



# Yellow Brick AgTech

Beyond Farming

A Holistic Plant Nutrition Ecosystem

2022



**Yellow Brick AgTech**

A vision to empower and supply growers, advisors and manufacturers.  
Achieve sustainable food production by way of a plant nutrition  
ecosystem, supported by data & hardware



YELLOW BRICK

# WE SERVE

**5**

continents

**+72**

countries

**+215**

crops

**+20k**

active farmers



# WE COVER

3,000 + FERTILIZERS

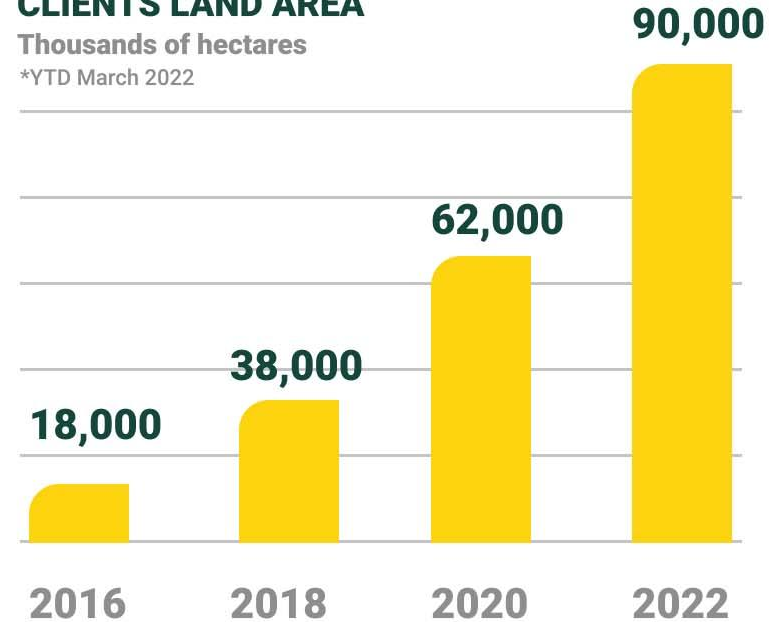
7,448 +  
applications

222,394 +  
acres

## CLIENTS LAND AREA

Thousands of hectares

\*YTD March 2022



# A Plant Nutrition Hub

Environmental, financial and agronomic intelligence services

## Irrigation

Management of water  
Communication between  
irrigation inputs

## Sensors & Monitoring

Software  
Hardware  
Water/Nutrients/  
Environment  
Real-time

## Indoor Farming

Combination of real  
estate and farming  
Use of vacant indoor  
spaces



## Real-Time Consulting

Agronomists  
Knowledge sharings

## Precision Software

Fertilization plans  
Pest control  
Precise dosing

## Fertigation Management

Smart control  
Chemigation  
Fertigation  
Agitation  
Gateway for data

## Online Marketplace

Sell produce  
Buy inputs  
Lease or buy  
Equipment  
Hire employees

# SIMILIAR COMPANIES PER SECTOR



**Yellow Brick AgTech**



**YB IndoorFarm**



**PLANT METRICS**

## **Sensors**

SUPLANT  
PHYTECH  
HUNTER



## **Software**

YARA  
ICL  
HAIFA



**I-Feeder Technologies**  
Dosing System Design and Innovation

## **Hardware**

NETAFIM  
GRUNDFOS  
PRIVA


# SOCIAL AND ECONOMIC RESPONSIBILITY:

 Reduce soil pollution

 Gender equality in the workplace

 Data driven decision making

 Yield & quality increase

 Reduce air pollution

 Resource conservation

 Reduce water pollution

 More adapted producers

 Energy savings

 ESG, diversity and gender equality

 Reduce fertilizer consumption

 Reduce pesticide usage



# PARTNERSHIPS AND CLIENTS





# CASE STUDIES



Location: **Turkey**  
Crop: **Potatoes**  
**Yield +27%**  
**Fertilizer use -40%**

Crop: **Green Beans, Rutabagas, Cabbage, Bell peppers**  
Yield in rutabagas **up to 100%**  
Yield in green beans **up to 30%**  
Yield in cabbage **up to 90%**  
Fertilizer use - no savings in fertilizer but **-25% pesticide use** (healthier crop)  
Crop: **Passion Fruit**  
Yield: **+35% yield**  
**INCOME: +42% with i-PNUK**



Location: **Russia**  
Crop: **Soybean**  
Valuable info: **NDVI showing BETTER BIOMASS** in i-PNUK plot than conventional



Location: **Tonga**  
Crop: **Butternut Squash**  
**Yield +7%**  
**Fertilizer use -40%**  
**Better uniformity, Without the use of phosphorus**



Location: **Punjab**  
Crop: **Chili**  
**Yield +105%**, chili managed to survive heavy rains which really impressed the grower.  
Crop: **Corn YIELD +15%**  
Crop: **Cotton YIELD +60%**

