



økologisk sort?
Workshop om FORRETNINGEN I FORÆDLING TIL ØKOLOGI





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- Technical VCU-DUS
- Variety Administration
- National List and Plant Variety Protection
- UPOV-Technical Committee (14 years)
- UPOV-TWA-group (14 years)
- CPVO-DK-technical Liaison Officer
- Member of
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Definition

- “variety” means a plant grouping within a single **botanical taxon of the lowest known rank**, which grouping, irrespective of whether the conditions for the grant of a breeder’s right are fully met, can be
 - defined by the **expression of the characteristics** resulting from a given genotype or combination of genotypes,
 - **distinguished** from any other plant grouping by the expression of at least one of the said characteristics and
 - considered as **a unit** with regard to its suitability for being propagated unchanged

UPOV 91 convention

Fx

- Hordeum vulgare L. “Prestige”
- Homo sapiens “Gerhard Deneken”





Legislation

International

- UPOV-'91 Convention on PBR – Farm Saved Seed
- EC-Council Directive (70/457/EC & 2002/53/EC) – NL agriculture
- EC-Council Directive (70/458/EC & 2002/55/EC) – NL horticulture
- EC-Council Directive (93/49/EC) ornamental plants
- EU commission regulation 930/2000 on denomination
- EU Council regulation 2100/1994 (CPVO-basic regulation)

UPOV guidelines

CPVO technical protocols

- 2003/90/EC – Agriculture
- 2003/91/EC – Vegetable

www.europa.eu.int/eur-lex





Legislation

National

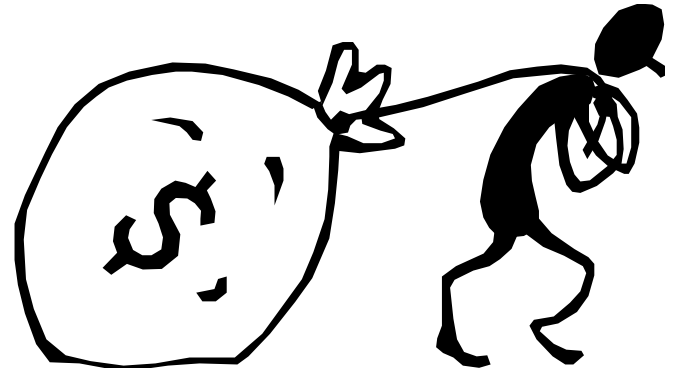
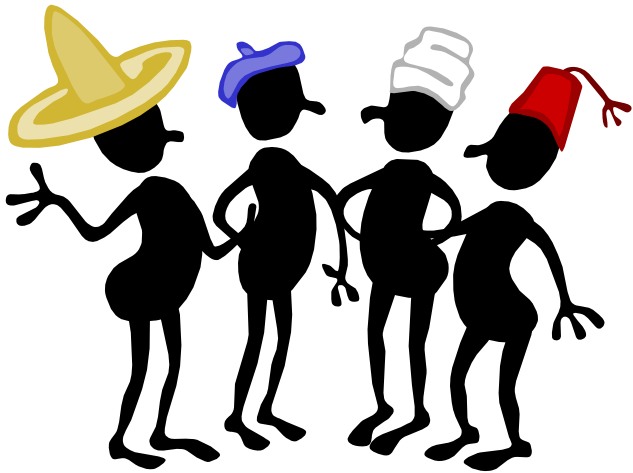
- Law and regulation concerning Plant Variety Protection
- Regulation concerning Registration of Varieties (Danish National List)
- Regulation reg. Variety Denominations with a reference to EU-regulation 930/2000
- Regulation concerning home-grown seed
- Regulation concerning breeders license on seed of grasses

www.retsinfo.dk

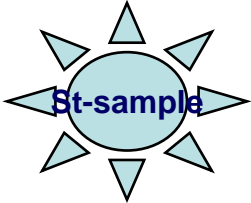




Why all this legislation ?



