Handling and applying digestate

1. Who is Samson-very short
2. What is unique for Samson – flexibility- implement range
3. Nutrient efficiency by different applications, what is achieved
4. How to be sure : What you want to do➔ is what you are doing
5. How to documentate the work done

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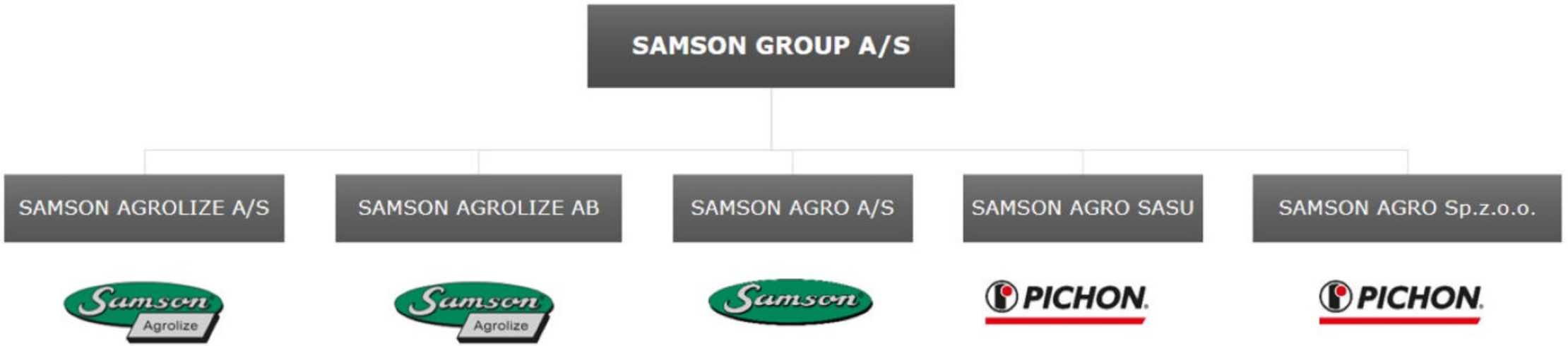
1A

SAMSON GROUP A/S: one group, five entities



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1B


SAMSON AGRO A/S
SAMSON AGROLIZE A/S
Denmark
SAMSON AGROLIZE AB
Sweden
SAMSON AGRO Sp.z.o.o.
Poland
SAMSON AGRO SASU
France
Norvège
Finlande
Golfe de Bothnie
Mer du Nord
Danemark
Royaume-Uni
Irlande
Londres
Pays-Bas
Berlin
Allemagne
Belgique
Paris
France
Lettonie
Lituanie
Moscou
Москва
Biélorussie
Pologne
Prague
Tchéquie
Slovaquie
Vienne
Autriche
Budapest
Hongrie
Ukraine
Moldavie
Roumanie
Croatie
Serbie
Italie
Barcelone
Rome
Bulgarie
Mer Noire
Géorgie

2A

The basis machine- The Samson tanker

	PG II 16	PG II 18	PG II 20	PG II 18 Genesis	PG II 20 Genesis	PG II 21	PG II 25	PG II 28	PG II 31	PG II 35
Tank volume [m³]	16	17.8	19.8	18.6	20.7	20.5	25.6	27.8	30.9	34.5
Tank diameter [mm]	1850	1950	2050	1850	1950	1950	2200	2200	2200	2200
length [mm]	8600	8600	8600	9315	9315	9315	9315	10165	10815	11815
Number of wheel axles [pcs]	2	2	2	2	2	3	3	3	3	3
Max. wheel diameter [mm]	1680	1680	1680	1850 *1980	1850 *1980	1680	1680	1850	1850	1850

*Not released in all countries due to homologation

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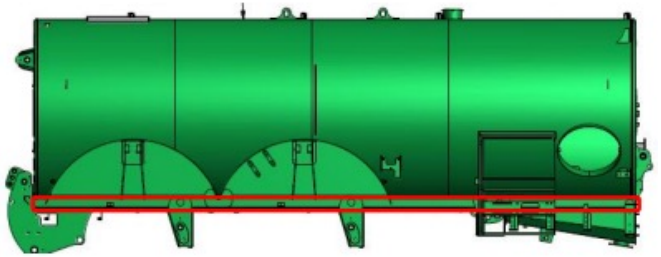
2B

A Samson tanker is an implement carrier , not just a tanker.- Flexibility

With strong frame for pulling implements and 9 t linkage capacity.
Makes it possible to carry effective implements and handle the forces comming from implements under work

Straight frame in one piece from drawbar to the linkage

- The perfect way to transmit the power from the tractor to the implement
- Gives the lowest weight
- Increases the lifetime of the frame



A Samson is efficient with 6m3/min to 12m3/min filling capacity.
, and up to 14 m3/min unloading.
Centrifugal pumps ,less maintennance
Beat vacuum tankers big time in cycle time pro load.
Designed also for intensive road transport with load ➔ Less cost pro m3 because of capacity

