

UNIVERSITY OF COPENHAGEN FACULTY OF SCIENCE
 Department of Plant and Environmental Sciences

Konference Christiansborg
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Øget diversitet i afgrødevalg skal sikre fremtidens fødevarerproduktion

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Name and occasion
 Slide 1

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Udfordringer

Befolkningstilvækst
 Klimaforandringer
 Stigende efterspørgsel efter kød

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Environmental constraints

drought, salinity, heat, cold
 and their combination
 new strategies to be developed

SWUP-MED

Crops: wheat, legume, new crops

Water sources: rain, treated waste water, saline water

Cropping systems: alternating cultivation (wheat, legume, new crop), full irrigation, deficit irrigation, alternate root drying

resources and trials

Irrigation systems

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Landbrugets bidrag til klimaforandringer

- Vand:
 - Landbrug står for 70% vandforbrug globalt, kød > 50% af landbrug
- CO2 oa.:
 - Landbrug 30%, kød 70% af landbrug

Global water use by sectors (1900-2025)

WF of consumption (litres per person per day or l/cap/d)

Global Greenhouse Gas Emissions by Economic Sector

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Landbrugets løsninger

Kødfordbrug

Vegetabilsk protein

Images: cow, vegetables, crops, soil, plants

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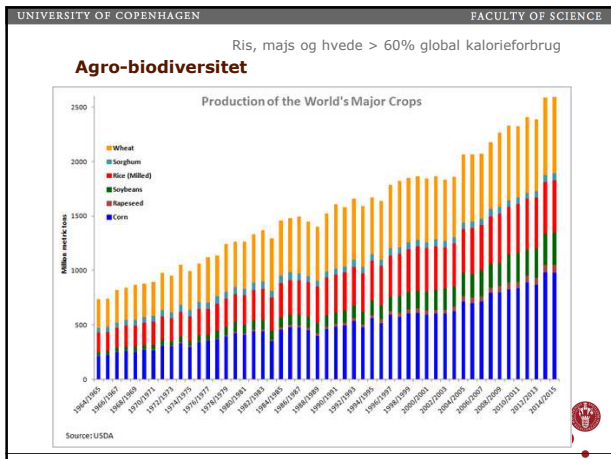
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How do we create climate-resilient crop production systems?

- Forbedrede afgrødesystemer
- Ny teknologi
- Nyt genetisk materiale

Global fødevarer sikkerhed
 Miljømæssig og økonomisk bæredygtighed

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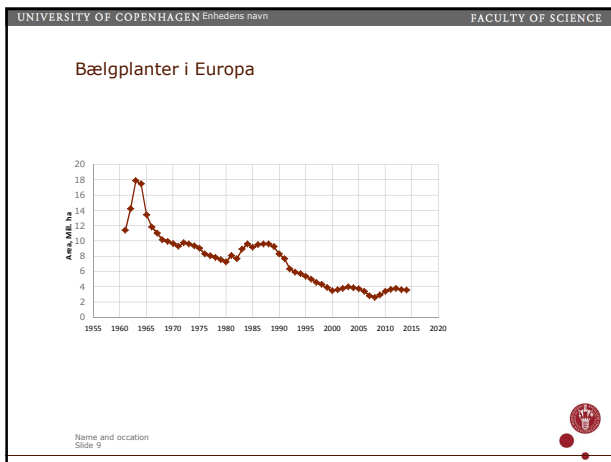


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Nyt genetisk materiale

Stress tolerante sorter
Tørke og andre abiotiske stress faktorer bør identificeres i forædlingsprogrammer vha. fysiologiske og biokemiske markører

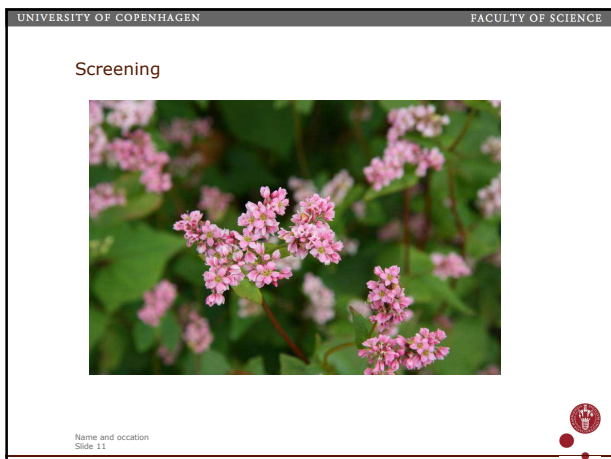
Nye afgrøder



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Andes afgrøder

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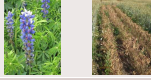



