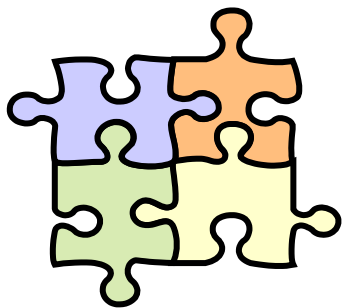


Kartoffelworkshop 2016

Lars Bødker

BETYDNING AF SÆDSKIFTET FOR AFMODNING

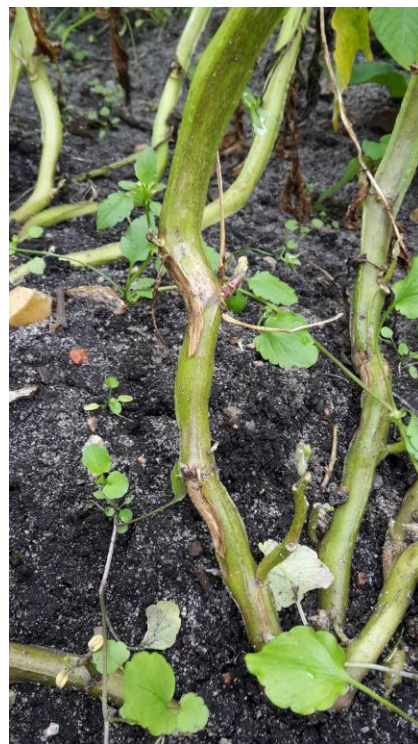


SÆDSKIFTETS BETYDNING FOR TIDLIG AFMODNING "CASE STORY"

- Betydning af sædskifte er "gammel viden"! Men hvad betyder det?



"CASE STORY"





TESTRESULTATER

NAK - HOLLAND

: The symptoms are caused by the following bacterial species

identification	result
1. Carl - black	<i>Pectobacterium</i> <u>atrosepticum</u> , <i>Pectobacterium</i> <u>wasabiae</u>
2. Carl - crack	<i>Pectobacterium</i> <u>atrosepticum</u> , <i>Pectobacterium carotovorum</i> subsp. <u>brasiliense</u>



TESTRESULTATER 2

NAK - HOLLAND

Result

:

1	The “swollen” lesions are primary caused by <i>Spongospora subterranea</i> (powdery scab). The heel end rot (also on this tubers) by <i>Pectobacterium atrosepticum</i> .
2	The primary cause of this symptom is <i>Colletotrichum coccodes</i> (black dot). Also a slight secondary infection of <u><i>Pectobacterium atrosepticum/wasabiae</i></u> detected.
3	<u><i>Pectobacterium atrosepticum</i></u> . The stems are also heavy infected with <u><i>Colletotrichum coccodes</i></u> (black dot)

BLACK DOT – VERTICILLIUM – ANDET

MALGORZATA KOWALIK-KEPLER - LANDBONORD

		black dot	verticillium	andre
1		1A	1	0
2		2A	1	0
3		3A	1	0
4		4A	1	0
5		5A	0	0
6		6A	1	0
7		7A	0	1
8		8A	0	0
9		9A	0	0
10		10A	0	0
1		1B	1	0
2		2B	1	0
3		3B	0	2
4		4B	0	2
5		5B	0	0
6		6B	0	3
7		7B	0	3
8		8B	0	0
9		9B	0	0
10		10B	0	0

Grønne stængler

Visne stængler

BLACK DOT – VERTICILLIUM – ANDET

MALGORZATA KOWALIK-KEPLER - LANDBONORD

		black dot	verticillium	andre
1		1A	1	0
2		2A	1	0
3		3A	1	0
4		4A	1	0
5		5A	0	0
6		6A	1	0
7		7A	0	1
8		8A	0	0
9		9A	0	0
10		10A	0	0
1		1B	1	0
2		2B	1	0
3		3B	0	2
4		4B	0	2
5		5B	0	0
6		6B	0	3
7		7B	0	3
8		8B	0	0
9		9B	0	0
10		10B	0	0