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2C

- SBX 16-24 = 16, 18, 20 & 24 meter
- SBX 18-24 = 16, 18, 20 & 24 meter

- SBX2 16-18 = 16 & 18 meter
- SBX2 16-24 = 16, 18, 20 & 24 meter
- SBX2 18-24 = 16, 18, 20 & 24 meter
- SBX2 20-28 = 16, 18, 20, 24 & 28 meter
- SBX2 20-27 = 15, 16, 18, 21, 24 & 27 meter
- SBX2 20-30 = 18, 20, 24, 28 & 30 meter

SBX – one distributor
SBX2 – two distributors

- SHB4 30 C = 18, 24 & 30 meter
- SHB4 30 = 18, 24 & 30 meter

- SHB4 36 = 20, 24, 30 & 36 meter
- SHB4 36 = 24, 30 & 36 meter

Four distributors

Draghose boom in different wides an types .
Because they are meaned to be used in crops

Which also means working with must apply to tramlines system/with

Going from earlier 12m now up to 36m

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2D

Grassland injectors

Single disc injector

Single disc injector

Double disc injector

TE 8	TS 8 TS 12	TD 8 Mk3 TD 12 Mk3

Black soil injectors

Two-bar tine incorporator

Three-bar tine incorporator

Two-bar disc incorporator

CM 6 CM 7.5	CMX 6.1 CMX 6.7 CMX 8.6	SD II 500 SD II 600 SD II 700

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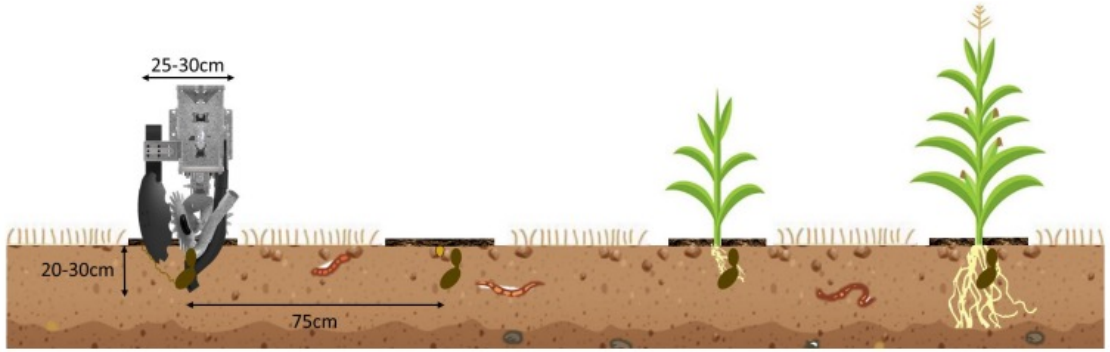
2E

- Use of minimum tillage
- Soil-drying and warming benefits of coventional tillage
- Agronomic no-till advantages
- Only the seed row portion af the soil is disturbed
- Pathway and seedbed is created through the residue of the previous crop
- Residue is moved in between the tilled rows to protect the soil
- Reduced fuel consumption

For more than 20 years this method has been used in northern America. It is now spreading throughout Europe combining the advantages of conventional tillage and plowing

Strip-Till
Or placed slurry for maize

- Row width from 25 to 30 cm
- Working depth from 20 to 30 cm
- 75 cm standard distance between rows
- Distance from seed to slurry is approximately 5 to 7 cm



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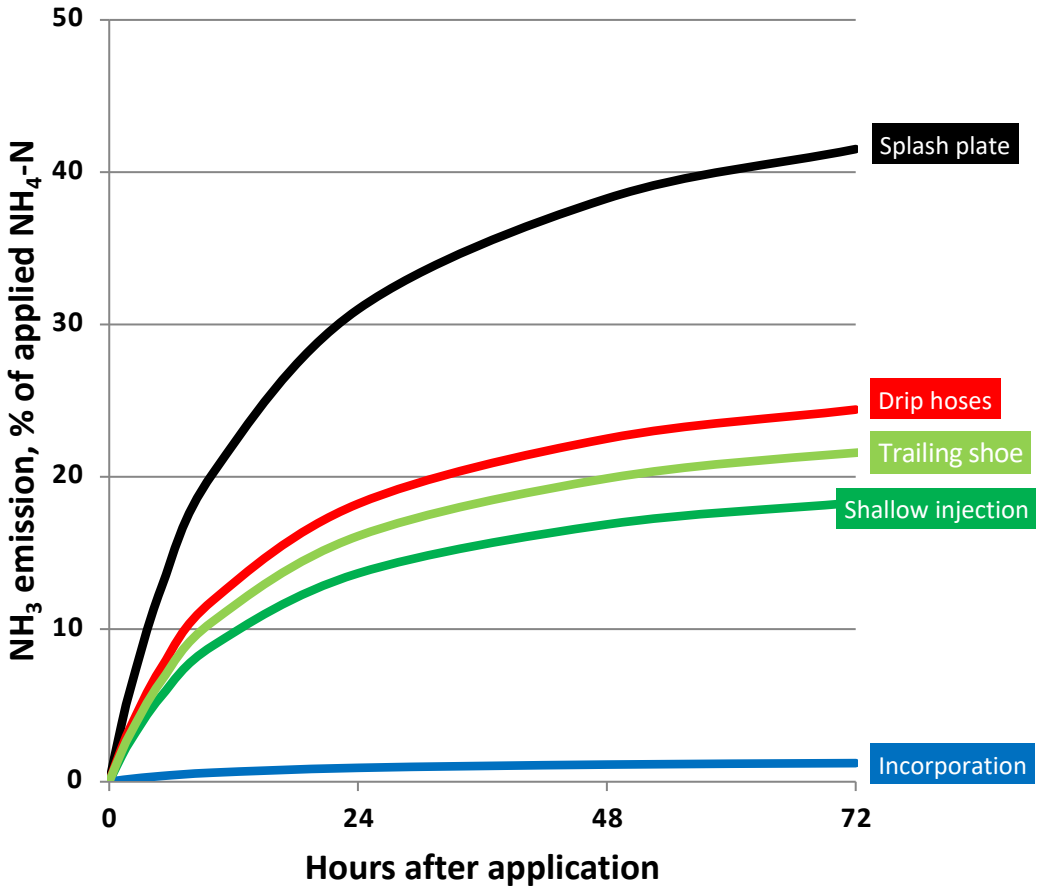
Ammonia volatilisation with different application techniques



