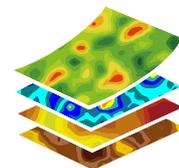


Translating data  
into knowledge



**Omnia**  
Precision Agronomy

Your farm  
Your data  
Your knowledge



Translating Data Into Knowledge

OmniaHUB

Omnia

Manure Management

Omnia Precision

Variable Fertiliser

Variable Seed

Sampling Services

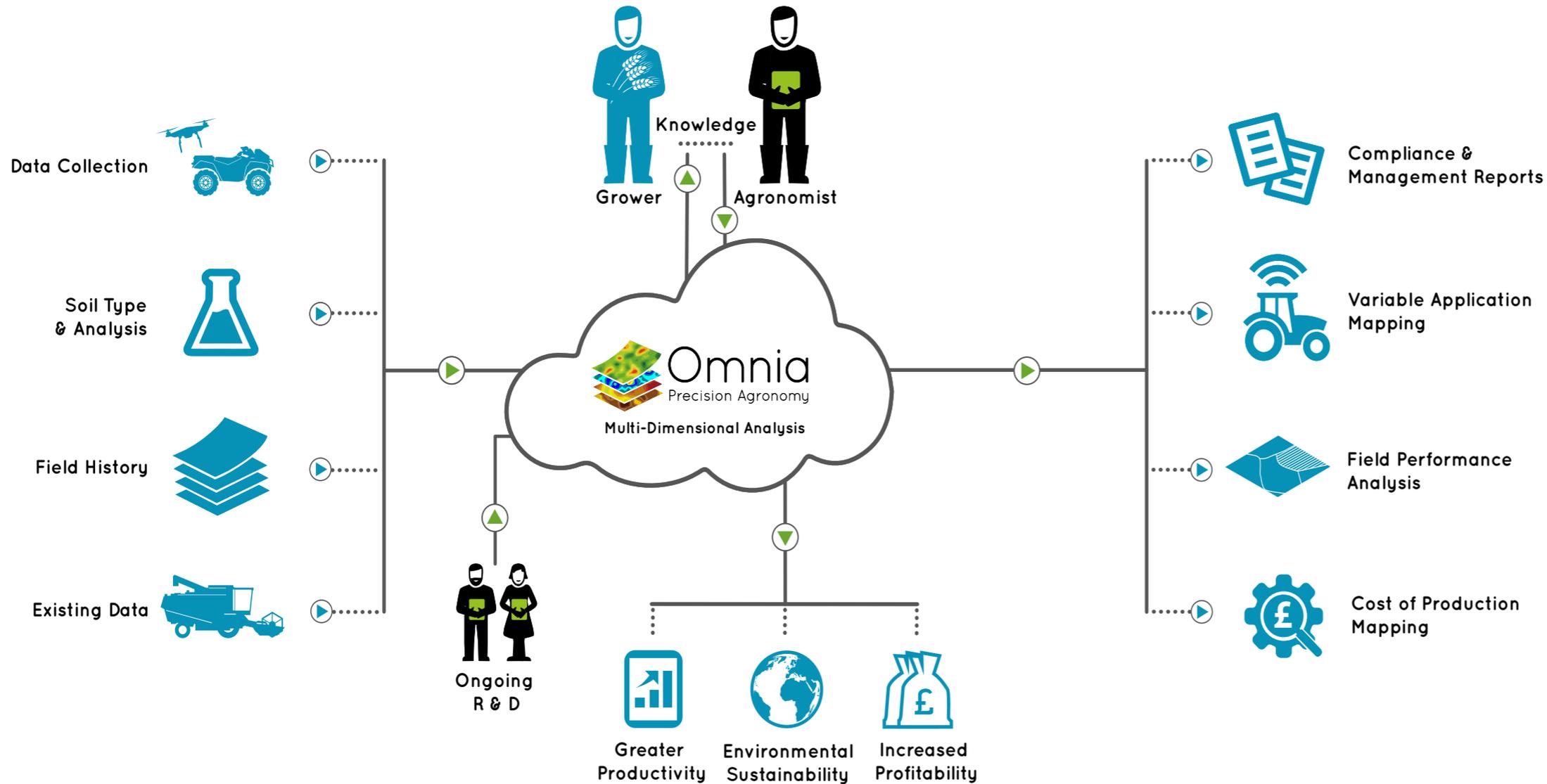
Field Performance Analysis

Cost of Production Mapping

Potato Cyst Nematode

Plant Vision





## Translating Data Into Knowledge

Growers have always relied upon the relationship with their agronomist to optimise their crop output. Omnia has been developed with this key partnership in mind.

