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european farmers european agri-cooperatives

## Farmers' perspectives on the UPOV system of plant variety protection

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Chairman of the COPA/COGECA Seeds WP  
Danish Seed Council

### Who are Copa and Cogeca? (1)

#### **Copa**

Created in 1958, Copa represents 23 million European farmers and family members

#### **Cogeca**

Created in 1959, Cogeca represents 22,000 European agricultural cooperatives

#### **Copa and Cogeca**

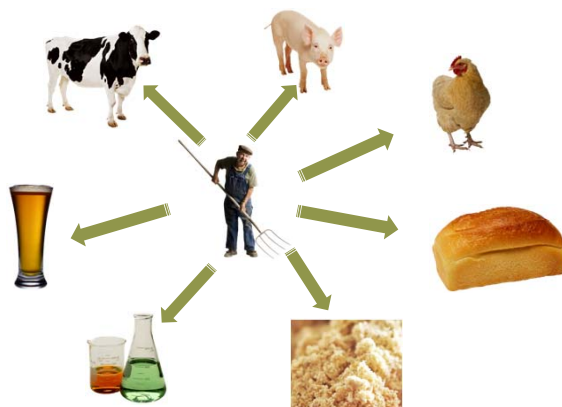
In 1962, a joint Secretariat was created, making Copa-Cogeca one of the largest and most active lobby organisations in Brussels

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## Why all this talk about new varieties?



## The farmer's key decision



## Finding the varieties that meet the needs of the farmers



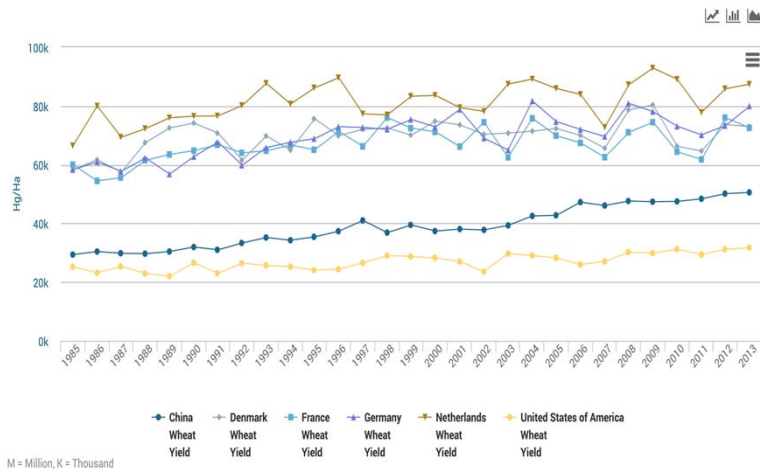
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## Registration, Certification, EU Register More than 1.500 new varieties every year!

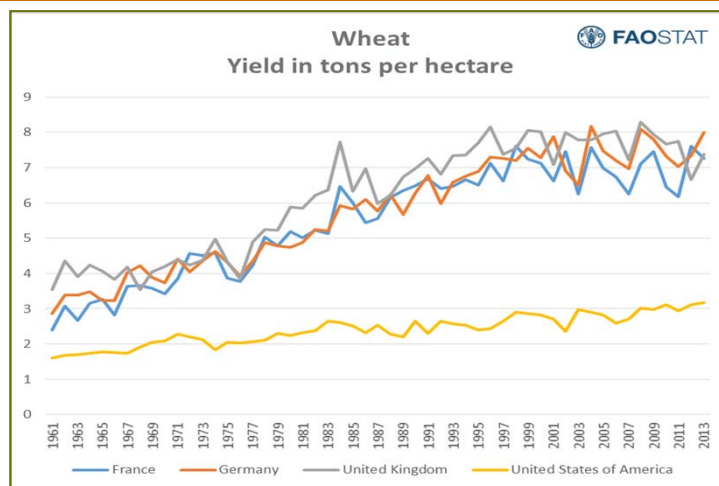
- Additional VCU tests at the level of Member States to include environment and sustainability concerns
- Increase the cooperation between the Member States where soil and climatic conditions are similar
- Official controls on all PRM categories
- Update the EU Register in an appropriate manner