Application of Agricultural Varieties

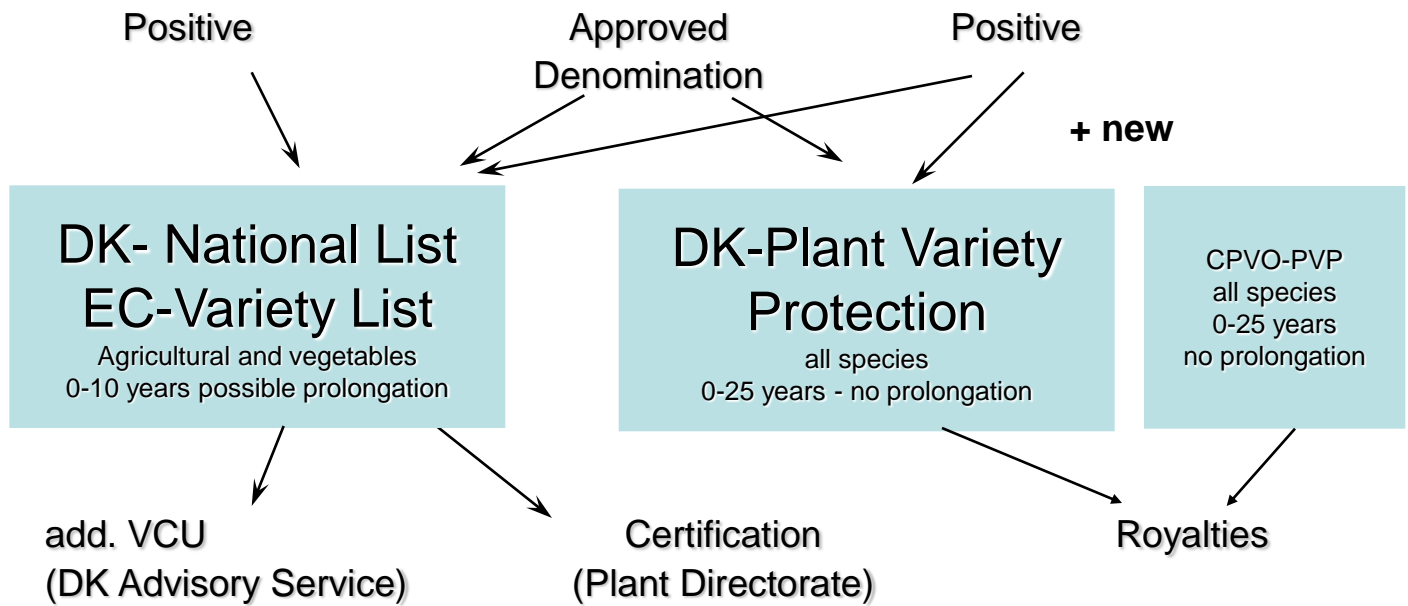


2 years of testing

- VCU
- Value of Cultivation and use
- All species
- Danish guidelines – standard test
- Optional: additional tests
- More than one location

2-3 years of testing

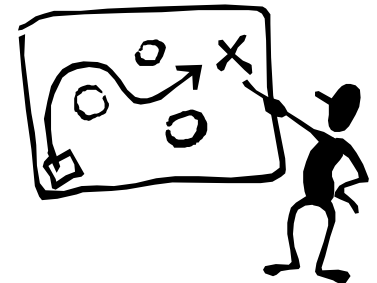
- DUS
- Distinctness, Uniformity and Stability
- CPVO protocols/UPOV guidelines
- Nearly all species (bilateral agreement)
- One location (Tystofte)



EU requirements regarding the VCU-examination



- EU-directive
 - Yield
 - Resistance to harmful organisms
 - Behaviour with respect to factors in the physical environment
 - Quality characteristics
- National freedom regarding the exact testing protocols and financing and testing





The value of a variety for cultivation and use shall be regarded as satisfactory if, **compared to other varieties accepted in the list of the member states in question**, its qualities, taken as a whole, **offer at least as far as production in any given region is concerned a clear improvement** either for **cultivation or as regards the uses which can be of the crops or the products derived there from**. Where other, **superior characteristics are present**, **individual inferior characteristics may be disregarded**.





DK-VCU-testing of spring barley

- 5 yield trials – direct comparison with all varieties on the Danish market and new applications –
 - 2011: 82 varieties + 1 mixture reference
 - fast results
- ID-test between 2nd year and DUS sample
- Disease assessments in obs-plots 25 locations publication – updates during the growing season
- Nematode resistance
- Growing characteristics (length lodging maturity etc)
- Quality assessments
 - Protein, starch, grading, hkl-weight
 - Optional: e.g. malting feeding quality – digestibility, Amino acid distribution
- Optional eg: organic yield testing
 - 2011: 26731: SJ107844 2.år 2011
 - 27412: SJ111998 1.år 2011





DK-National Listing of spring barley

- Co-ordination/integration with Landsforsøg – re-use of results
- Sort-info
- National List Decision by PD