Omnia is a revolutionary precision farming system that will interpret existing information, whether this is digital or personal knowledge and experiences to give practical and effective advice.

*Improving productivity, increasing profits and ensuring future sustainability.*

## OmniaHUB

At the centre of Omnia is The HUB. An online application to store, organise and process nutritional and precision farming information.

One of the benefits of having an on-line application is that it can be accessed on any computer or tablet

without needing to download and install any software.

OmniaHUB allows you to bring all of your data together into one place to manage and analyse like you have never been able to before.



## Omnia Field Scout

To assist with in-field decision-making the Omnia Field Scout App has also been developed.

The App is available to download from the App store, free to all Omnia Precision subscribers.



Delivers unrivalled whole field seed and nutritional planning



Soil analysis						
cropping year 2016/2017						
Field	Analysis number	Analysis data	P <sub>2</sub> O <sub>5</sub> ppm	K <sub>2</sub> O ppm	MgO ppm	ph
Big Barn (18.13 ha)	7/4/2016_5	7/4/2016	17	171	170	6.7
Big Paddocks (4.44 ha)	7/4/2016_8	7/4/2016	15	404	151	7.7
Eau Field (10.66 ha)	7/4/2016_6	7/4/2016	21	255	169	7.7

Available for Growers to use, or delivered by a FACTS qualified Omnia specialist



Optimise fertiliser use for yield and quality



## Omnia

Omnia delivers unrivalled whole field seed and nutritional planning and reduces the workload associated with producing NVZ compliance data for inspections. Growers can use Omnia themselves, or choose a service delivered by an Omnia specialist.

Nitrogen calculations are fully justified to meet specific farm needs.