- Example of average ammonia loss as % of applied ammoniacal nitrogen (NH_4-N)
- Splash plate spreading is judged to have a volatilisation loss which is a factor of 1.7 higher than drip hose application
- Shallow injection in grass is judged to have a volatilisation loss which accounts for approx. 75% of the loss from slurry applied with drip hoses
- Incorporation in black soil is judged to have a volatilisation loss which accounts for approx. 5% of the loss from slurry applied with drip hoses
- Source: Hansen *et al*, 2008.

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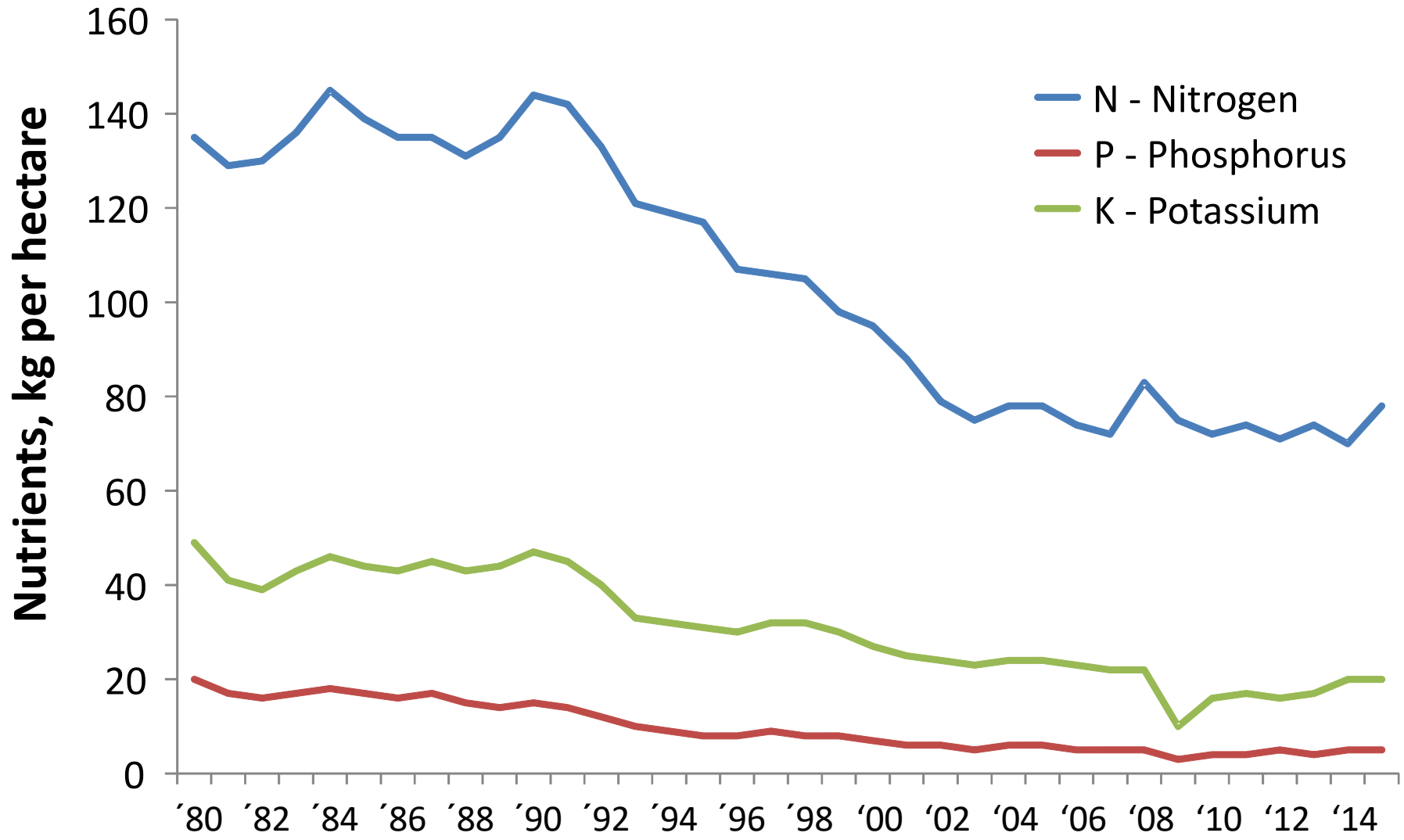
3B