# OUR HOLISTIC PLANT NUTRITION ECOSYSTEM



Precision  
Nutrition Software



Fertigation  
Application &  
Management



Fertilization  
& Irrigation



Sensors &  
Monitoring



Indoor  
Farming

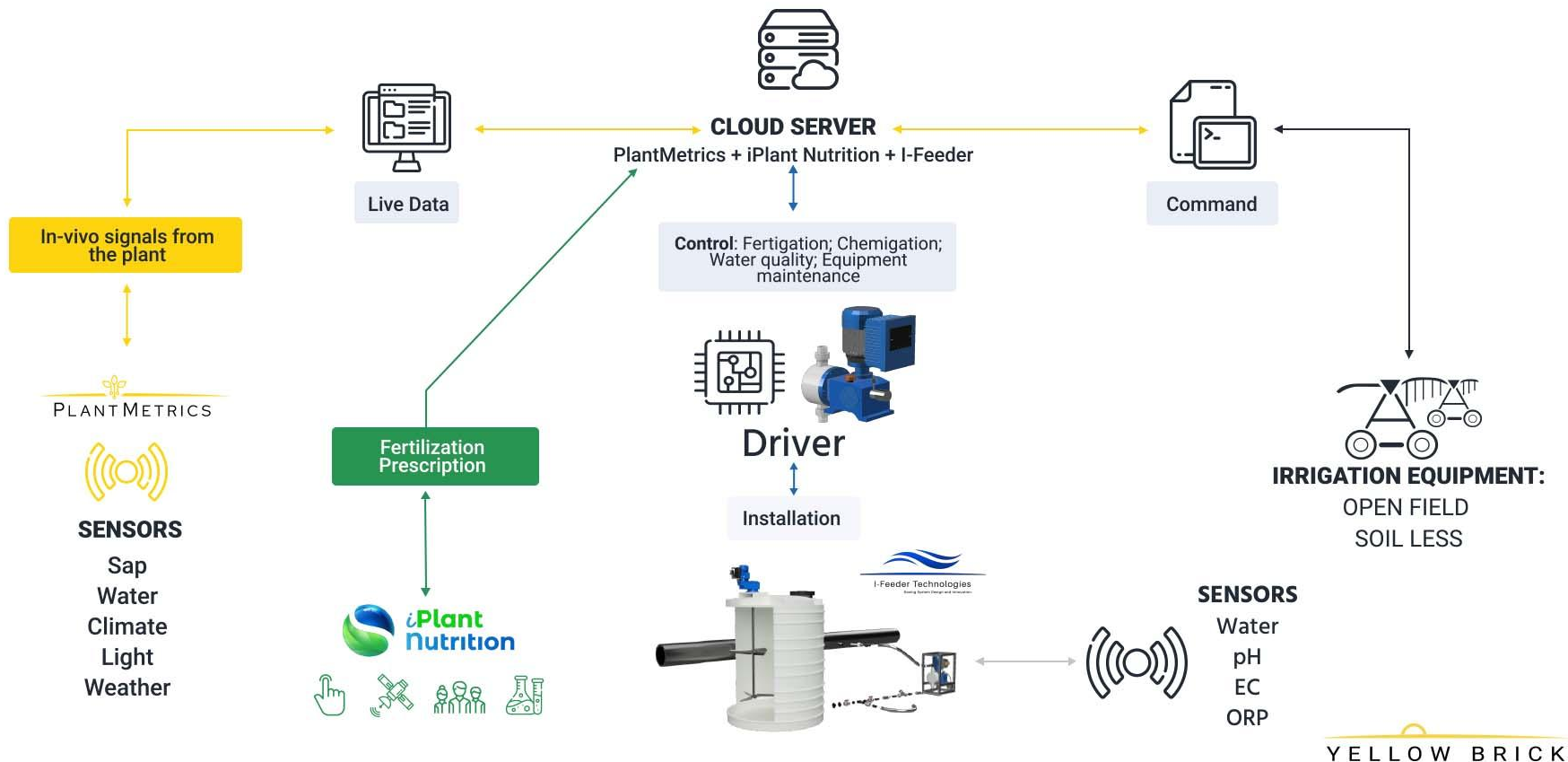


Real-Time  
Consulting  
Services



Online  
Marketplace

# OUR HOLISTIC PLANT NUTRITION ECOSYSTEM



# A PLANT NUTRITION SOFTWARE SOLUTION



A unique algorithm calculates a tailored fertilization plan suitable for your crop requirements

An OEM of in-house software engineers and agronomists - flexibility and demand at your fingertips

Fertilization and fertigation plans and recipes:  
open-field  
hydroponic  
orchard  
greenhouse  
EC/ pH  
drainage

# FEATURES



Monitoring of standards, status and regulation



Full access on our 215 crops and 3,000 fertilizers database



Continuously updating database



API/ IOS and Google Application/  
White Label



Agronomic consultancy included



No Installation - Wireless connectivity  
accessible from any connected device

# BENEFITS



Adjusted fertigation recipe in order to reach the optimal EC and pH of the nutritive solution.