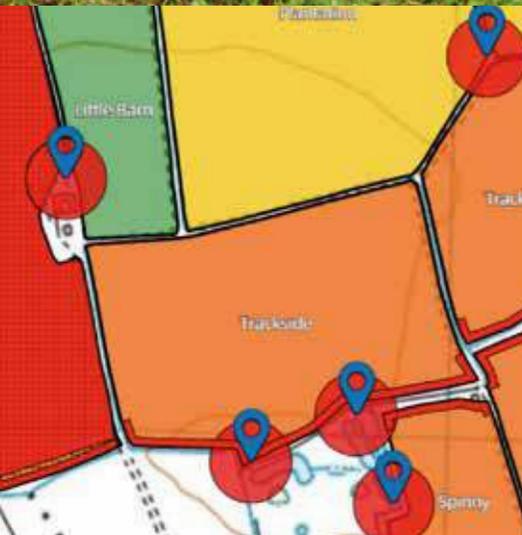
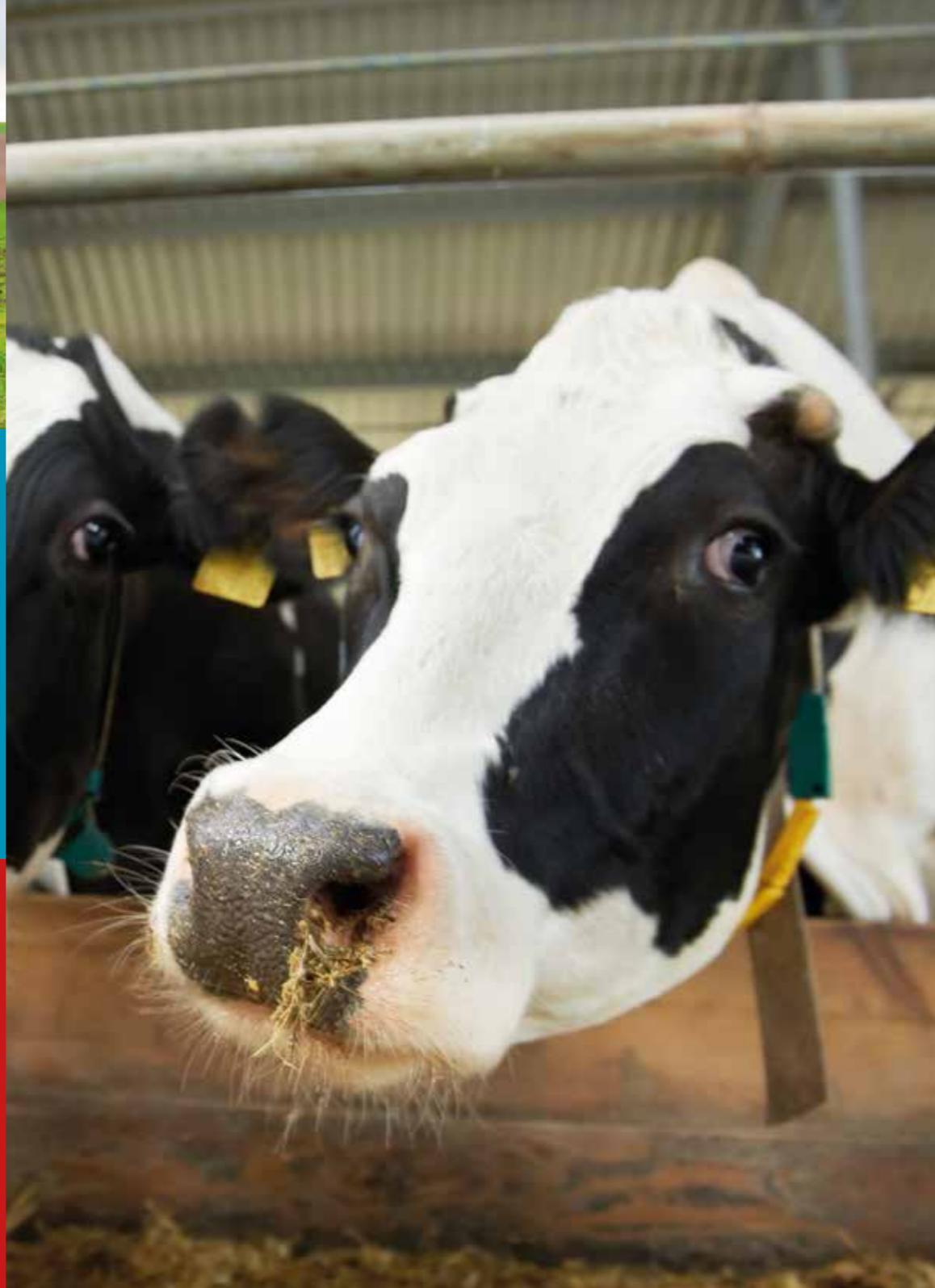
Regular soil sampling can be included within the service to ensure the most effective use of P, K, Mg and S and the absolute efficiency of N use, whilst managing pH is critical for optimum nutrient uptake.

In addition Omnia can be used to measure other essential soil attributes such as;

- Organic Matter
- Cationic Exchange Capacity
- Micronutrients.

Our clients have taken advantage of Omnia nutritional management services for a number of years.

We continue to invest in this development to ensure that we continue to exceed technical and legislative requirements on an ongoing basis.



