



van den borne  
aardappelen



# The company

VAN DEN BORNE AARDAPPELEN

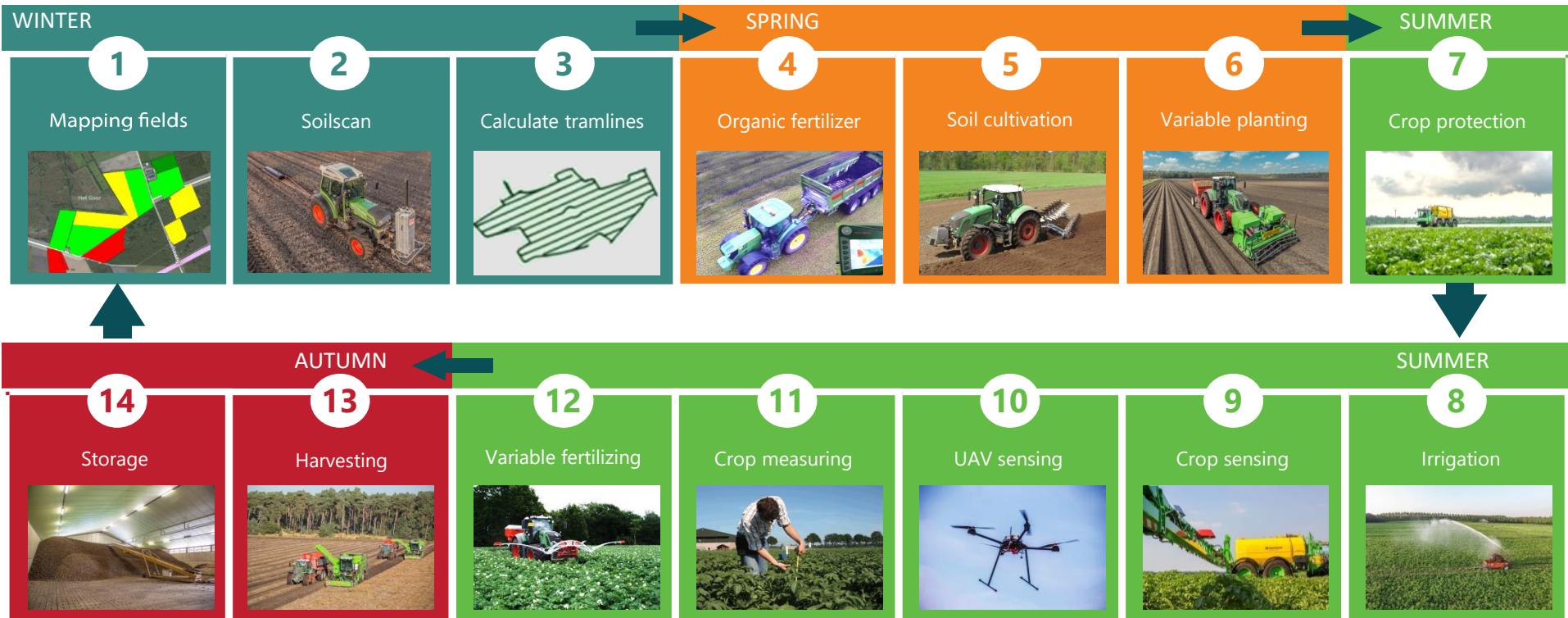


- Arable farming , Sandy soil
- Reusel, Noord-Brabant – The Netherlands
- 5 co-workers
- 180 fields, average size 3ha , average of 6 corners for each field = 13 % overlap
- Precisiontechnology since 2006, PrecisionFarming since 2009



# Precisionfarmingcyclus

VAN DEN BORNE AARDAPPELEN



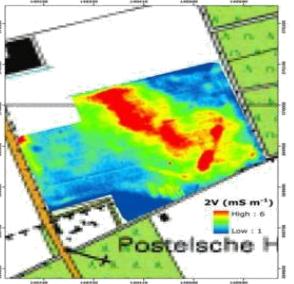
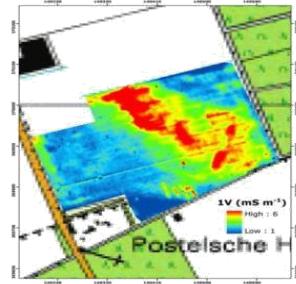
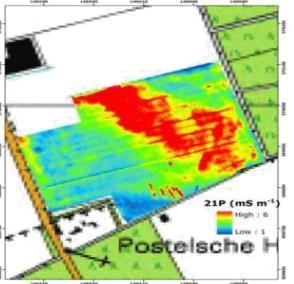
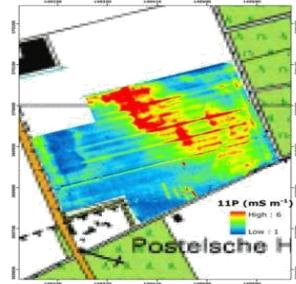
# Soil scan