Consumption of mineral fertilizers, 1980-2015



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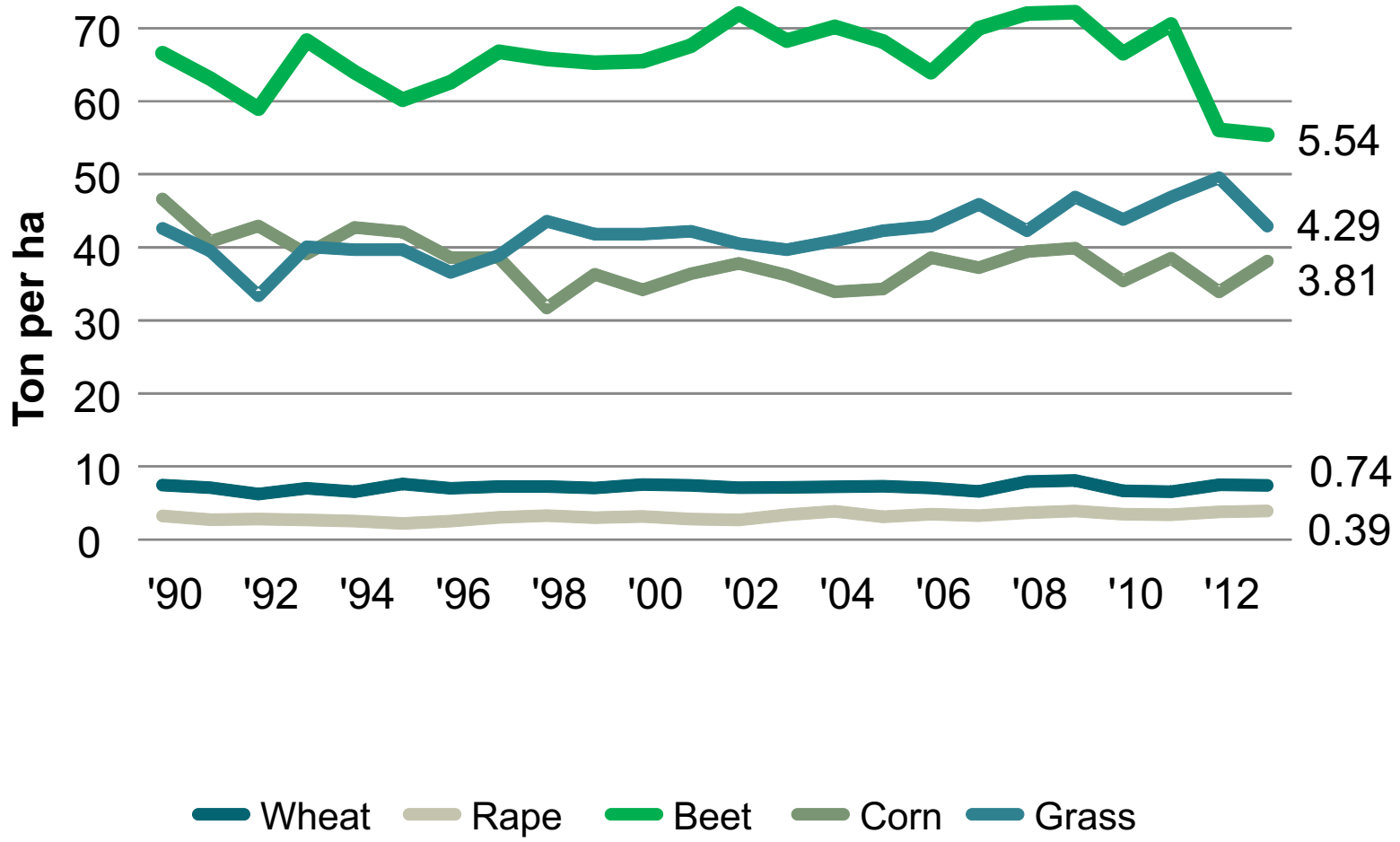
Crop yields, 1990-2012



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4A

1. Have the needed storage capacity , so storage capacity is not deciding ,when it has to beapplied in the field.
2. Have the machine capacity for applying under good conditions in time.
3. What is in it N, P, K o r ? Get a representative samples of the digestate pro m3
4. Have equipment with auto dosage control, which give the m3/ha that is wanted
5. Get documentation for the applying done ➔and then top dress with fertilizer