Speeds the generation of compliance reports

Calculates storage capacity and allows for predicted shortfalls to be managed

Ensures your manure application plans meet all NVZ regulations

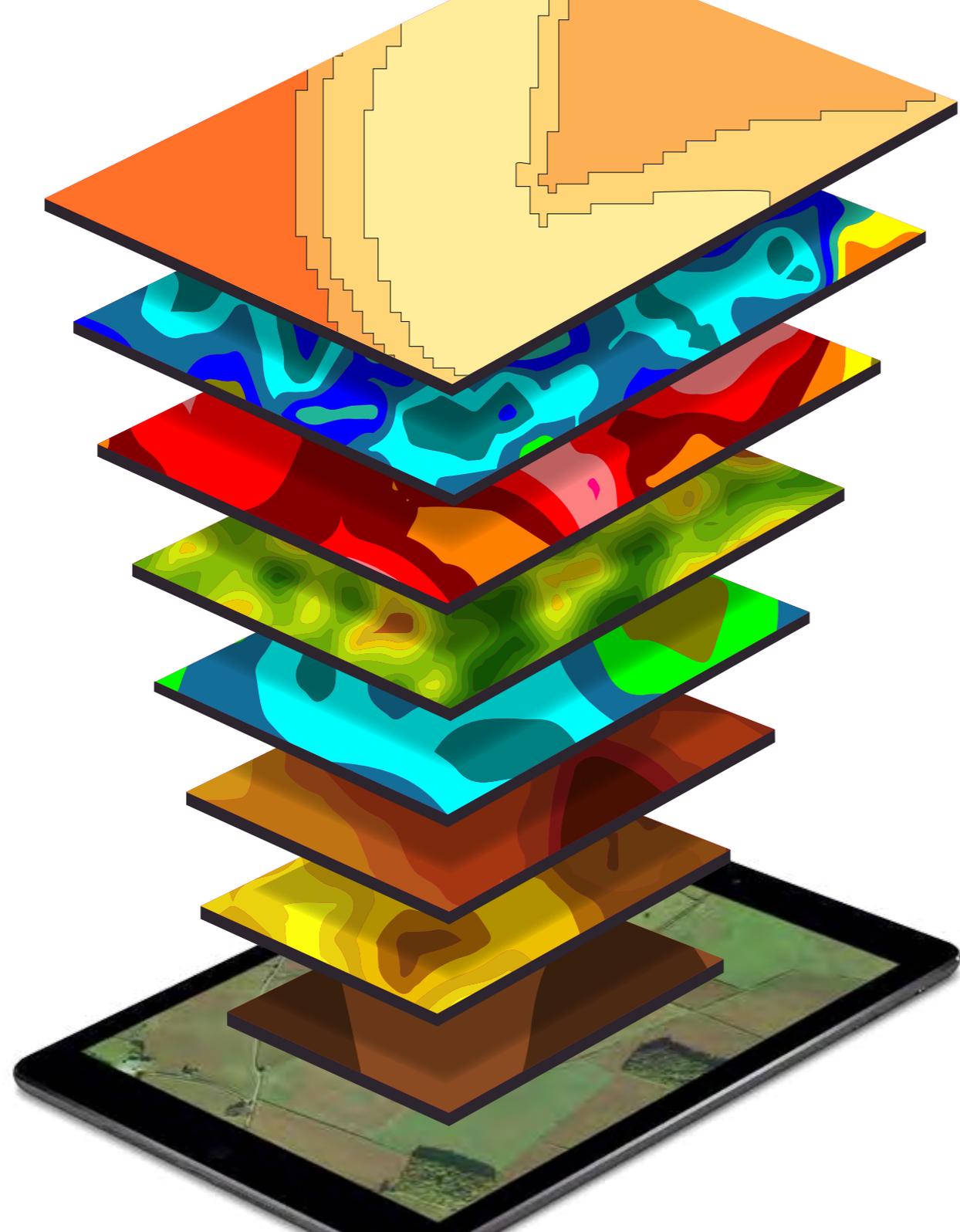
## Manure Management Planning

Considerable benefits can be made by utilising organic manures correctly. Manure and slurry should therefore be treated as a valuable resource of nutrients and organic matter.

**An Omnia manure management plan is split into 5 specific sections;**

1. Risk Map
2. The Farm Limit
3. The Field Limit
4. Storage
5. Imports and exports.

An Omnia manure management plan will help you use your manures to maximum benefit and reduce harmful impact on the environment, whilst complying with all the NVZ regulations.



## Omnia Precision

Omnia Precision is a unique precision farming system using Multi-Dimensional Analysis, where the grower and their Omnia specialist work together to meet the grower's precision agronomy objectives.

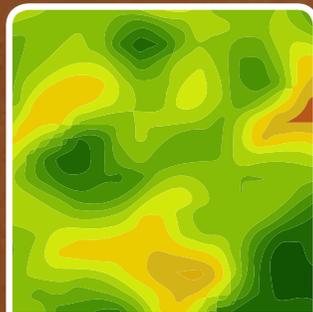
Omnia's Multi-Dimensional Analysis is used to create variable rate nutrient, seed or crop protection plans.

Its advanced algorithms are used to calculate the optimum solution for an individual area within the field, irrespective of the number of map layers you wish to include or the different zone shapes.

Multi-Dimensional Analysis is also used to analyse multiple years' of yield maps, to aggregate the long term performance of the field irrespective of the crop and to create cost of production maps.

*Realising the full potential of precision technology*

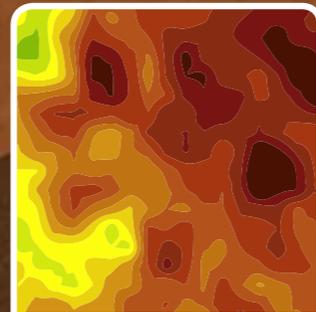
Increase yields by more than 1.0 t/ha  
Reduce blackgrass tillering by 50%



Slugs



Weeds



Seedbed



Soil Type

## Variable Seed

Omnia trials over a number of years have shown that the variation in seed rates required can be considerable and needs a planned approach with specific aims and goals in mind.