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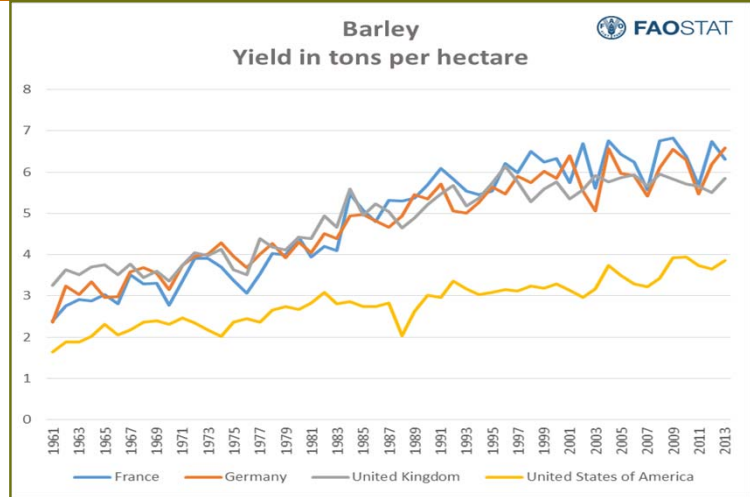
## 30 years Yield development for wheat



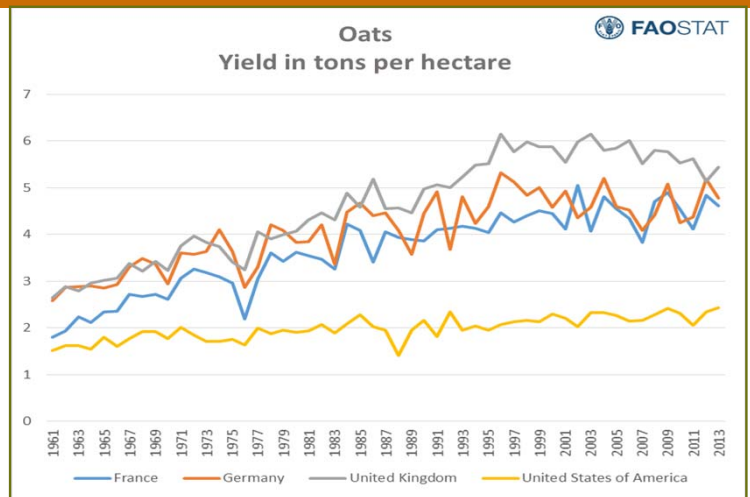
## EU Main producers /USA

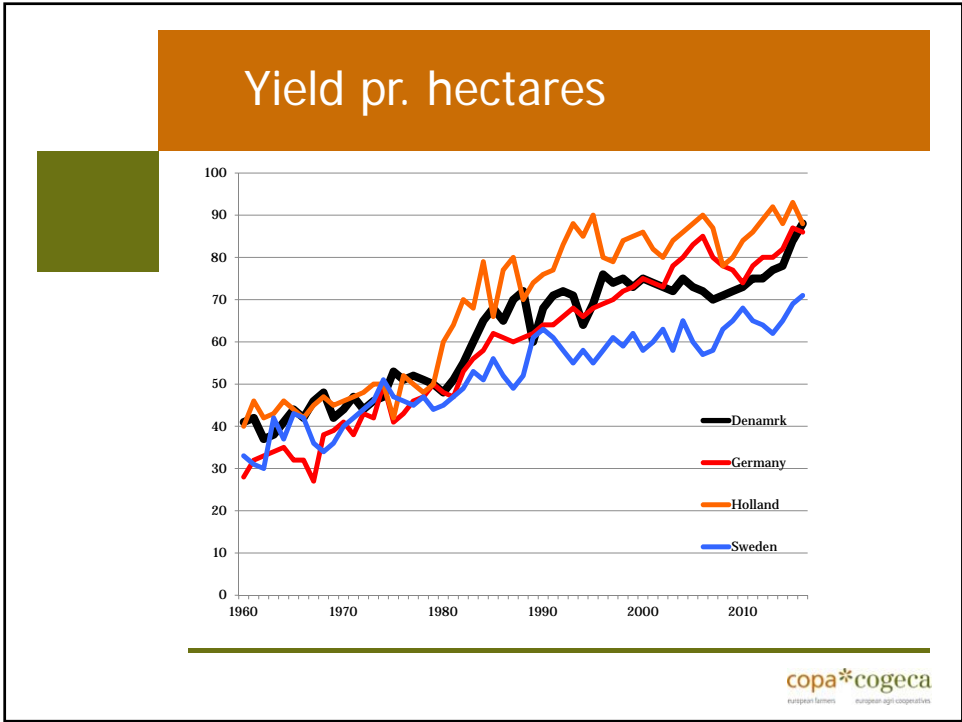
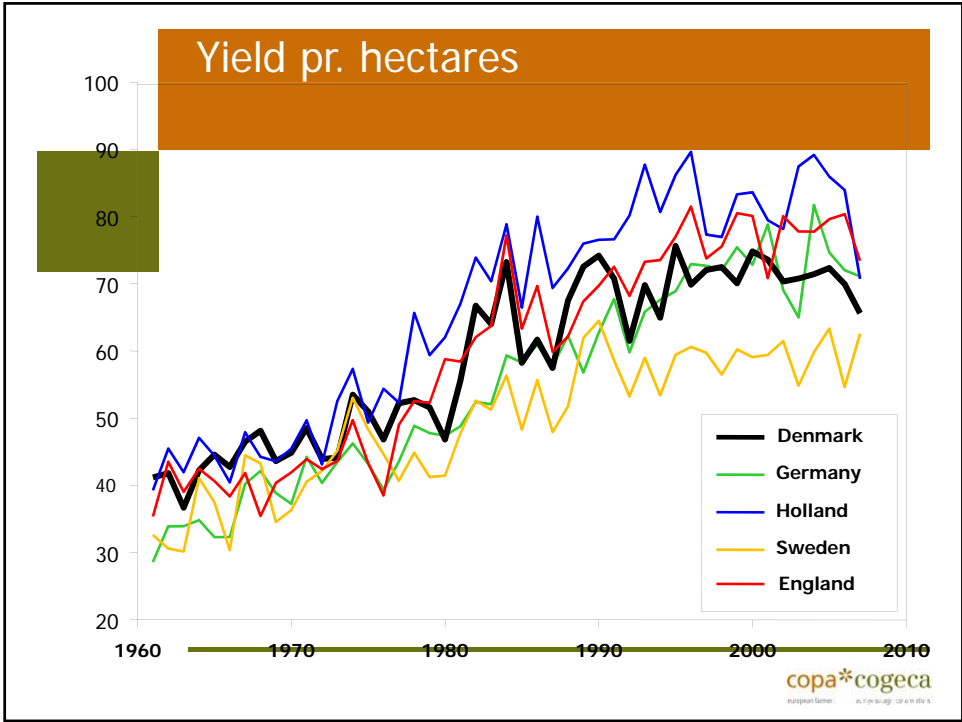