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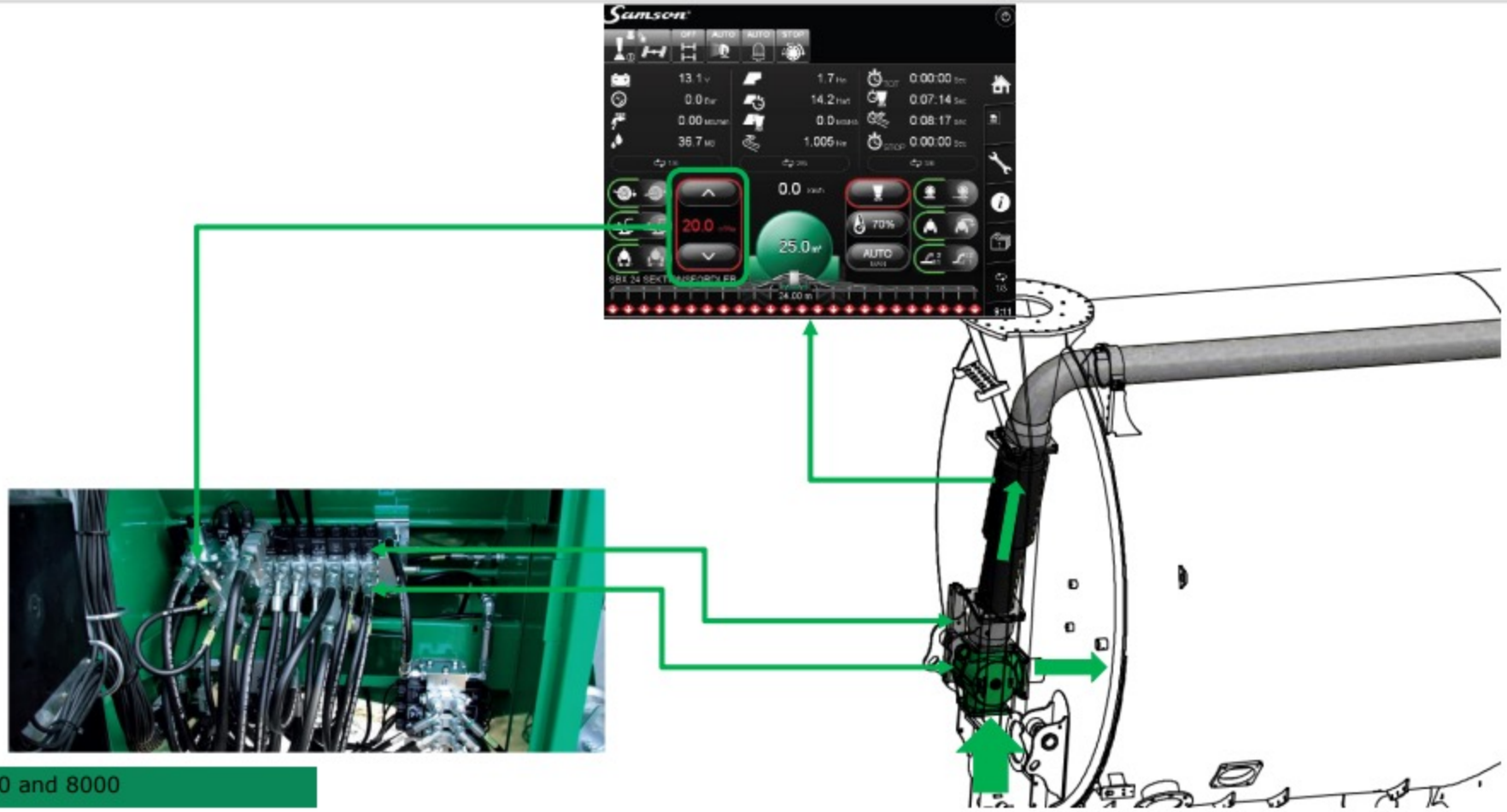
4B