Both granular and liquid fertilizers are included in the database.



Precise efficiency in fertilizer application.



Healthier crops.



Increased crop uniformity.



Cloud based software or mobile app, easily accessible remotely from any tablet, cellular device or computer.



Increased yields by up to 30%.



Decrease input cost by up to 50%.



Optimization of fertilizer & chemical input costs.



Fertilizer programs in minutes.



Lower pesticide and herbicide application.

*"By incorporating the software into our weekly operations and fertilization strategy we have seen savings in both time and resources which has led to a significant impact in our production."*

**syngenta**.flowers

YELLOW BRICK



# BENEFITS



Sensorless and equipment free



Fertilization and irrigation recommendations in a matter of minutes



Satellite input allow real time recommendation tailored around weather events



A tool for all growers, agronomists and consultants. Governments, chemical companies, irrigation companies and cooperatives



We talk already to 1000's of farmers - now we will talk to millions



# I-FEEDER TECHNOLOGIES DOSING SYSTEMS



A 40-year-old OEM of fertigation, chemigation and agitation equipment.



Precision application at all volumes and pressures.



Local support from within 5 continents.



We control the manufacturing process from initiation to ready for shipment. Crafted by our specialized in-house engineers, designers and technicians.



Specializes in Fertigation and Chemigation systems for all liquid and soluble chemical homogenous application.



Automation - driven remotely capable of various autonomous functions and controls.

# BENEFITS



Plug-And-Play Turnkey System for easy install and ease-of-use.



Increases efficiency by delivering nutrients as needed.



Accurate, durable and economical.



Easy to maintain with most maintenance tasks capable of being carried out in-field.



Saving on labor, energy costs, and the ability to dose nutrients that may be otherwise difficult to apply.



Lower application of fertilizer and water as well as flexibility in application timing.



Unaffected by outside influences such as pressure and water flow variations.



Can run dry and is not sensitive to impurities or granules.

# PLANTMETRICS IN-VIVO SENSOR



Sensors able to measure & interpret bio-signals from the sap.



Real time monitoring of the plant's nutritional and environmental needs.



Ability to detect stresses prior to the onset of symptoms and monitor the healing process after treatment.



Live communication.



Cloud-based platform integrated with the YB AgTech ecosystem.



Can communicate with other farm based devices.



Linking plant physiology and hardware development to ensure efficiency in the use of resources.



Continuous reading of plant and influencing parameters – internal and external.

# YB INDOORFARM



An operational indoor farm project in Cambridge with high quality fresh produce to be sold countrywide leading to reduced emissions and carbon footprint.



Incubator for AgTech development leveraging our agronomy, science, technology and business experience.



Knowledge hub to act as testing ground for new technologies.



Creation of green spaces which can also serve as a learning environment.



A recreational area bringing the community together into an outdoor space to partake in water sports and other activities



Integrated into a greenbelt in the Cambridge region in the United Kingdom in a way which will blend into the environment.



Technologies utilised would be a brewery for CO<sub>2</sub>, a Bio-reactor, our autonomous machine learning plant nutrition system and recycled water systems.



Open marketplace for agricultural-related products and services.



Users can connect via the app and buy/sell their products and/or lease any equipment.



Providing a platform for companies that want an additional online sales channel.



Shortening supply chain between farmer and consumer.



Smart phone app that connects and provides support to growers in need of guidance with expert consultants 24/7.



Based on in-field of expertise, country, language and price.



Growers in need of guidance without the obligation of long-term commitment of a conventional on-site agronomist.



# OUR TEAM



**Johnathan Kol-Bar**  
Group Executive Chairman



**Johan van Zyl**  
Group CEO & President



**Dino Maletta**  
EVP Chief Group Financial  
Management



**Tobias Chang**  
SVP - Group Real Estate  
Development - CEO Ybest



**Mini Kol-Bar**  
VP - Group Financial Control  
Management



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VP Business Development



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Chief Agronomist



**Illia Volha**  
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**Mary C Radnor**  
VP - Special Assignments  
Financial Control Management



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Brand Identity Designer



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**Arsenii Popov**  
Quality Assurance Engineer



**Vladyslav Smirnov**  
Blazor Developer



**Andrew Dai**  
Group Analyst



**Iryna Nifantjeva**  
Financial Controller

# INVESTORS WHO PROVIDE MORE THAN CAPITAL

Live communication with an integrated cloud-based platform.



Japanese diesel engine manufacturing company established in 1912 that delivers solutions as an industrial equipment manufacturer. Yanmar's global business operations span across seven domains, including agricultural machinery.



Colombian company established in 2006 with the objective of promoting the use of land and the commercialization of agricultural products with export potential. GNA has the following companies: Croper (agricultural marketplace), AgriLink (agricultural events) and AgriCapital (agricultural lending platform).



UK-based co-investment facilitator established in 2009 focused on private equity investments and opportunities in the precision agriculture space, with a division in real estate development.





**Yellow Brick AgTech**

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