Grønne stængler

Visne stængler

ALT FOR TIDLIG AFMODNING











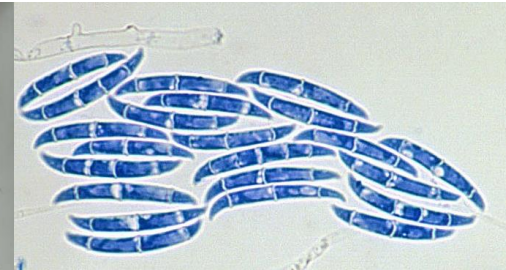






SÆDSKIFTESYGDOMME/SKADEGØRERE

- Black dot
- Verticillium
- Rhizoctonia
- Fusarium
- Phoma
- Pythium
- Cystenematoder
- Fritlevende nematoder
- Etc. etc.
- Brok



ÅRSAGER CYSTENEMATODER



ÅRSAGER

BLACK DOT – VERTICILLIUM



FUSARIUM

BÅDE I JORDEN OG PÅ LÆGGEKARTOFLER



RODFILTSVAMP



PULVERSKURV- (BROK!)



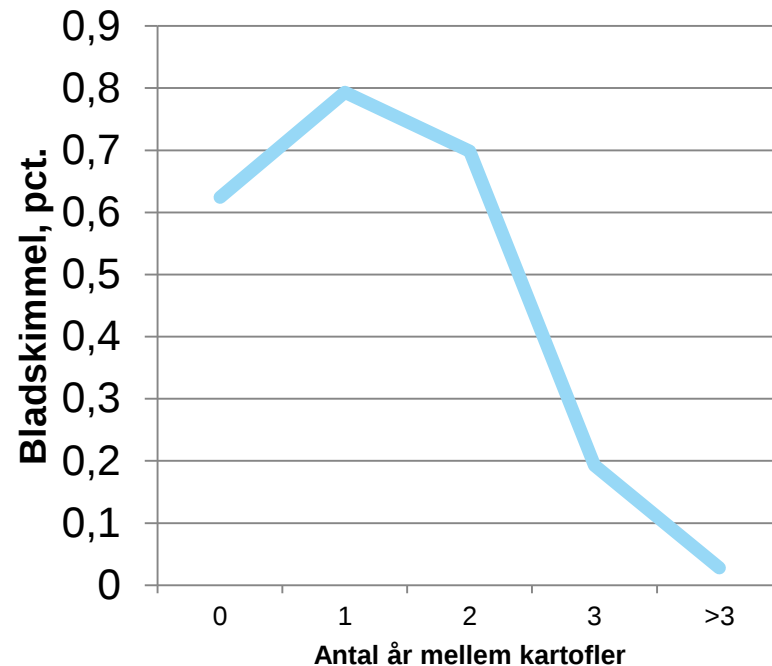
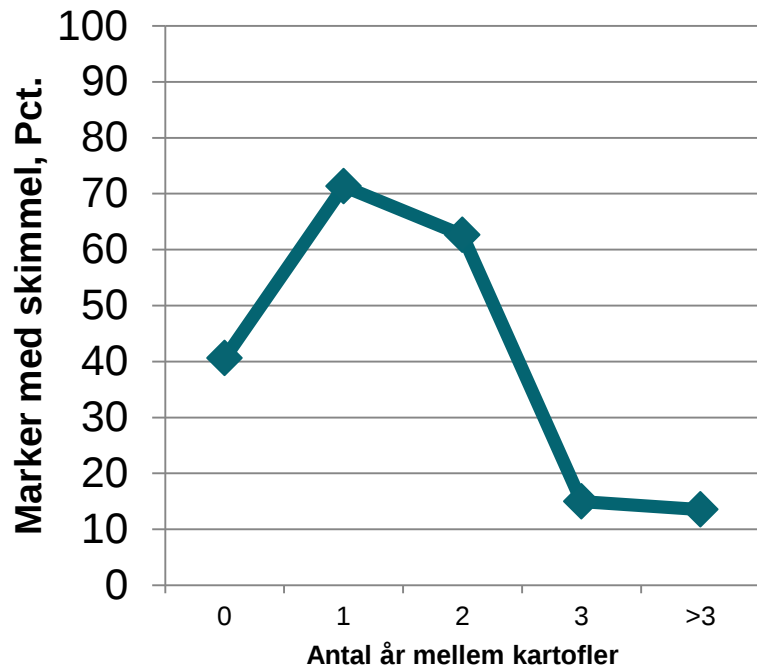
(KARTOFFELSKIMMEL)

