



Experience of the Netherlands on DUS examination

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The Netherlands...



- Small country (41.528 km²)
- About 16.7 million inhabitants
- 408/km²

The Netherlands...



- 1/3 of its land is under sea level
- This areas are man-made (polders)
- Small, very densely populated country & limited arable land

- Dutch Philosophy "Doing more with less"



The Netherlands and Plant Breeding nowadays



- Present, only private breeding, Government finances fundamental breeding research
- In the Netherlands there are approx. 350 breeding companies with an annual turnover of approx. € 2.5 billion.
- Of top 10 vegetable breeding companies in the world, 7 are in NL
- Many breeding companies are Small and Medium Enterprises
- 15-30 % of their annual turnover is spent on R&D
- Yearly private investment is € 250 -350 million (\$ 350 – 475 million)



The Netherlands and Plant Breeding nowadays



24% of value of world export of seeds and propagating material from the Netherlands

- 47% of European use of Seeds and propagating material is from the Netherlands
- The Dutch Breeding sector – world market leader
 - Vegetables
 - Ornamentals
 - Potatoes

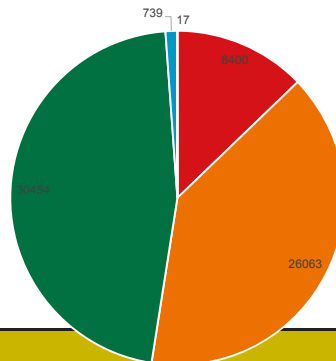
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Plant Variety Protection - the Netherlands

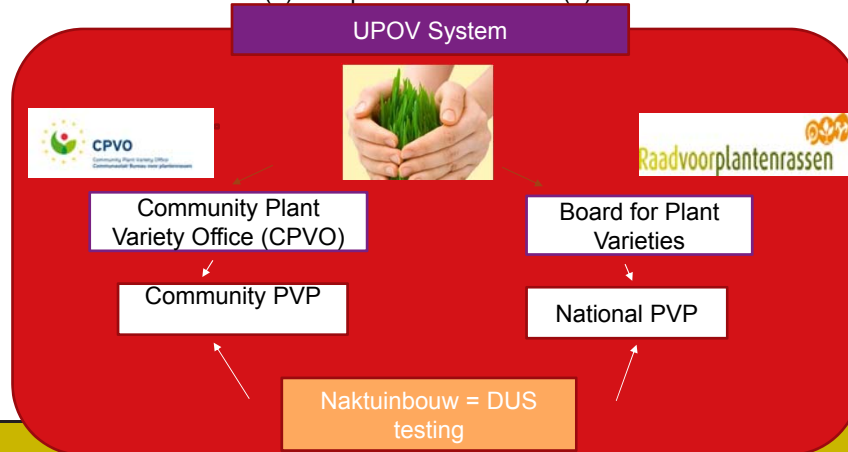
Total 65.673 applications since 1960 665 different species (PVP and Listing):



□ Agriculture □ Ornamental □ Vegetable □ Arboriculture □ Others

The PVP system in The Netherlands nowadays

Two kinds of PVP: (1) European Union PVP or (2) National PVP



CPVO & Naktuinbouw

Naktuinbouw is 1 of the 25

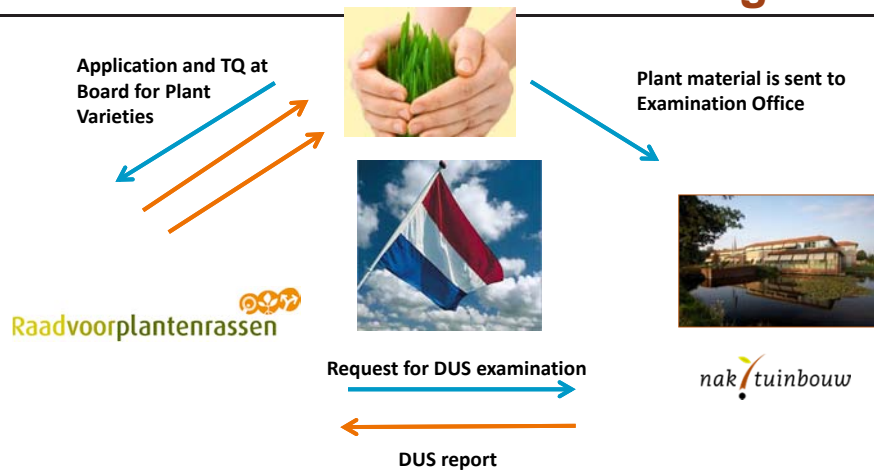
EN**TRUSTED** ED

Examination Offices

Number of applications

Crops	2016			Total
	List	PVP		
		NL	CPVO	
Ornamentals	-	232	562	794
Agriculture	251	82	8	341
Vegetables	676	486	111	1273
Trees			19	19
Total	927	800	700	2427