Until now seed rates within a field have largely been decided by guesswork. It is often done by deciding upon the 'average rate' and then increasing or decreasing the rate based partly upon experience and instinct.

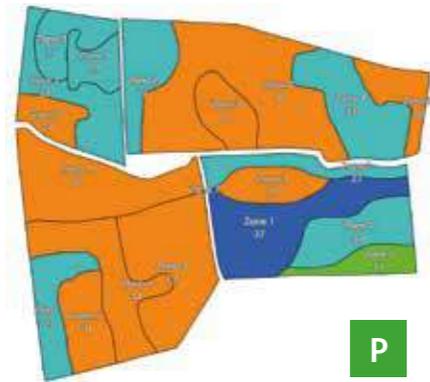
Omnia is different. Using the crop type, variety and anticipated drilling date Omnia selects the correct

algorithm and suggests a target plant population, which you can modify to meet your individual situation.

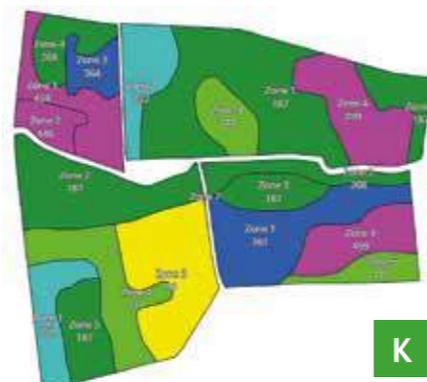
Maps of the soil types within the field are then loaded into Omnia to form the basis of the plan. Additional factors can then be overlaid, such as; seedbed condition and weed or slugs pressure.

Omnia's unique Multi-Dimensional Analysis then analyses the data and creates a seed rate map that matches the actual agronomic requirement of the field more closely than ever before.

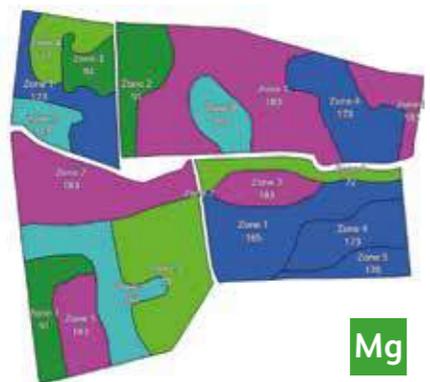
Savings of up to £30/ha



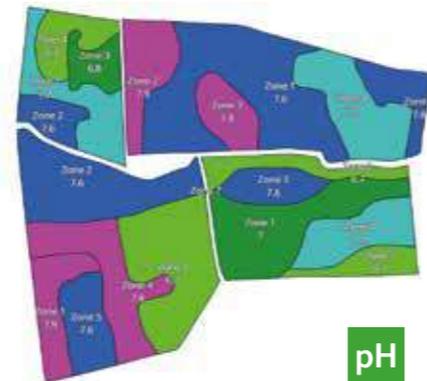
P



K



Mg



pH

## Variable Fertiliser

One of the main objectives of precision farming is a more targeted approach to fertiliser applications.

Variable rate applications require the need to determine the actual crop demand accurately and cost-effectively.

Omnia has the ability to utilise historic grid and zone sample results to compare with the most recent analysis.

Soil sampling can be collected by the grower, as part of the Omnia service or by a third party and can be automatically uploaded into the software.