## EU Main producers /USA

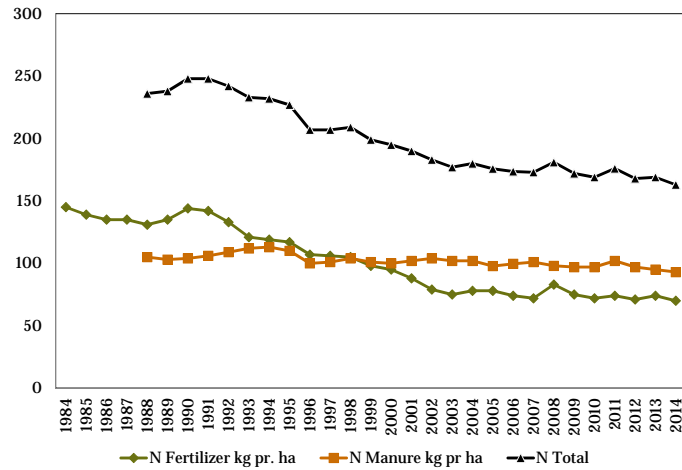


## EU Main producers /USA

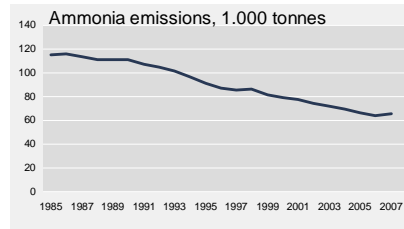
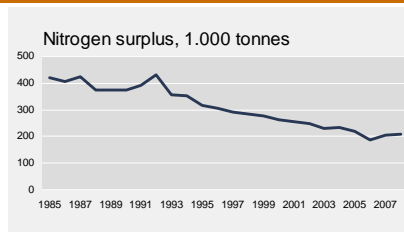
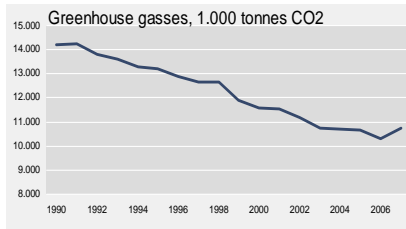




## Danish input of Nitrogen pr. Hectar



## Danish Reductions in environmental impact



## Treatment Index in Denmark and Germany

	DK 2014		Germany 2011-13	
	Wheat	W. Rape	Wheat	Winter rape
<b>Herbac.</b>	<b>1,44</b>	<b>1,71</b>	<b>2,0</b>	<b>2,2</b>
<b>Growsreg.</b>	<b>0,26</b>	<b>0,02</b>	<b>?</b>	<b>?</b>
<b>Fungi</b>	<b>1,22</b>	<b>0,63</b>	<b>2,4</b>	<b>1,0</b>
<b>Insect</b>	<b>0,33</b>	<b>0,83</b>	<b>0,8</b>	<b>2,7</b>
<b>TI in total</b>	<b>3,25</b>	<b>3,18</b>	<b>&gt; 5,2</b>	<b>&gt; 5,9</b>

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## The perfect Variety list

Overview for winter wheat (varieties in National trials 2015, latest data)