VAN DEN BORNE AARDAPPELEN



2

Soil scan



**ORBit**  
[www.orbit.ugent.be](http://www.orbit.ugent.be)



1

2

3

4

5

6

7

8

9

10

11

12

13

14



## Controlled traffic farming

- Controlled traffic farming has an average of 7% more yield

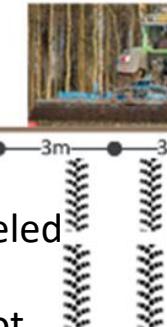


# Calculate tramlines

VAN DEN BORNE AARDAPPELEN



Current situation

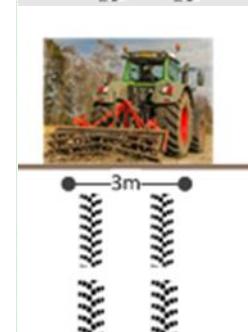
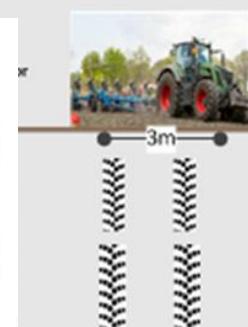
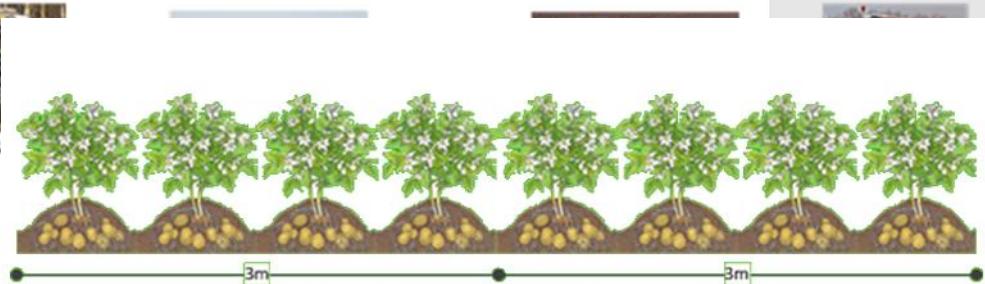
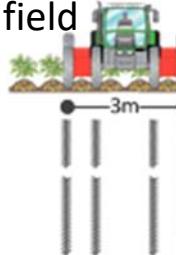


Desired Situation

In desired situation

spring

- At least 2/3 non-wheeled
- On the traffic lanes not more soil compaction than applied to the whole field in current situation



# Organic fertilizer

VAN DEN BORNE AARDAPPELEN



4

Organic fertilizer



JOHN DEERE

2016 N: Application

Layer: As Applied Rate



Operations Center

Blokseschuur tegen m

van ejck borne | Vd Borne

1

2

3

4

5

6

7

8

9

10

11

12

13

14

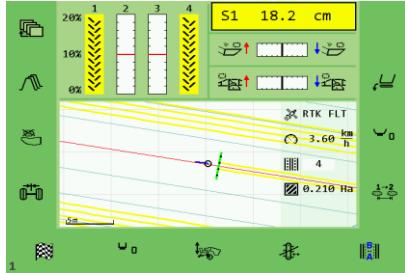
# Variable planting

VAN DEN BORNE AARDAPPELEN



6

Variable planting



1

2

3

4

5

6

7

8

9

10

11

12

13

14

# Irrigation

VAN DEN BORNE AARDAPPELEN



8

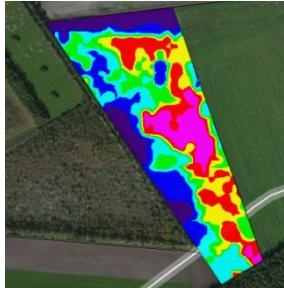
Irrigation



Weather data



Soilconductivity



Soilmoister



1

2

3

4

5

6

7

8

9

10

11

12

13

14



# Crop measuring

VAN DEN BORNE AARDAPPELEN



11

Crop measuring



Increase your growth



1 m<sup>2</sup> rooien  
(3 planten)