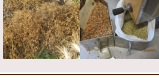
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Antal arter og sorter testet

Art	2012	2013	2014	2015
Quinoa	10	2	10	7
Amarant	19	12	6	6
Sorghumvede	3	3	3	12
Hirse	10	9	10	15
Tef	3	0	0	0
Valmue	1	1	1	0
Kanahua	1	9	0	0
Chis	1	0	0	0
Linse	32	38	12	10
Kikært	51	15	6	5
Hestebønne	5	4	4	4
Bønne	0	0	0	1
Fert	1	3	0	10
Lupin	5	5	4	4
Sojabønne	6	8	2	2
Havre	2	2	2	2
Sorghum (200)		16	6	6
Sæddodder	0	0	22	8
Total	150	127	88	92


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Afgøde		Afgøde	
Quinoa		Hestebønne	
Amarant		Lupin	
Boghvede		Kikært	
Ært		Linse	

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Quinoa
 2013 Año Internacional

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Quinoa

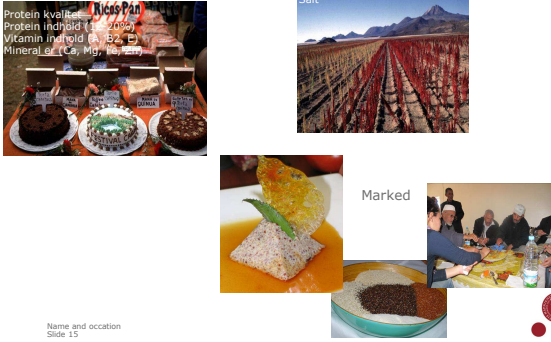
Næringsværdi

- Protein Kvalitet
- Protein indhold (11-16%)
- Vitamin indhold (A, B2, D)
- Mineraler (Ca, Mg, Na, Fe)

Dyrkning

- Tolerance overfor Torke
- Frost
- Salt

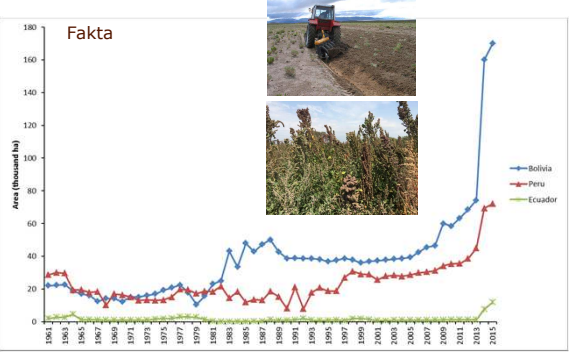
Marked



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Fakta



Area (thousand Ha)


- Bolivia
- Peru
- Ecuador

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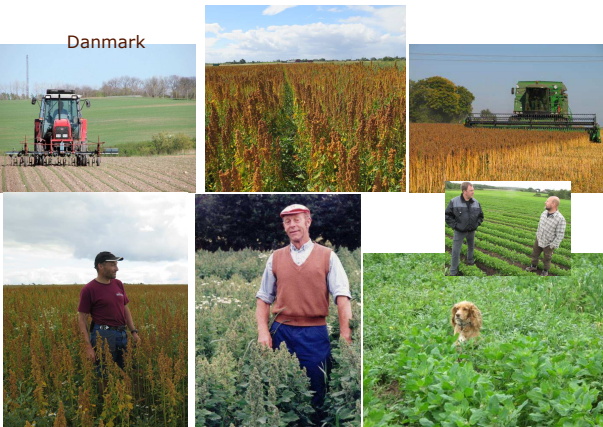
Udvidelse af dyrkningsområde for quinoa

- Andes
- Peru kyst
- Afrika (N, Ø, V, højland, havets overflade)
- USA
- Europa
- Asien
- Australien



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Danmark





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Har quinoa, amarant, hestebønne og lupin et potentiale som fødevarer?

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Quinoa til hverdag og fest

Saison

Knabstrup

Årstiderne

Washington

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Humor?

Kæreste, elskede. Jeg har i lang tid tænkt over noget. Jeg gerne vil spørge dig om ... Vil du ikke nok lade være med at lave mere quinoa?

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TAK