Selection: 20 out of 49 varieties Show all	Yield 1)		Agronomic data (Yield trials) 1)				Diseases (Observation Plots) 2)			Cultivation (Observation Plots) 2)		
	Grain yield index	Grain yield, t/ha	Starch, % in dry matter	Crude protein in dry matter, Tested variety	Specific weight, Tested variety	Mildew coverage	Septoria coverage	Yellow rust coverage	Reaping date	Straw length	Lodging	
	(index)	(t/ha)	(%)	(%)	(kg/ha)	(%)	(%)	(%)	(date)	(cm)	(score 0 - 10)	
Year	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015
Sorting	0											
1. Benchmark	106 (10)	110,8 (10)	71,1 (10)	9,3 (10)	77,2 (10)	2,4 (5)	11 (6)	8 (15)	15/8 (6)	88 (4)	0,1 (8)	
2. Kalmar	103 (10)	107,1 (10)	72,3 (10)	9,0 (10)	75,4 (10)	2,6 (5)	4,3 (6)	0,1 (15)	15/8 (6)	80 (4)	1,6 (8)	
3. KWS Silverstone	102 (10)	106,6 (10)	72,8 (10)	8,9 (10)	78,1 (10)	1,1 (5)	20 (6)	0,01 (15)	16/8 (6)	78 (4)	0,9 (8)	
4. KWS Nils	101 (10)	105,6 (10)	71,8 (10)	9,7 (10)	78,6 (10)	1,9 (5)	11 (6)	1,6 (15)	16/8 (6)	88 (4)	0,5 (8)	
5. Albert	101 (10)	105,6 (10)	72,0 (10)	9,4 (10)	78,6 (10)	11 (5)	3,3 (6)	4,0 (15)	15/8 (6)	85 (4)	0,1 (8)	
6. Graham	101 (10)	105,4 (10)	71,8 (10)	9,2 (10)	77,2 (10)	1,1 (5)	6 (6)	0,2 (15)	15/8 (6)	75 (4)	0,8 (8)	
7. Kadett	100 (10)	104,5 (10)	71,3 (10)	8,9 (10)	75,9 (10)	5 (5)	9 (6)	2,6 (15)	16/8 (6)	84 (4)	1,9 (8)	
8. KWS Cleveland	100 (10)	104,0 (10)	71,2 (10)	9,0 (10)	73,6 (10)	1,2 (5)	15 (6)	0,08 (15)	15/8 (6)	77 (4)	0,7 (8)	
9. Hereford	99 (10)	103,9 (10)	72,0 (10)	8,8 (10)	76,5 (10)	4,6 (5)	16 (6)	0,5 (15)	15/8 (6)	84 (4)	0,0 (8)	
10. Escalate	99 (10)	103,6 (10)	71,9 (10)	9,1 (10)	75,9 (10)	4,2 (5)	5 (6)	10 (15)	17/8 (6)	83 (4)	0,4 (8)	
11. KWS Lasse	99 (10)	103,5 (10)	71,2 (10)	9,3 (10)	75,7 (10)	1,0 (5)	8 (6)	0,01 (15)	15/8 (6)	89 (4)	0,8 (8)	
12. Tonnage	99 (10)	103,1 (10)	71,8 (10)	8,6 (10)	74,7 (10)	3,1 (5)	8 (6)	0,8 (15)	14/8 (6)	88 (4)	2,8 (8)	
13. Hybery	97 (10)	101,8 (10)	72,0 (10)	9,5 (10)	77,9 (10)	7 (5)	13 (6)	0,01 (15)	16/8 (6)	93 (4)	0,0 (8)	
14. Næskov	96 (10)	99,9 (10)	72,1 (10)	9,3 (10)	75,3 (10)	2,8 (5)	10 (6)	0,08 (15)	16/8 (6)	85 (4)	1,3 (8)	
15. KWS Loft	95 (10)	99,7 (10)	71,8 (10)	10,2 (10)	80,1 (10)	1,7 (5)	3,5 (6)	24 (15)	15/8 (6)	86 (4)	1,1 (8)	
16. Elixer	95 (10)	99,6 (10)	71,2 (10)	9,8 (10)	78,8 (10)	2,0 (5)	6 (6)	0,3 (15)	16/8 (6)	87 (4)	1,4 (8)	
17. Jensen	94 (10)	98,3 (10)	71,7 (10)	9,2 (10)	78,1 (10)	0,6 (5)	7 (6)	1,4 (15)	17/8 (6)	86 (4)	0,4 (8)	
18. Ajax	93 (10)	97,6 (10)	72,1 (10)	9,8 (10)	79,2 (10)	6 (5)	6 (6)	0,01 (15)	15/8 (6)	87 (4)	0,4 (8)	
19. Folklor	92 (10)	95,8 (10)	71,4 (10)	9,7 (10)	76,3 (10)	5 (5)	6 (6)	0,8 (15)	14/8 (6)	80 (4)	1,0 (8)	
20. Mariboss	90 (10)	94,3 (10)	70,3 (10)	9,0 (10)	74,6 (10)	4,8 (5)	10 (6)	0 (15)	17/8 (6)	85 (4)	1,0 (8)	



## Looking back

Season detail of the characteristic 'Grain yield index' in winter wheat (varieties in National trials 2015)