JORDSMITTE OG FOR HØJT N-NIVEAU

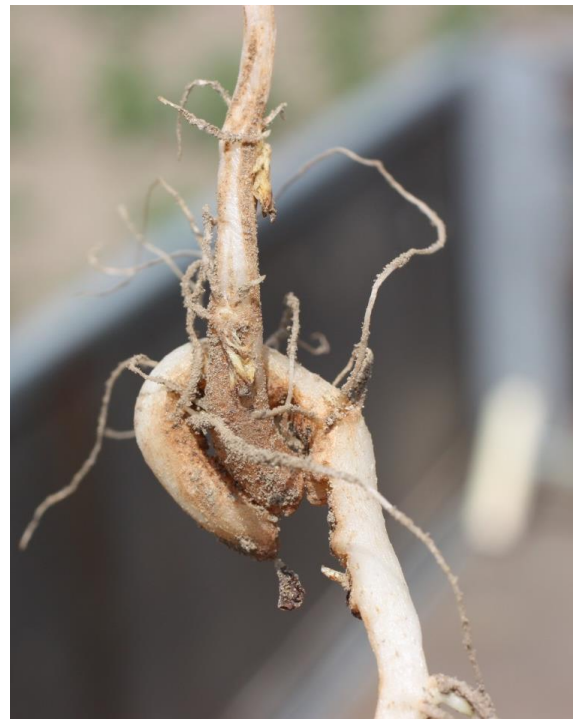


SKIMMEL OG SÆDSKIFTE

1999-2001



(FRITLEVENDE NEMATODER)

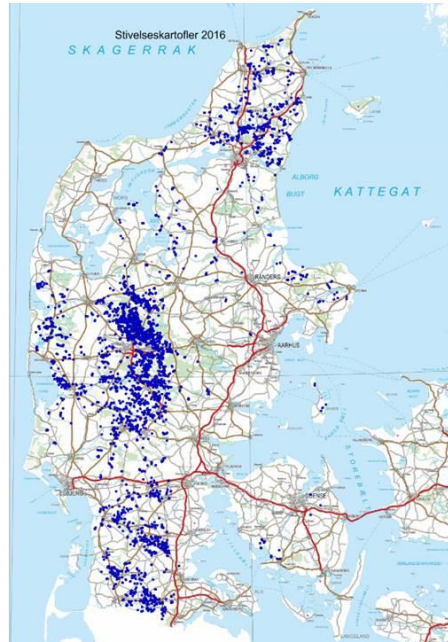


(KALIUMMANGEL)

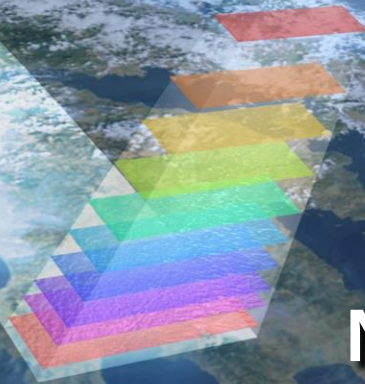
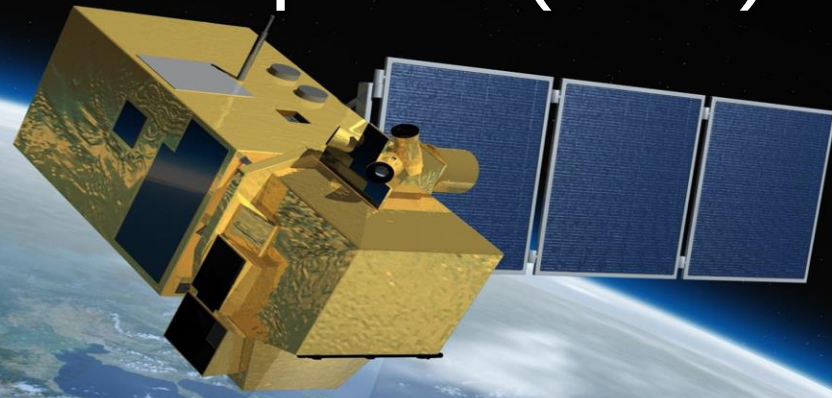