*Target nutrients where they are most needed*



## Sampling Services

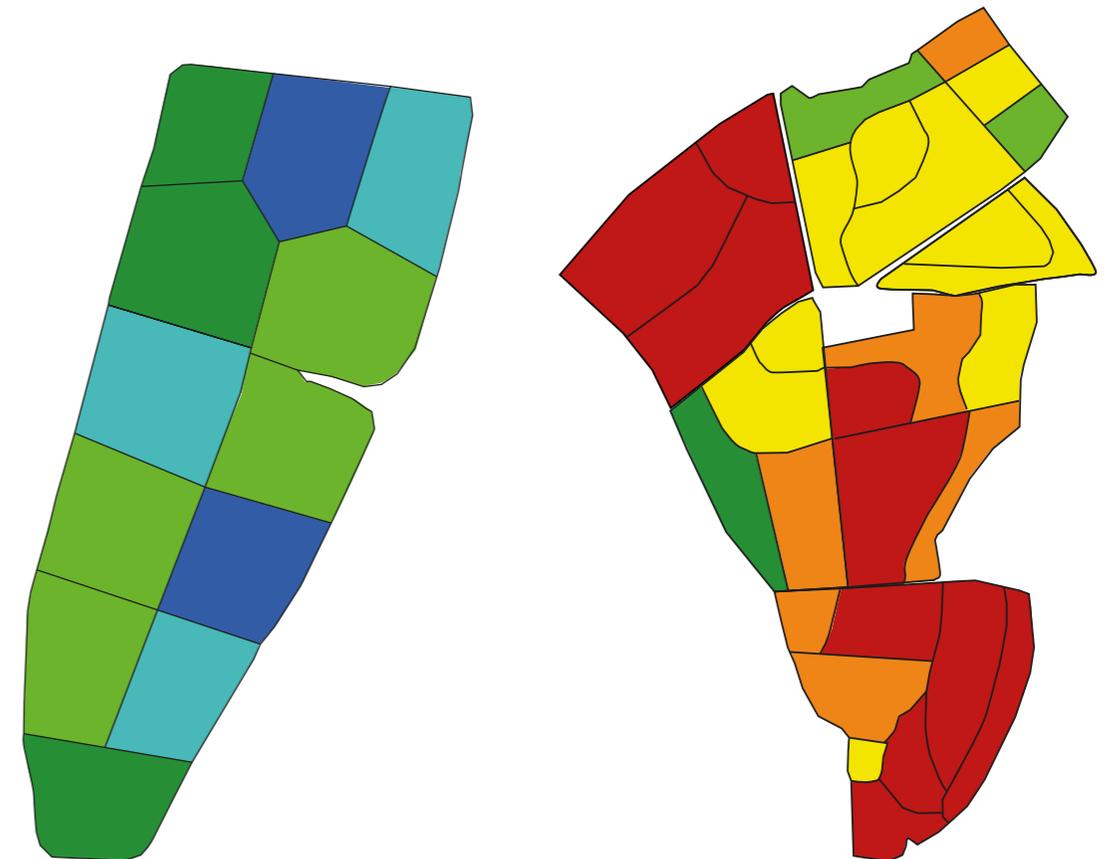
With all nutrient management soil sampling is required every four or five years. Omnia is able to use the soil samples and historic data, already obtained by the grower, however we can also provide soil sampling services where required.

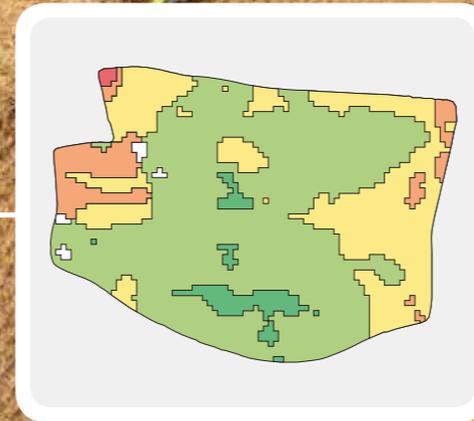
The standard analysis we offer tests for P, K, Mg, pH and soil texture, however for growers wanting more detailed information we can provide analysis to include organic matter, Cationic Exchange Capacity and other essential elements.

There may also be a need to create soil management zones, either for targeted nutrient analysis or to map soil-type variation.

Zone creation can be achieved by incorporating the grower's knowledge with multiple layers of available data which may include soil and yield maps and conductivity scanning.

Where data is not available we are able to provide a conductivity scanning service.





## Look at your business in a new way

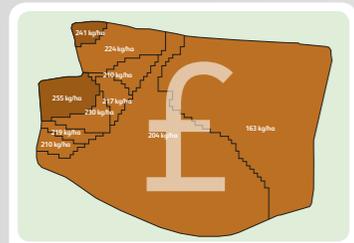
For over 20 years' farmers have been collecting yield maps which, in most cases, are simply not used. Yield map analysis has now been made possible using the Multi-Dimensional Analysis within OmniaHUB.