After listing

- Descriptive list





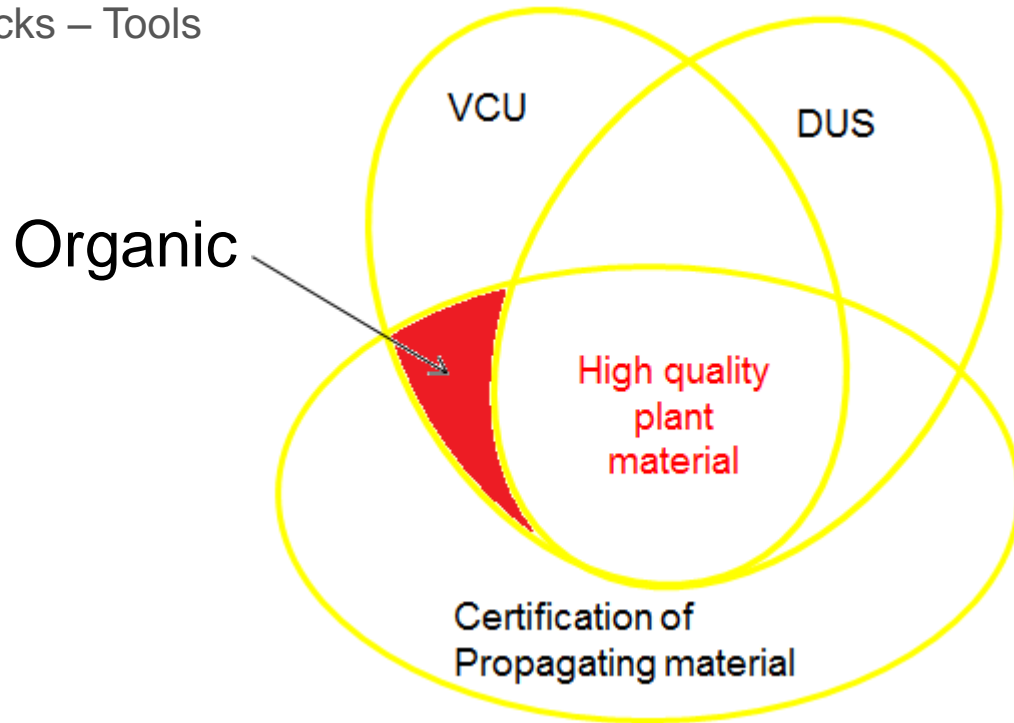
DK-National Listing (DUS & administration) of spring barley

- Maintenance of standard sample – available for post control testing – certification – PBR reference
- Accredited DUS examination – re-use DK–DUS to obtain EU-PBR
- DUS description
- International information distribution – gazette
 - www.pdsdb.pdir.dk
- Denomination examination – information available in international network (CPVO & UPOV)
- EU-listing
- Invoicing





Formal Seed Sector
Bricks – Tools



PVP/PBR acts as catalyst in the proces



Approval of Varieties to the Danish National List and granting PBR



Plant Directorate



Technical Board of Variety Testing

● PD, Department of Variety Testing (chair)	1
● Plant Directorate	3
● Breeders Association (cereals)	1
● Breeders Association (ornamentals)	1
● Breeders Association (grasses)	1
● Danish Advisory service Agriculture	1
Fruits and vegetables	1
● DK Organic Association (Økologiske Landsforening)	1

Final Reports

VCU and DUS results are treated separately





Costs 2011 – requirement of full cost recovery

Application	4.500 kr
• 1st year of DUS	11.200 kr
• 2nd year of DUS	11.200 kr
• 1st year of VCU	15.100 kr
• additional aspects – separate budget eg feed value, amino acid-distribution, specific mineral composition, weed competitiveness, root development, nutrient efficiency, organic growing conditions (4-locations 14.765 np), baking quality 3.675 eg gm-testing (Monsanto) 183.000 kr	
• 2nd year of VCU	15.100 kr
• additional aspects – separate budget	
• Total	57.100 kr

Department of Variety Testing - annual fee revision – npo





- Organic variety?
- **Approve variety, especially suitable under organic growing conditions**
 - DUS
 - VCU
 - Special characteristics to be examined/documentated
 - Breeding selection
 - NL
 - PBR (DK/EU)





FVM 2011-13 agriculture PGR-action plan

4.2 Develop organic varieties and variety testing

Initiative: Danish Plant Directorate and FERV (GUDP-kontoret) is the financial contributor

Contribution and project will be developed in cooperation with the relevant stake holders eg plant breeders – organic growers etc

Status

Frames are fixed, but the final text has not been elaborated yet

First possibility to apply will be in 2012





DE:

- Ingen organisk afprøvning
- Standardafprøvning (VP-SES)
 - Korrelationsanalyse (korn & kartofler) – ens ranking
 - Optional specifikke selekterede egenskaber – mod fuld betaling
fx
 - Aminosyresammensætning
 - Ukrudtskonkurrenceevne
 - Sygdomstolerance etc
 - Organisk afprøvning som system betragtning er for bred og uspecifik
 - Heterogene sorter politisk interessant og acceptable under landracer
 - Politisk tryk – dog svært foreneligt med nuværende sortsafprøvnings-koncept, der baserer på kvalitet, forbedring og udvikling kombineret med IP-rettigheder
- Landessortenversuche – fragmenteret afprøvning





SE
UK





European legislation under revision at the moment

”Better Regulation”

Public hearing – just finished – European Commission digest and reviews at present

DUS requirement – remains

VCU requirement - ?

