

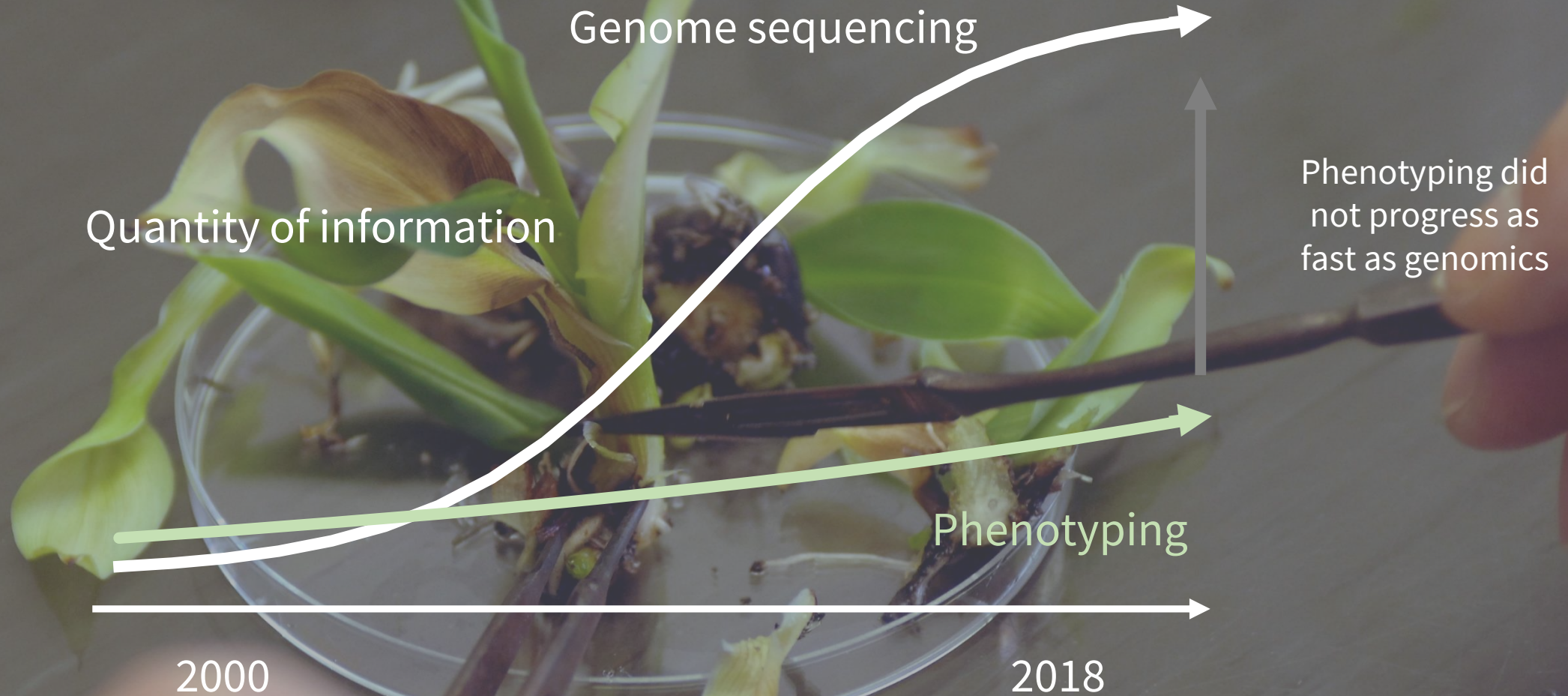


Plant breeding is more than genomics

Etienne David
Business Developer



The bottleneck of plant breeding



Phenotyping is different with robotics



X10,000

The data on
your trials

X500

The speed of
acquisition

99%

The savings on
acquisition

Blue River Technology
Computer Vision for Plant
Acquired for €305 million

Indigo Agriculture
Microbial Crop technology
Raised \$203 million

TRADITIONAL BREEDERS ARE ALREADY BEING CHALLENGED

Alphabet X (Google)
Artificial Intelligence

FarmBeats (Microsoft)
IoT Platform

You are only three steps away

Data Acquisition

Get Tb of data
about your field →

Data Science
Transform your
data in traits
and variables →

Crop Science
Link genotype
and phenotype

Ready to scan your trials ?

Enjoy Hiphen's outstanding crop traits and variables

Flexible Data Acquisition		Powerful analysis	
Airphen <i>Designed for phenotyping</i>	Other sensors <i>Easy integration</i>	Cloverfield <i>Phenotyping as a Service</i>	Agisoft plugin <i>Get reliable data</i>
6 high-res spectral band Flexible focal length Fully synchronizable Double-swath	RGB high-res Thermal camera LIDAR Hyperspectral radiometer Sentinel-2 Etc...	Data storage and fusion Most advanced models (including Machine learning and Deep Learning)	Radiometric calibration Geometric corrections Basic spectral indices