The analysis doesn't just rely on our models, but allows the user to simply interact with the maps to decide what the good and poor yields are for each field.

This ensures that the resultant Field Performance map is an accurate reflection of the variable performance within the field.

“ Precise evaluation of profit and loss is the key to business sustainability ”

John Pelham / Andersons



Seed £/ha



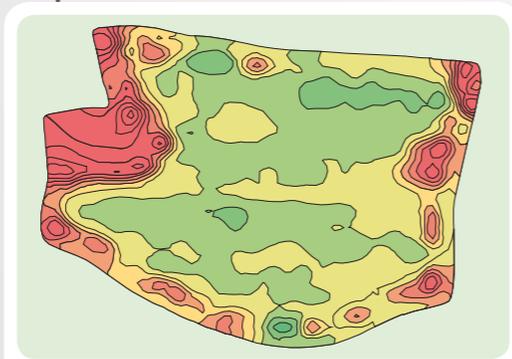
Fertiliser £/ha



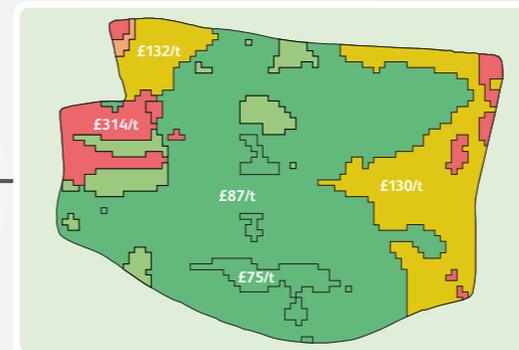
Crop protection £/ha



Operation £/ha



Yield t/ha



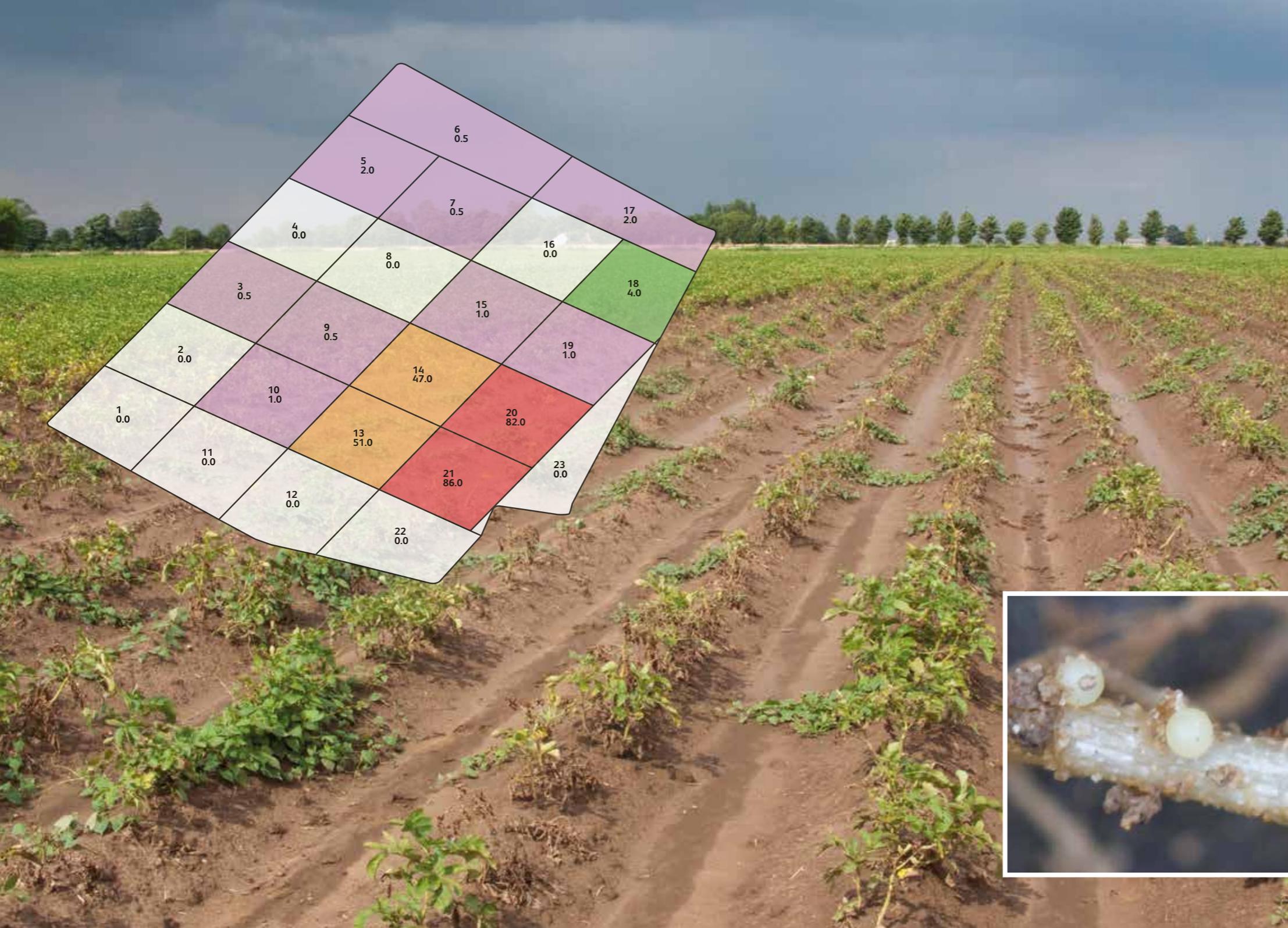
Cost of production map £/t

## Cost of Production Mapping

The importance of understanding your costs of production might seem obvious, however, variation in output across a field and the increasing use of variable inputs mean that this may be misleading when done at a field scale.

Omnia allows growers to identify the least and most costly areas within a field and make decisions based on this more detailed information.

Costs, based upon industry standards, allows a quick and easy snapshot of individual site performance. For growers that have their own financial information, this can be easily adopted to show much more detailed analysis, bespoke to the individual farming business.



## Potato Cyst Nematode

Potato cyst nematode is the UK's most important potato pest capable of causing substantial yield losses and costs the UK potato industry in excess of £50 million per year.