» Requirements -

Denomination – unic denomination

European coordination ?

» National listing?



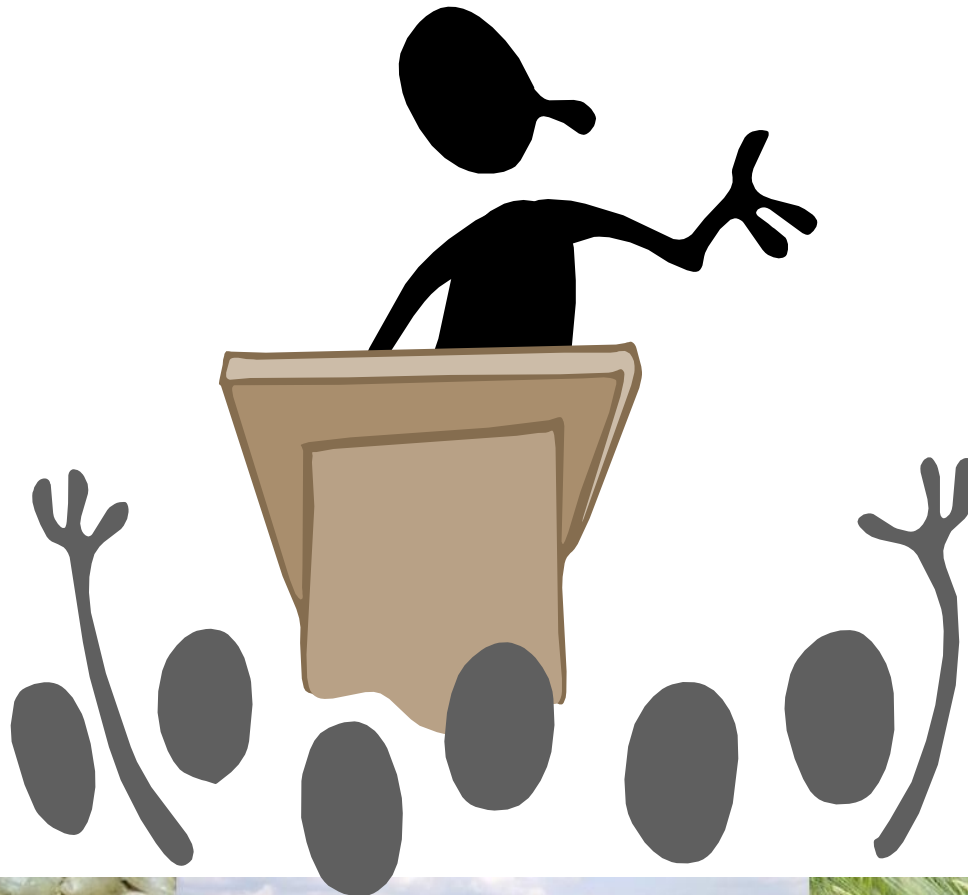


Other experience

- FØJO – Barof – 2001-04
- SUSVAR – COST action
- Ensartethedskrav til markedsføring af sorter? Anders Borgen



Questions ?





Time

After approval and other varieties

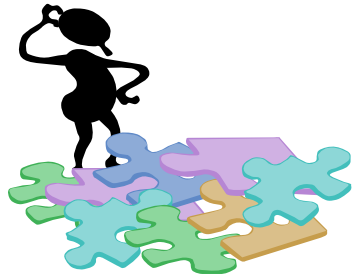
B-Testing (Advisory Service)

No of trials

Before approval

A-testing - DVT
Testing for registration
2 years testing

A-plus testing -
Advisory Service
(-/+ fungicides for cereals)
(option)
1-2 years of testing





List of abbreviations

CPVO – Community Plant Variety Office

UPOV – Union of Protection of New Varieties

VCU – value of Cultivation and Use

DUS – Distinctness, Uniformity, Stability

PBR – Plant Breeders Rights

PVP – Plant Variety Protection

TWA – Technical Working Party Agriculture

GM – Genetically Modified

NL – National List