The right vector for your challenges

Systems at all spatial and temporal resolutions



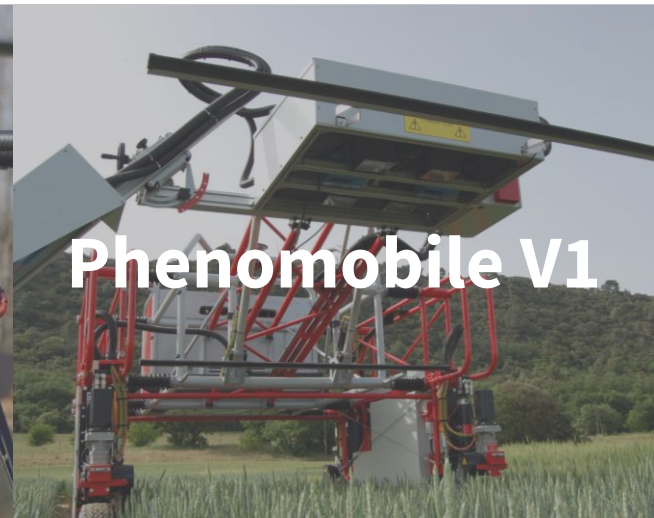
Greenhouse



Field IoT



Multirotor UAV



Phenomobile V1



Handheld



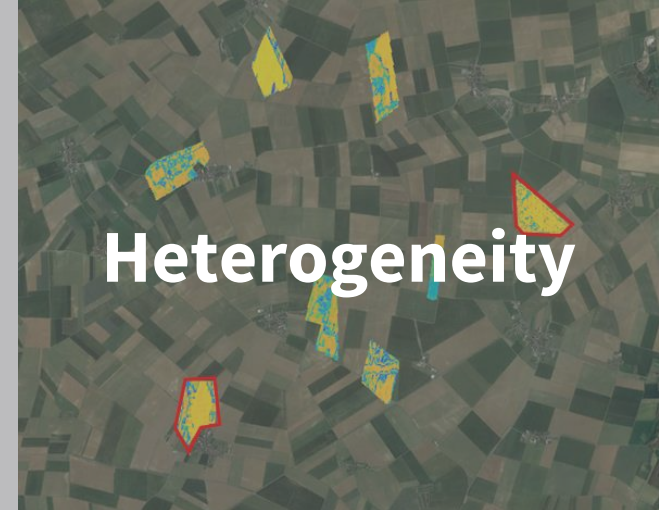
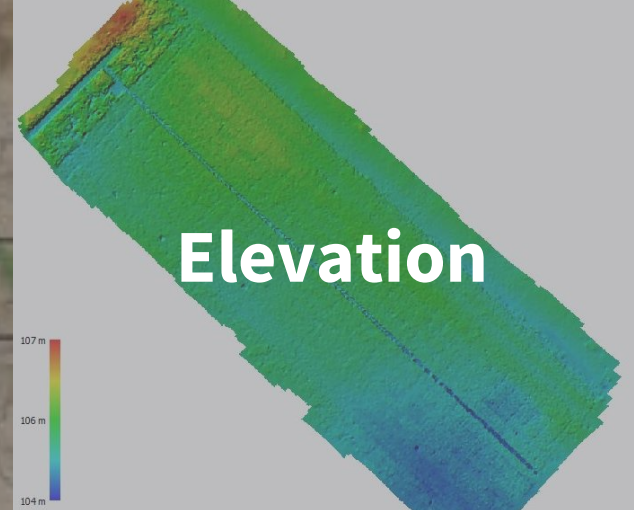
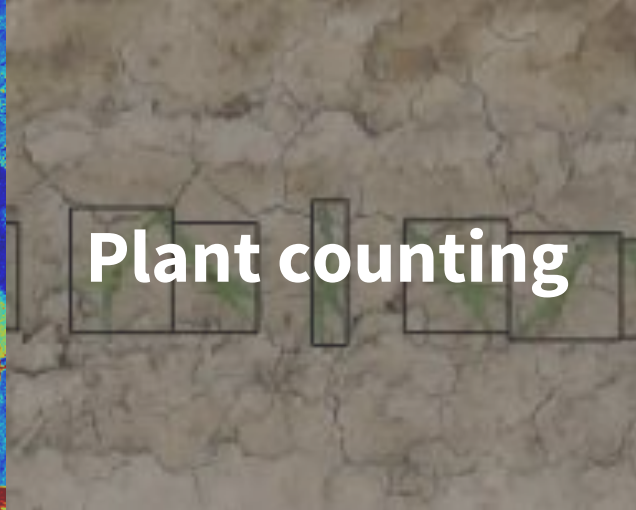
Sentinel



Fixed wings



Phenomobile V2



A small taste of our skills

Advanced Algorithms: Model inversion to deep learning

Quality insured by our experts



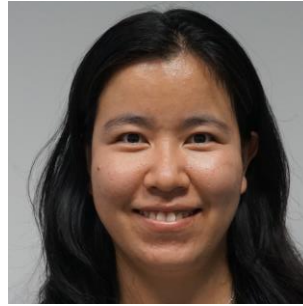
#DataScience



#IoT



#Software



#Algorithms



#Operations



#Datafusion



#Sensors



#Vision

Founding team



Alexis Comar
CEO
@Hiphen
Phd + HEC



Frédéric Baret
Research
Director @INRA
h-index: 71



David Gouache
Head of
Research
@Terres inovia



Benoit de Solan
Expert @Arvalis

Already four year of track records



Testimonials



BIOGEMMA



Florimond Desprez

Let's solve your challenges !

	Standard	Advanced	Expert
Outputs	Vegetation indices orthoimages Reflectance orthoimages Dense Cloud Digital Elevation Model	Vegetation height Plant counting Leaf Area index + Coverage Ratio Average Leaf Angle Fraction of intercepted radiation	Development of operational methods for new traits and variables, with scientific validation. Ex: Organs counting, disease quantification
Analyse	Airphen plugin for Agisoft-Photoscan	Cloverfield Cloud platform	Cloverfield Cloud platform + Hiphen expertise
Sensors	Airphen	Airphen	Airphen + RGB, thermal, LIDAR
Vectors	Handheld device Field IoT system UAV	Handheld device Field IoT system UAV	Phenomobile Satellite imagery + all from advanced

CONTACT US !

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