hoogte  
grond tot top  
stengel



aantal  
stengels



aantal  
etages



weeg  
stengels +  
loof van de  
gerooide  
planten



weeg  
wortels



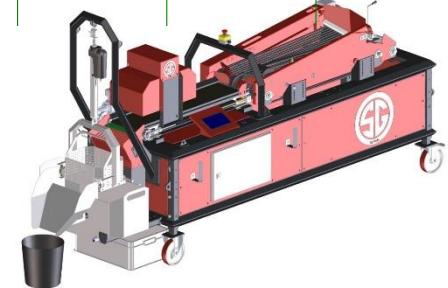
sorteer+tel  
knollen



weeg  
knollen  
per maat



weeg OWG  
+ BWG van  
hele partij



1

2

3

4

5

6

7

8

9

10

11

12

13

14

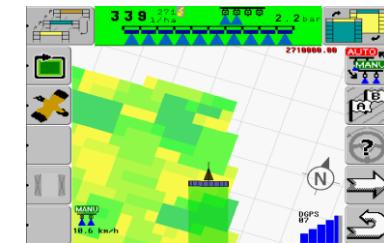
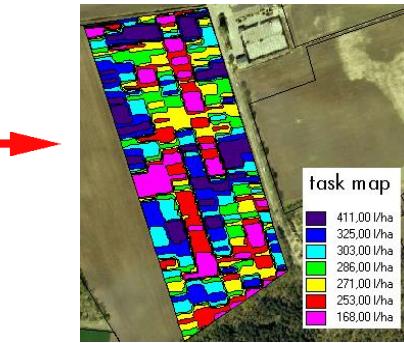
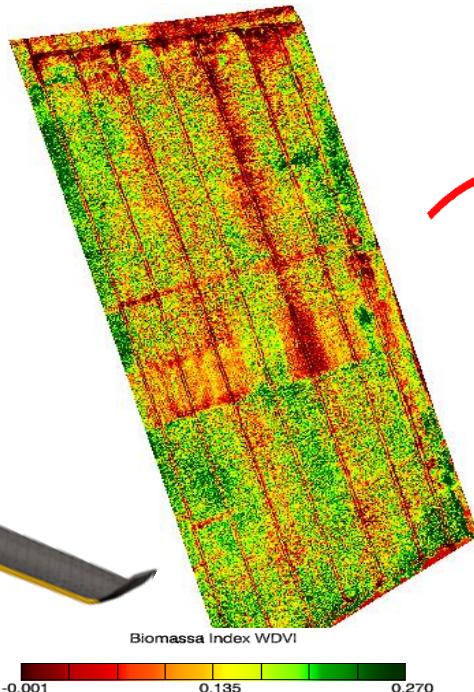
# Variable fertilizing