Auto dosage of the slurry



Standard on SlurryMaster 6000 and 8000

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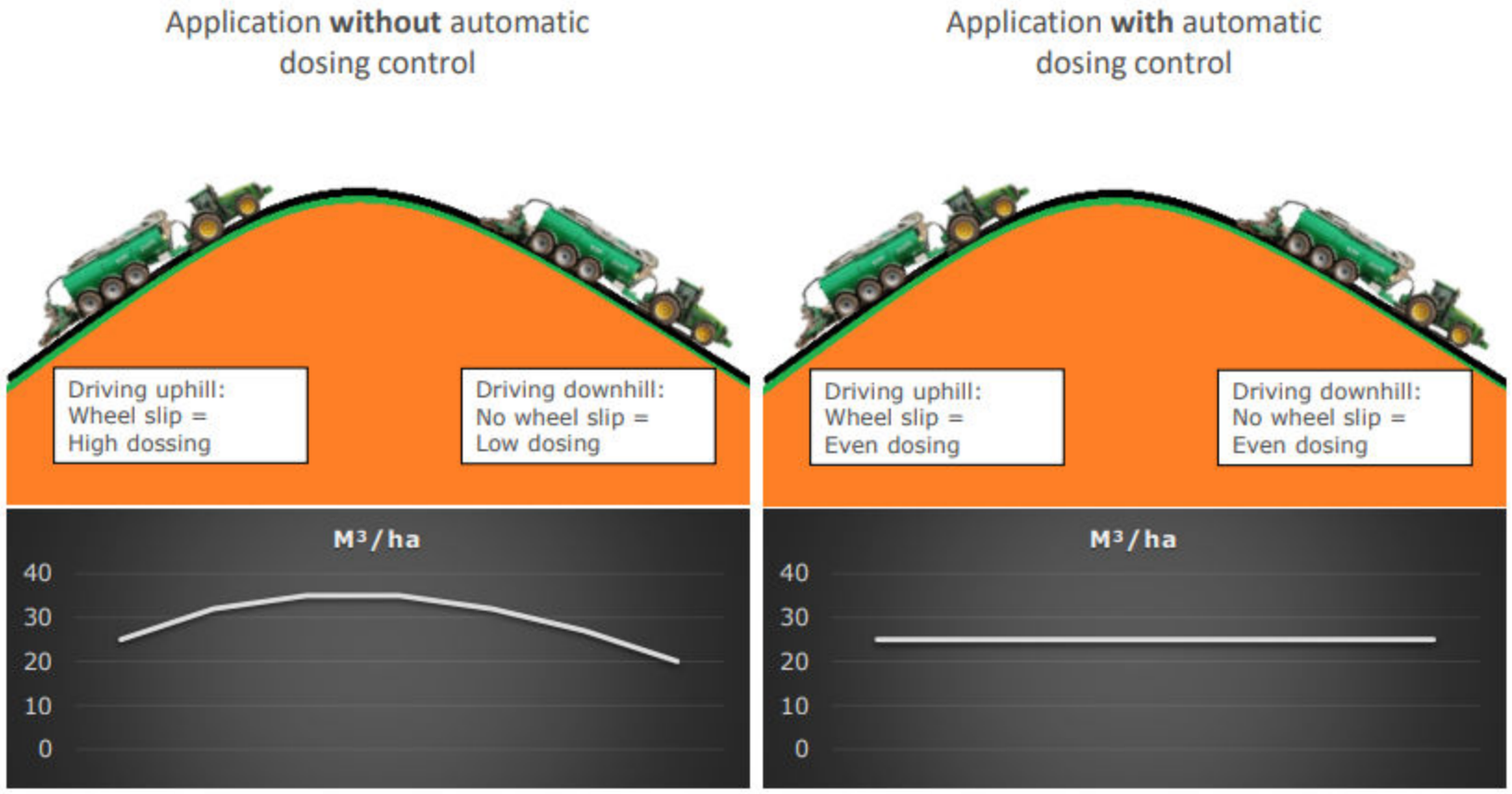
4C



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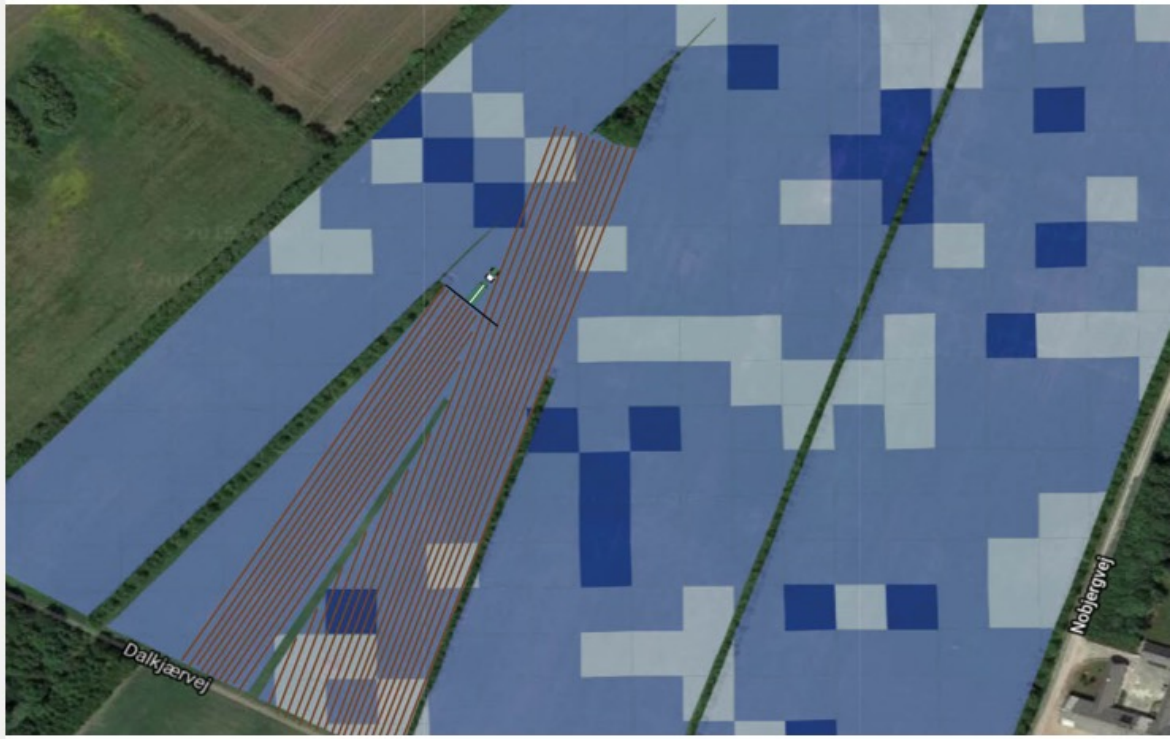
4D

TC-SC - Task Controller Section Control

Section control

"Automatic section control" minimises the double application of natural fertilizers, thereby reducing overdosing in local zones of the field. This is beneficial for both the environment and the yield.