STIVELSESKARTOFLER I DANMARK 2016

3.726 MARKER I ALT 26.160 HA



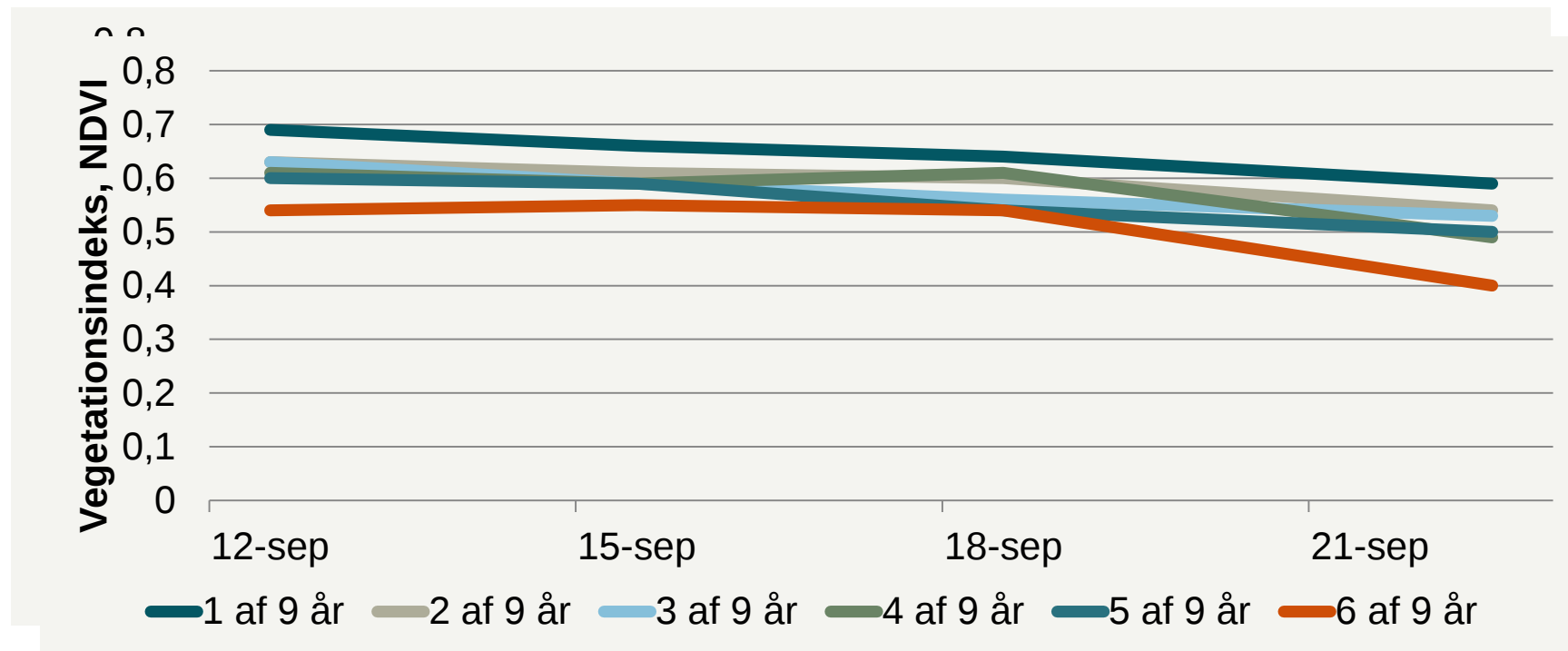
CropSAT (ESA)