VAN DEN BORNE AARDAPPELEN



12

Variable fertilizing



1

2

3

4

5

6

7

8

9

10

11

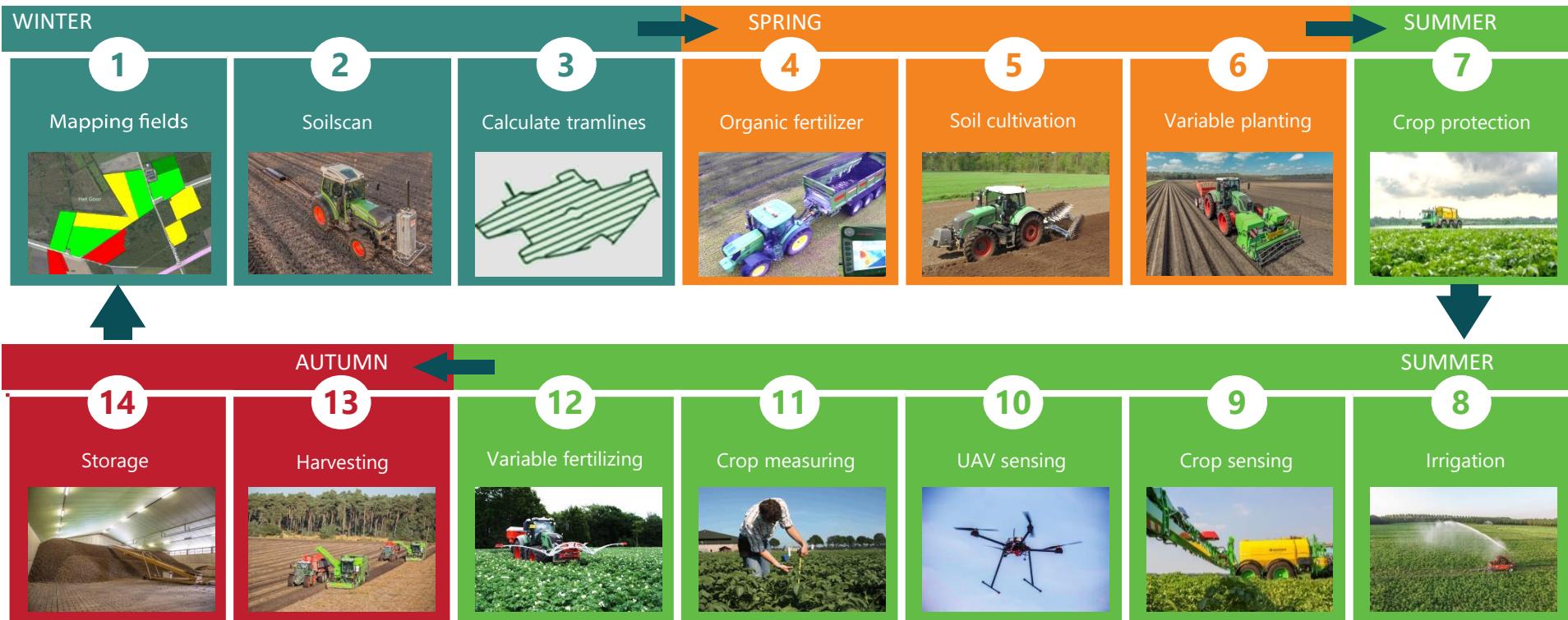
12

13

14

# Precisionfarmingcyclus

VAN DEN BORNE AARDAPPELEN





# Praktijk Centrum Voor Precisie Landbouw



Proeftuin voor  
Precisielandbouw



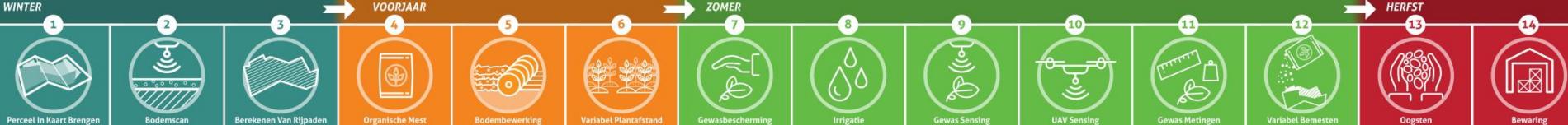
Provincie Noord-Brabant



Ministerie van Economische Zaken



Proeftuin voor Precisielandbouw wordt mede mogelijk gemaakt door bijdragen van het Europees Fonds voor Regionale Ontwikkeling, het Rijk en de provincie Noord-Brabant in het kader van OPZuid.



# Precision Farming

VAN DEN BORNE AARDAPPELEN



INFORMATIE  
VLAANDEREN



**vito**  
vision on technology

**CZAV**  
VAN EN VOOR BOEREN

**Kverneland**



**Fleuren**  
BOOMKWEKERIJ

**Delphy**

**DAMMANN®**  
Pflanzschutztechnik  
Fahrzeugtechnik  
Airporttechnik

**SUIKER UNIE**  
A ROYAL COSUN COMPANY

**SESVANDERHAVE**  
sugar beet seed



**FARM FRITES®**

**VAN IPEREN**  
INTERNATIONAL

100 JAAR  
NEDERLANDSE GOLF FEDERATIE  
NGF

**Helicon**  
OPLEIDINGEN

CLUB PELLIKAAN  
FOR THE HEALTHY FEW

**FENDT**

STICHTING  
VELDLEEUWERIK

Rusthoeve  
agrarisch innovatie  
en kenniscentrum

**Praktijkcentrum  
Voor Precisie Landbouw**

**TU/e**

Technische Universiteit  
Eindhoven  
University of Technology

**ZLTO**

**has**  
hogeschool

**ILVO**  
Instituut voor Landbouw en Visserij-onderzoek

**imants**  
125 Years Quality Cultivation

**FME**   
POWERED  
BY DUTCH  
TECHNOLOGY

**dutch design  
foundation**

**NXP**

**ORBit**  
[www.orbit.ugent.be](http://www.orbit.ugent.be)

Data  
Science  
School

**GRIDS**

**TILBURG** UNIVERSITY

**HZPC**  
Growing with our potatoes

**AGRICO**

**BAYER**

**FrieslandCampina**

# Precision Farming

VAN DEN BORNE AARDAPPELEN



Thanks for your attention!



Interested? Visit:

[www.vandenborneaardappelen.com](http://www.vandenborneaardappelen.com)



/jacobvdborne



/vandenborne