GPS system is used to automatically engage/disengage individual sections on the application implement in areas where application has already taken place, e.g. wedges, overlaps and headlands.



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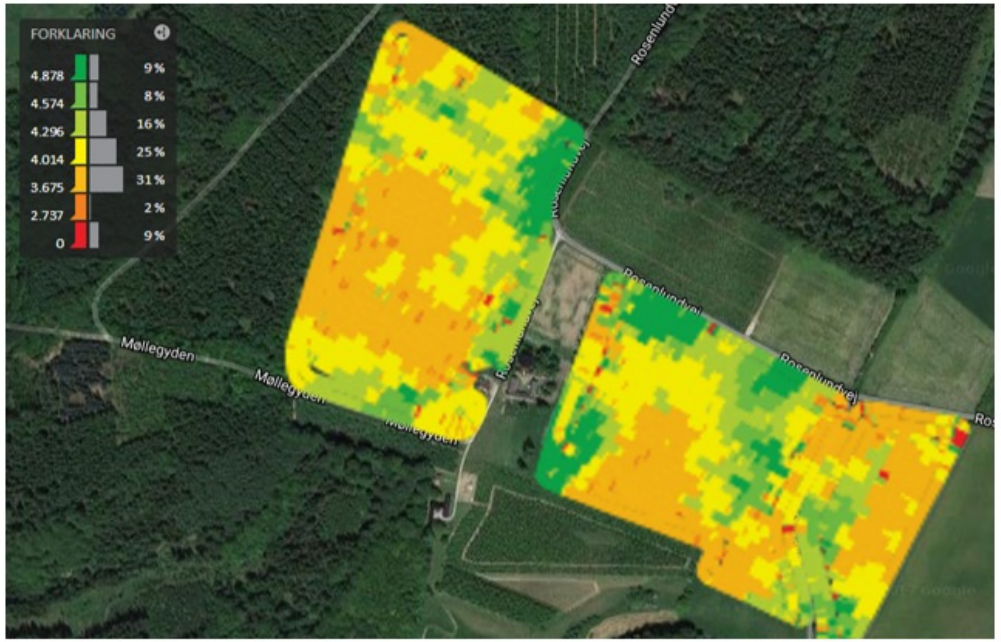
4E

TC-GEO - Task Controller geo-based

The VRA can be used to document the applicated amount by position and rate. This is required when applicating some materials in some countries.

The system draws a map during the application. This map can be exported for documentation of where, what, when and how much has been spread.

- Full documentation of applied material
- A tool to generate bills from



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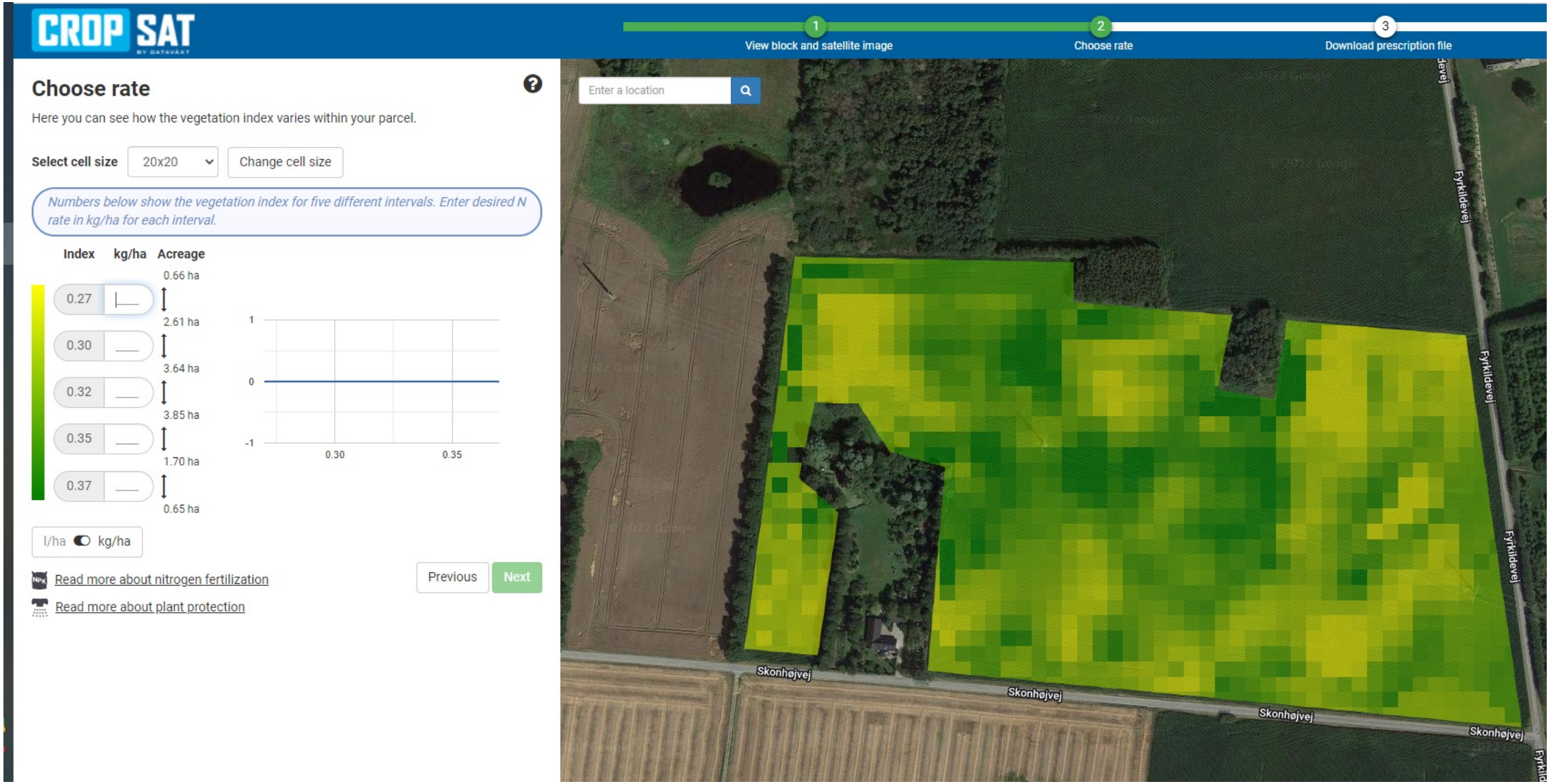
4E