NDVI – måling (10 x 10 meter)

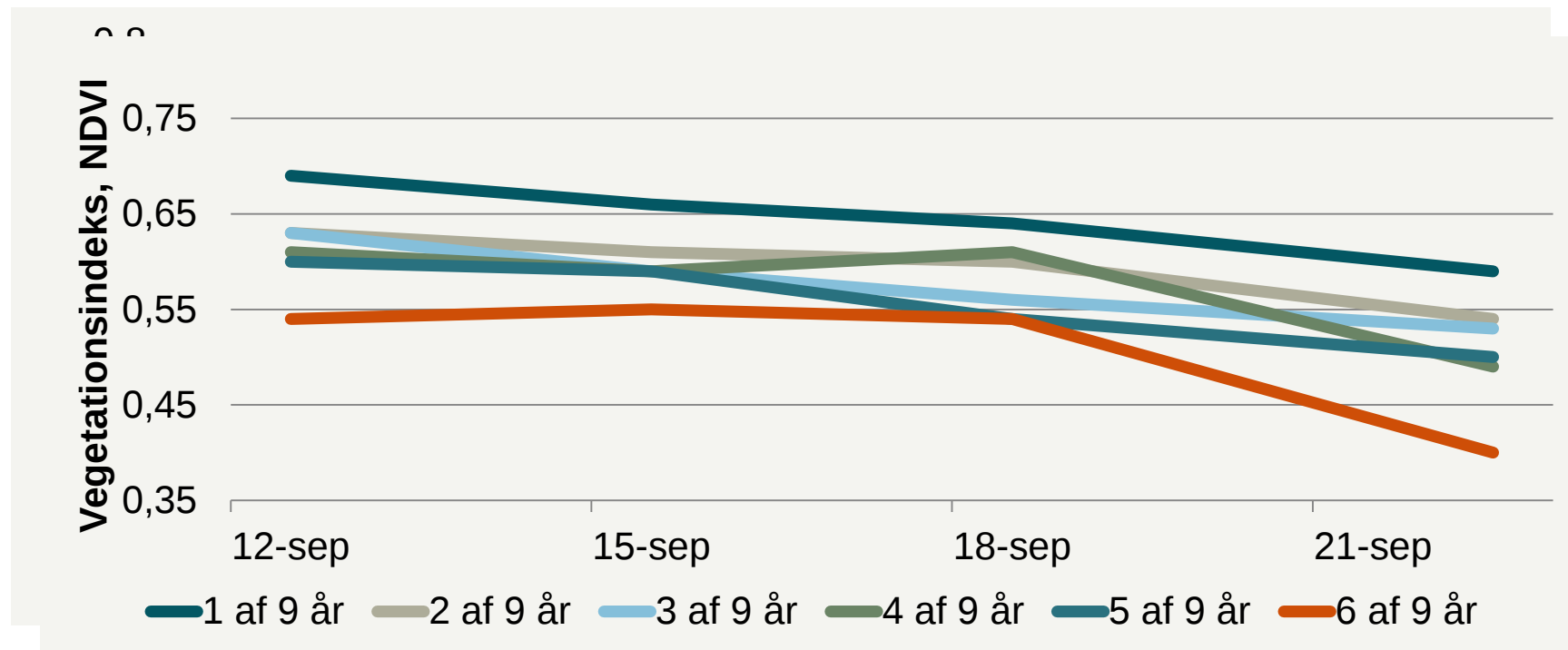
NDVI (CROPSAT) OG HYPPIGHED AF KARTOFLER

