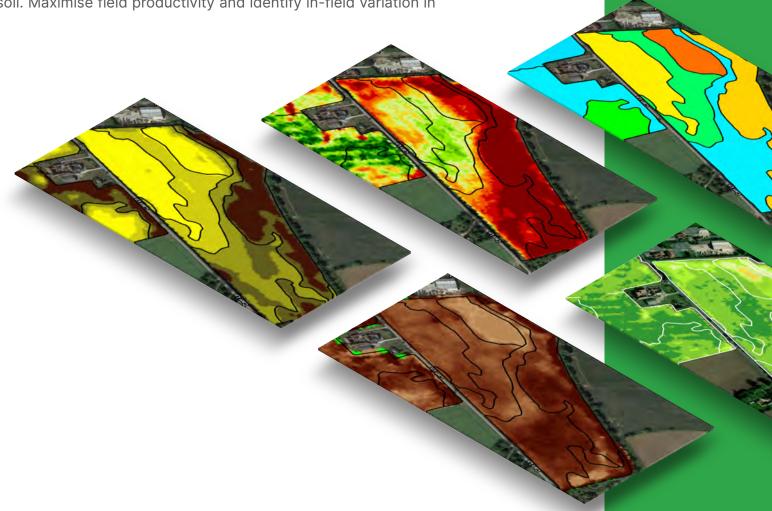


## Step 2 - Add your required service level (optional)

If you are on the Premier package, expert advice from your account manager is already included, but for those on Essential and Advanced who want to save the time of running your own plans, and want to have the support and expertise of an account manager, just let us know. If you don't use variable rate currently but still want the option of whole field planning, then our Base package could be for you, complete with remote support as required.

# Step 3 - Choose your fieldwork requirement (optional).

As you know, it all starts with your soil. Maximise field productivity and identify in-field variation in three simple steps.



### 1. IDENTIFY

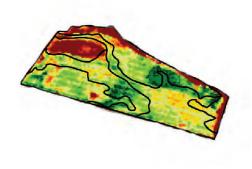
Use high resolution satellite images provided with one of our four packages to determine the variation within your fields. Take action by identifying the cause of the variation through soil evaluation.

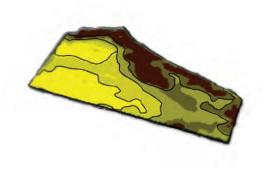
### 2. ZONE

Determine the right way to manage every field with one of our three methods available, allowing you to choose the right option for your farm.

### 3. SAMPLE

Sample each zone individually and identify the true variation. This will allow you to make the final decision on your nutrient or seed management plans, based on what is really happening in your field.







- Full Nutrient analysis available. As standard P, K, Mg, pH. Additional elements OM, broad spectrum, laser soil texture analysis
- Access your data online via the RHIZA platform 'Contour'
- Create variable application plans from your data to optimise your investment

Fieldwork is available across all the packages at an additional cost to the digital subscription, at any time. Upload existing results on Base, an upgrade is required to Essential, Advanced or Premier for variable applications

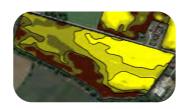
# Process

1. IDENTIFY

# Soil Scan

2ha average

Electrical Conductivity Measurement of soil conductivity. Clay has a higher resistance than sand or silt, allowing variance to be shown across two depths of your soil – both topsoil and subsoil (30-90cm)

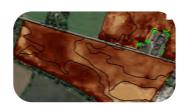


### OR

### Soil Brightness 3.5ha average

your topsoil profile

Using satellites, we create a compound image of your bare soil, and use near-infrared sensor results from the satellite to map your soil. The reflectance of soil particles to this infrared light highlights changes within



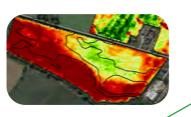
# OR

# NDVI and Farmer Knowledge

3-5ha average

Self-zone

Historical imagery or local knowledge used to create known variation zones



### 2. MEASURE

### Management Zones

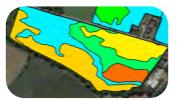
Management zones are then created according to soil variation, generated from selected mapping method



# Maps

3. MANAGE

Results are then stored in Contour where users can view data as maps, compare against other layers and build recommendations



### Soil Sample

Management zones are then individually sampled. Analysis of nutrients, OM and soil texture can be reported back to the Contour platform



### Application

Application maps can then be generated within the platform using the bespoke, easy to use planning tools. GPS files can then be downloaded that are compatible with all major machinery manufacture



# **Explore RHIZA**

### **DIGITAL TOOLS**

The Base package is the entry point into precision farming. Improve in-field decision making with our range of powerful tools.



### **Satellite imagery & ClearSky**

We source satellite imagery to assess the crop biomass, health and performance. This imagery can be used to create management zones and variable rate applications, subject to the package you have chosen. Our partnership with Aspia also allows us to supply ClearSky, an industry leading cloud-free alternative to traditional satellite imagery.



### Weather data

The satellite and radar data we source is accurate up to 1km<sup>2</sup> and provides you with decision making tools such as when to drill based on soil moisture, or surface windspeed to plan optimum spray window.



### Pest and disease forecasting

Our P&D models can be used to better plan applications. They are weather driven, providing granularity and forecast at your individual farm level.