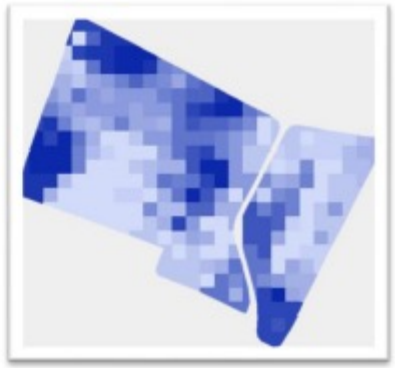

CROP SAT
BY DATAVÆXT
1 View block and satellite image
2 Choose rate
3 Download prescription file
Choose rate
Here you can see how the vegetation index varies within your parcel.
Select cell size
20x20
Change cell size
Numbers below show the vegetation index for five different intervals. Enter desired N rate in kg/ha for each interval.
Index
kg/ha
Acreage
0.27
0.66 ha
0.30
2.61 ha
0.32
3.64 ha
0.35
3.85 ha
0.37
1.70 ha
0.65 ha
1
0
-1
0.30
0.35
l/ha
kg/ha
Read more about nitrogen fertilization
Read more about plant protection
Previous
Next
Enter a location
Fyrkildevej
Skonhøjvej

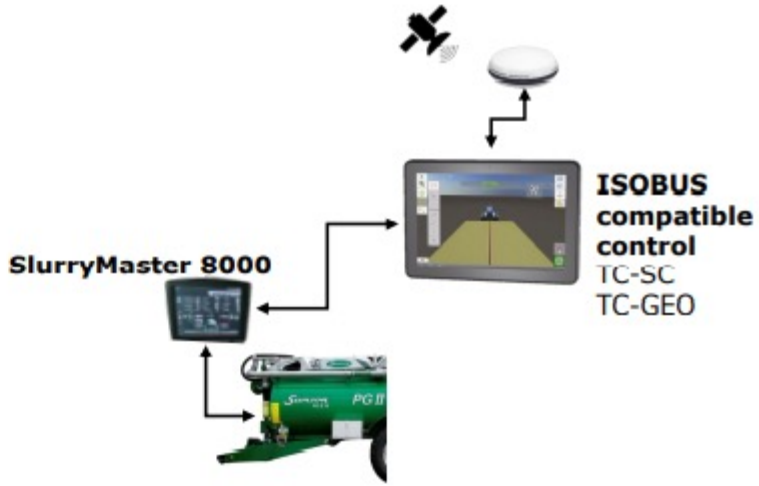
5A

SlurryMaster 8000 ISOBUS

- ISOBUS TC-SC - Automatic section control
  - Minimises the double application of natural fertilizers
  - Prepared for headland boundary control
  - application is engaged/disengaged automatically in the headland
- ISOBUS TC-GEO - Variable dosing
  - variable dosing ensures very precise application
  - Improved utilization of natural fertilizer
  - Full traceability of the natural fertilizer application
- Automatic synchronisation of implement data

Optional on SlurryMaster 8000





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5B

Controlled with SlurryMaster 8000

20 job counters

- 1 total counter
- 1 season counter
- 18 Costumer jobs

Save on USB

- Export data in Excel format

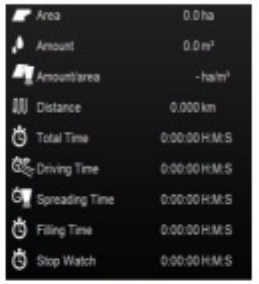
Thermal Printer

- Full documentation
- Driver can sign for his work
- 11cm wide paper
- No ink. Heats up special paper instead

Job counters are standard on SlurryMaster 8000

Data export is standard on SlurryMaster 8000

Printer is option on SlurryMaster 8000



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5C

Thanks for your time

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