2.595 MARKER – 17.360 HA - JB 1



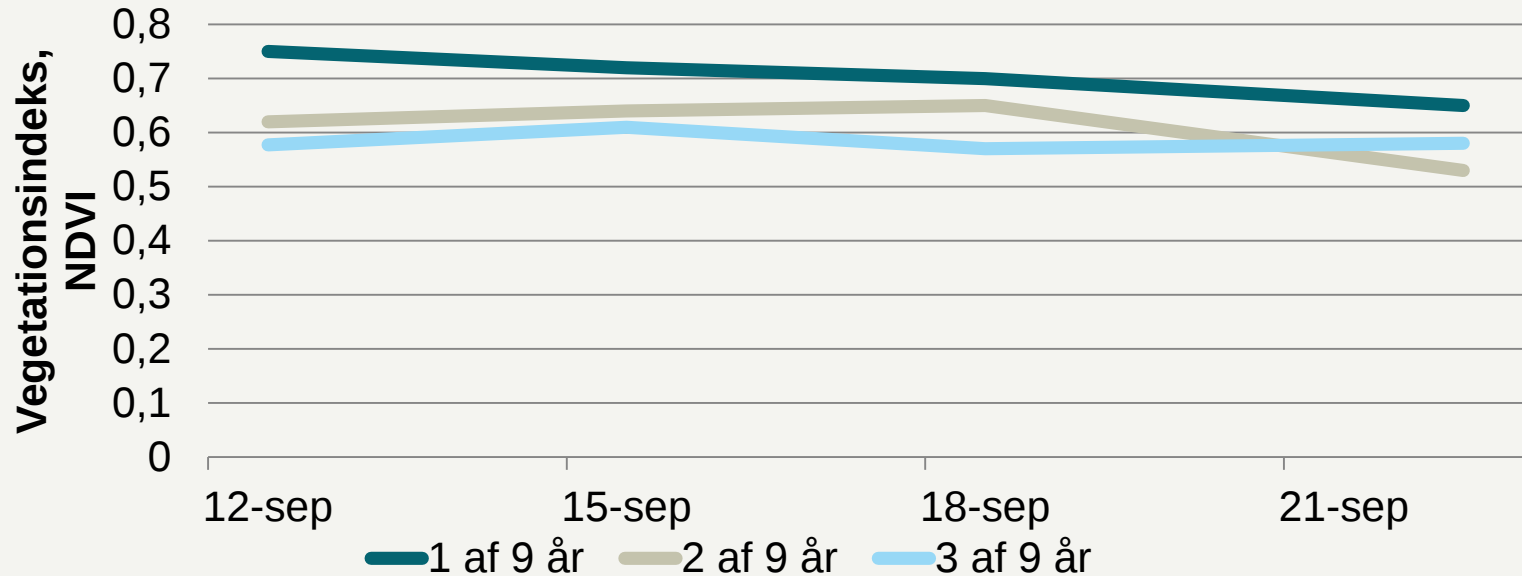
NDVI (CROPSAT) OG HYPPIGHED AF KARTOFLER