# Mobile scouting app

Our scouting app Contour Mobile provides quick access to in-field observations and satellite imagery, enabling targeted crop walking. Aid communication and joint decision making by sharing findings with your agronomist.



# **Yield Maps**

Easily upload and analyse yield maps in the Contour platform. Upload yield maps from any manufacturer, with all data automatically cleaned and converted behind the scenes. The results can be used to understand field variation cause and effect.



#### Soil data

Soil information such as classification, organic matter and calcium levels are provided by Cranfield and James Hutton Institute. Integrate your farm's historical soil data onto the platform at any time.



### **PLANNING TOOLS**



### Seed

Easily create variable rate seed plans based on your soil data or chosen imagery layer. Add scouted observations or draw polygons to fine-tune maps, addressing variation in establishment. VR seed helps remove limiting factors to crop success from the first application to your field.



### **Nutrient**

Optimise applications to crop need and target input spend. Choose to variably apply either P&K, lime or nitrogen products. Soil results allow for Base fertiliser plans either whole field or VR. Biomass, optical & ClearSky imagery are available, providing access to regular biomass imagery to react to crop variation and fine-tune nitrogen applications in season.



### **Lime Planning**

Often the forgotten nutrient, lime needs the same level of thought and accuracy as the rest of your nutrient plans. Our simple-to-use planning tool allows you to correct and maintain soil pH, ensuring full-use efficiency of your other recommendations as well as promoting soil health.

### **COMPLIANCE & SUPPORT**



### **Nutrient management plan**

RHIZA's NMP tool allows you to plan, track and confirm your nutrient applications throughout the growing season. Grass, combinable, forage and veg crops can be planned on. Combining organic and inorganic fertilisers and variable rate applications, this intelligent tool ensures that you meet government regulations around compliance.



### Compliance

The livestock and nutrient management planning tool allows users to make compliant plans with ease. RHIZA's FACTs qualified advisers will streamline manure management and other input processes, saving your business time.



## **Optional support**

All RHIZA packages can be supported by a dedicated FACTS qualified account manager to interpret the data and assist with the decision making throughout the year.

I've been using RHIZA for 4 years and it has now become an everyday go to tool helping me make informed decisions on the best course of actions for our crops.

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Peter Cartwright
Revesby Farms, Farm Manager

66

You only have one set of soil.
Understanding and measuring with
RHIZA gives you the ability to optimise
your inputs.

**99** 

Sam Fordham RHIZA, Head of Technical 66

NDVI images showed up any in-field variations on my farms which was a valuable tool to allow me to prioritise areas of the fields to investigate further when crop walking.

Katy Downie

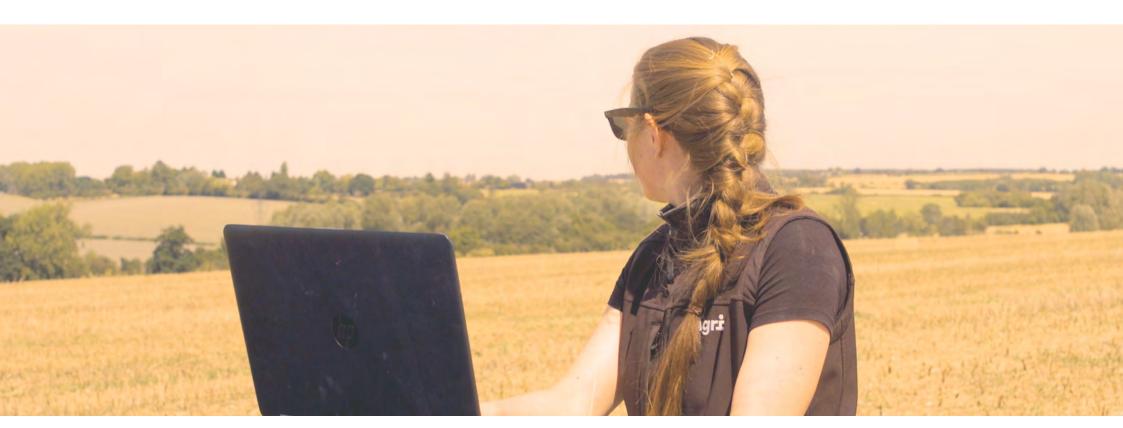
Agronomist

66

Farmers are time-poor and Contour's functionality provides great support in terms of efficiency and modernising farming processes that can sometimes be cumbersome and complicated.

Jamie Lyttle

Crop Inputs Specialist





# RHIZA's Contour Mobile

Remote digital agronomy from your mobile

- A simple tool used on thousands of farms which you can use offline
- ✓ Scout and record over 260 pests, weeds and diseases
- Track problem areas across your business
- ✓ Monitor every hectare and share observations with other users
- Crop walk in conjunction with NDVI, GCVI, EC scan and SOB maps
- Data is date and geo stamped
- Z Simple to use
- Used on thousands of farms
- **Z** Optimise yields while targeting nutrients, reducing costs and risks
- P, K, Mg and pH soil analysis information
- ✓ Use in conjunction with RHIZA desktop platform
- Available with every package



Observations in three simple steps







RHIZA

info@rhizadigital.co.uk

03300 949150

For more details regarding our services or how RHIZA can support you to obtain the optimum yield from every field, please visit www.rhizadigital.co.uk