Selection: 20 out of 49 varieties Show all	2015	2014	2013	Average of years with results
<b>Sorting</b>				
1. Benchmark	106 (10)	106 (13)	105 (9)	106 (32)
2. Kalmar	103 (10)			103 (10)
3. KWS Silverstone	102 (10)			102 (10)
4. KWS Nils	101 (10)	102 (13)		101 (23)
5. Albert	101 (10)	102 (13)		101 (23)
6. Graham	101 (10)			101 (10)
7. Kadett	100 (10)	102 (13)		101 (23)
8. KWS Cleveland	100 (10)	100 (13)		100 (23)
9. Hereford	99 (10)	99 (13)	99 (9)	99 (32)
10. Escalate	99 (10)			99 (10)
11. KWS Lasse	99 (10)			99 (10)
12. Tonnage	99 (10)			99 (10)
13. Hybery	97 (10)	101 (13)	102 (9)	100 (32)
14. Nakskov	96 (10)	100 (13)	101 (9)	99 (32)
15. KWS Loft	95 (10)	98 (13)	98 (9)	97 (32)
16. Elixer	95 (10)	101 (13)	97 (9)	98 (32)
17. Jensen	94 (10)	98 (13)	101 (9)	97 (32)
18. Ajax	93 (10)			93 (10)
19. Folklor	92 (10)			92 (10)

## Danish Variety info Cereals regions

Location detail of the characteristic 'grain yield index' in winter wheat (varieties in National trials 2015, data from 2015)

Selection: 20 out of 49 varieties Show all	Sender- borg	Horsens	Bjæverskov	Årslev	Holeby	Skive	Odder	Holste- bro	Skælskør	Eskil- strup	Avg.
<b>Sorting</b>											
1. Benchmark	119	101	105	108	103	106	102	105	102	111	106 (10)
2. Kalmar	93	98	97	94	108	110	110	108	104	101	103 (10)
3. KWS Silverstone	99	97	96	103	107	98	106	109	103	104	102 (10)
4. KWS Nils	100	98	102	106	104	100	100	96	104	101	101 (10)
5. Albert	91	102	97	98	100	101	110	110	101	101	101 (10)
6. Graham	100	99	99	101	101	97	106	100	103	102	101 (10)
7. Kadett	105	98	99	102	103	96	98	95	103	101	100 (10)
8. KWS Cleveland	96	96	98	99	101	101	96	107	103	100	100 (10)
9. Hereford	98	89	102	102	104	99	101	99	102	99	99 (10)
10. Escalate	95	101	98	96	96	105	107	103	96	94	99 (10)
11. KWS Lasse	96	95	102	109	105	92	100	96	97	99	99 (10)
12. Tonnage	97	94	99	101	110	101	94	101	92	97	99 (10)
13. Hybery	101	96	96	93	94	96	101	101	98	99	97 (10)
14. Nakskov	91	93	98	101	97	91	92	104	90	98	96 (10)
15. KWS Loft	102	93	93	95	95	90	100	97	94	96	95 (10)
16. Elixer	105	94	87	92	97	97	100	91	91	99	95 (10)
17. Jensen	87	91	97	96	99	93	90	94	96	96	94 (10)
18. Ajax	99	93	91	93	92	91	99	98	83	95	93 (10)
19. Folklor	95	95	90	89	88	94	100	88	93	86	92 (10)
20. Mariboss	69	87	91	94	100	91	83	103	94	90	90 (10)

## Grass Seed variety performance list

Sort	2010	2011	2012	2013	2014
Troya		98	99	107	111
Turfgold					100
Tyrconnell			94	115	79
Tyrella				58	85
Gns. kg pr. ha	1199	1220	1225	1510	1558
<b>Alm. rajgræs, 4n</b>					
Arusi				99	98
Astonenergy	92	94	92	90	74
Barnauta	108			105	
Barpesto				84	89
Calibra	120	118	116	113	117
Cartalou		96	75	87	87
Double			99	107	102
Fabian					78
Garibaldi	109	116	95	116	106
Glenstal				101	119
Karatos				81	76
Kentaur		109	98	109	107
Kintyre			110	71	
Loporello				90	
Magician			111	98	100
Mathilde	111	109	106	109	114
Maurice		64	83		
Navan		86			
Navarra	99		97	100	104

## Better Varieties needed more than ever!

- **Climate Change**
- **Pesticide resistant**
- **Special Industry demands**
- **Feed the world!**

## New breeding techniques

- speed up traditional breeding
- help to overcome some limitations of traditional breeding
- enlarge the portfolio of products developed in the EU



Contribute to meet the challenges

## Thank you