2.595 MARKER – 17.360 HA - JB 1

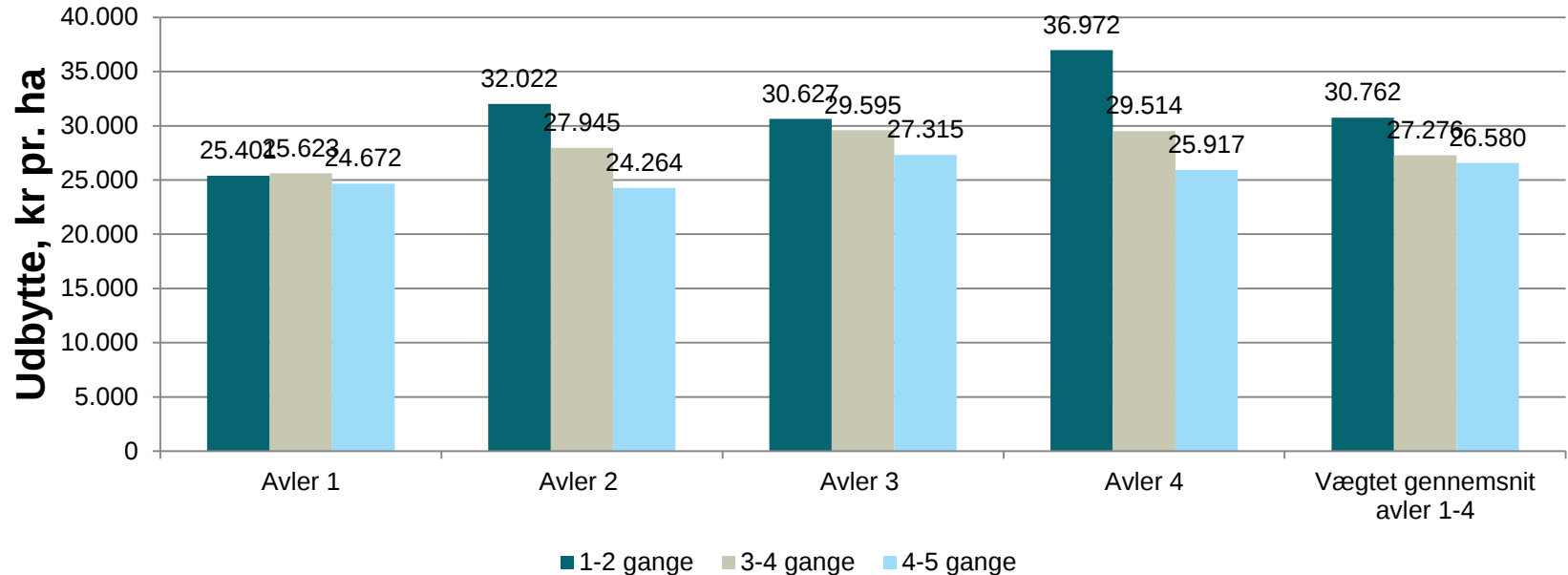


NDVI (CROPSAT) OG HYPPIGHED AF KARTOFLER

258 MARKER – 2.420 HA - JB 4



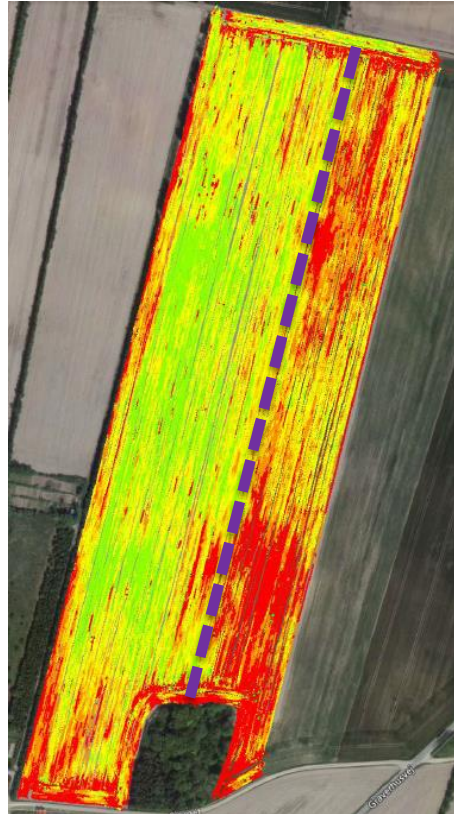
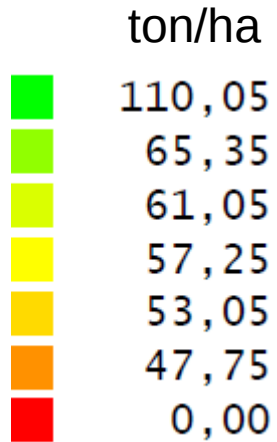
UDBYTTESTYRING (JB 1 - 2015)



(Rasmus Trads, AKK)

EFFEKT AF SÆDSKIFTE

AKV - LANGHOLT



Kartofler	
←	→
2008	2010
2012	2013
2016	2016

KONKLUSION

- Sædskiftet har betydning allerede efter én afgrøde
- Nye sædskiftesygdomme spiller en større rolle end forventet (black dot, verticillium)
- Større indsats for at brede arealet med kartofler ud
- Rutinemæssig test for cystenematoder og jordbårne sygdomme.

PÅ TRODS AF ALLE ULYKKER SKAL VI OGSÅ
HUSKE DETTE 😊



SPØRGSMÅL?