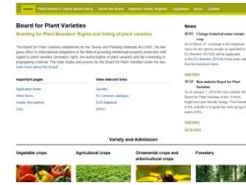
National Plant Breeder's Rights





Board for Plant Varieties

- Falls under Ministry of Economic Affairs
- Members of the Board (7 – 11) appointed by Minister
- No administrative tasks
- Secretary of the Board
- <http://www.raadvoorplantenrassen.nl/en/home>



Website Board for plant varieties

Raadvoorplantenrassen



Naktuinbouw: Netherlands Inspection Service for Horticulture

- Basic inspection according to
 - Dutch Seed and Plant Material Act and Plant Disease Act
 - European legislation
- DUS testing for National Listing, National and European Plant Variety Protection
 - Ornamental crops
 - Agricultural crops
 - Vegetable crops





Naktuinbouw

- Non-profit organisation, 'only public duties'
- Regulated by the Ministry of Economic Affairs
- Independent chairman appointed by the Minister of Economic Affairs
- Charged with activities based on the Dutch Seeds and Planting Materials Act (ZPW) and the Plant Diseases Act (PZW)
- Activities 100% funded by the business community



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Where to test DUS & Criteria

Application

Raadvoorplantenrassen

Board for Plant
Varieties

1. DUS examination to be conducted at *nak*tuinbouw
2. take-over of existing DUS reports.
3. to request to conduct DUS test on behalf of the Netherlands
 - a) other Authorities or Institute,
 - b) the breeder

1. DUS examination at Naktuinbouw

(Mainly) for entrusted crops.

Most applications are tested at Naktuinbouw.

DUS reports are offered to countries all over the world

- CPVO, Germany, UK, France, Finland, Slovenia, Croatia, Serbia, Turkey, Kenya, Russia, Brazil, Colombia, Ecuador, New Zealand, etc. etc.



*nak*tuinbouw

2. Purchase of DUS reports in The Netherlands

If the variety has been tested already by **other entrusted (CPVO) EO** the Dutch board of Plant Varieties can “take over the report

‘Take-overs’ mainly:

- agricultural crops (maize, wheat)
- vegetables (lettuce, tomato)
- Fruit



3. Request DUS test to other authorities (1/2)

DUS done by other Entrusted CPVO EO

- Flax: France
- Maize: France, Germany, Czech Republic
- Wheat: Czech Republic, Germany
- Fruit: Germany
- ‘2 trials in one year’ for pea, bean, onion, cabbage, maize etc., with the 2nd trial in Czech Republic or for maize in Slovenia





Request DUS test to other authorities (2/2)

The Netherlands has:

- **Bilateral agreements:**
 - Potato: for Denmark, Belgium
 - Spinach: for United Kingdom.
 - Rose: for Colombia
- **Multilateral agreements**
 - Ornamentals in Europe:
 - Chrysanthemum: United Kingdom,
 - Alstroemeria and Gerbera: the Netherlands,
 - Rose:
 - Cutflowers: the Netherlands
 - Potroses: Germany,
 - Garden roses: United Kingdom.



Request DUS test in cooperation with Breeders

- maximizes the use of all available information
- minimizes the time for DUS examination
- can provide access to breeders' specialist resources
- is always under the control of the Authority
- can involve the applicant in all aspects of conducting the DUS Test but will always result in a decision being taken by the Authority

- Seaweed



Questions?



Question?

Raadvoorplantenrassen 

Board for Plant Varieties

Receives an application of a tropical crop that can not be tested in the Netherlands of any other Entrusted EO?

Criteria?

UPOV Country
Confidence in PVP system
Confidence in DUS testing
Confidence in results
Independence of testing
Costs and duration of DUS testing
Security of varieties during DUS testing



nak  *tuinbouw*