Omnia allows historical PCN information to be compared directly with the most recent data, in conjunction with other data such as aerial photography. Growers can then devise a more targeted approach to the management of these distinct areas within the field\*.

Omnia should form part of an Integrated Pest Management approach to PCN control.



\*Due to the random occurrence of PCN in a field an absence of eggs in a sample does not guarantee PCN related problems will not occur.



*High Accuracy  
NDVI sensors*



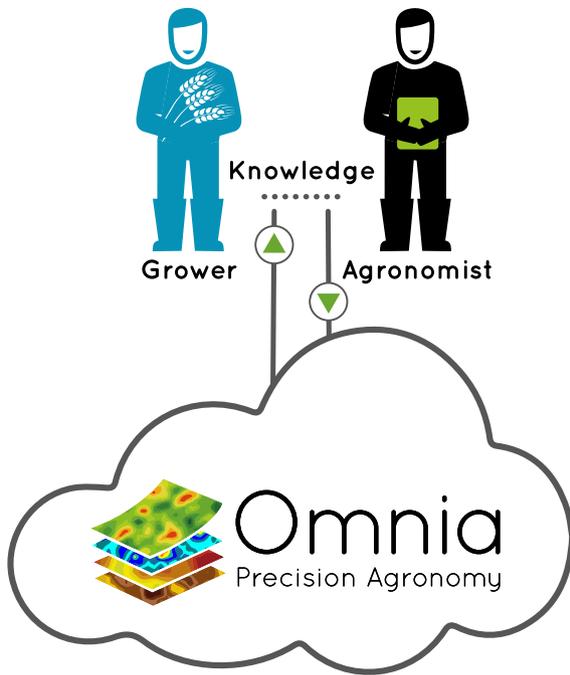
## Plant Vision

Plant Vision is a machine mounted sensor system offering the accuracy and reliability to acquire NVDI data.

Using rugged NDVI sensors, Plant Vision can be mounted onto any machine and has been designed to capture green area information about any growing crop.

The data can be imported into Omnia or any other farm mapping system and data can be used for:

- variable nitrogen applications
- crop monitoring
- harvest planning.



For more information about any of our Omnia services contact:

[omniaprecision.co.uk](http://omniaprecision.co.uk)

Tel: 01526 831 000

Email: [consultancy@omniaprecision.co.uk](mailto:consultancy@omniaprecision.co.uk)

 [twitter.com/omniaprecision](https://twitter.com/omniaprecision)



**HUTCHINSONS**  
Crop Production Specialists

