



Promoting Sustainability and Economic Development

Thor G. Kofoed,
Chairman of the COPA/COGECA Seeds WP
Danish Seed Council

Who are Copa and Cogeca? (1)

- * Copa

- * Created in 1958, Copa represents 20 million European farmers and family members

- * Cogeca

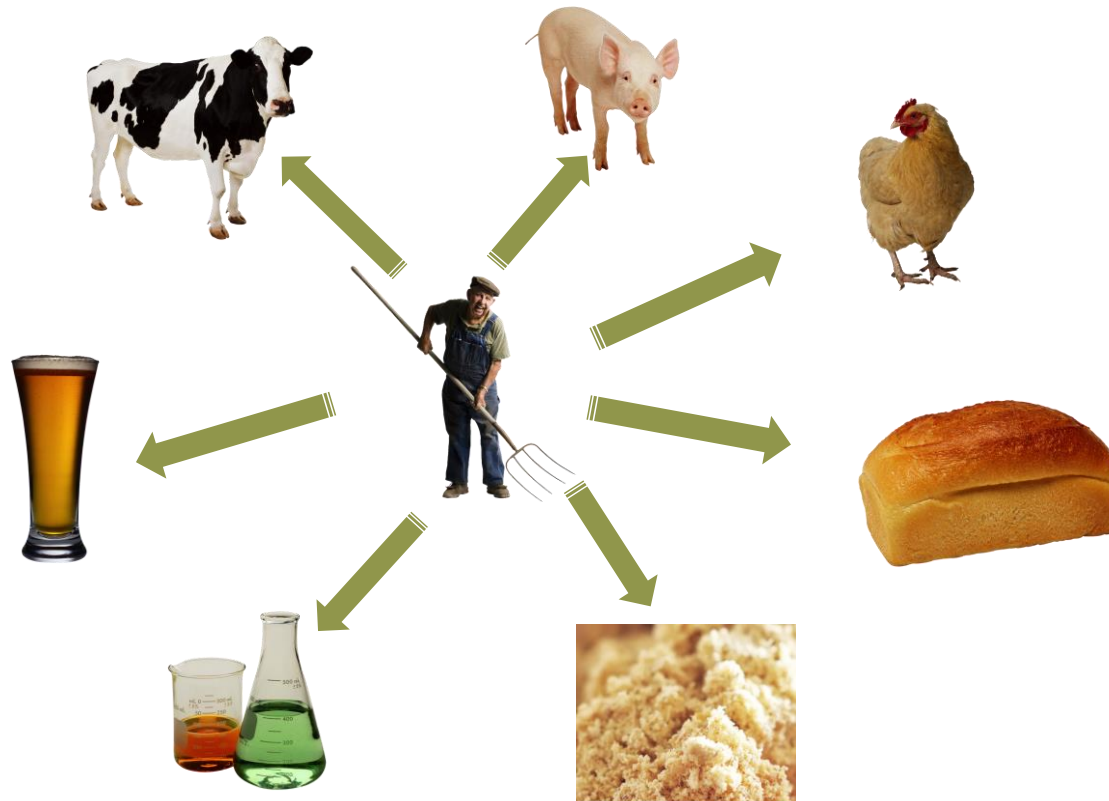
- * Created in 1959, Cogeca represents 20,000 European agricultural cooperatives

- * Copa and Cogeca

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



The modern farmer's key decision



Marked regulation on Seed and Propagating Material

- *The regulation applies in all EU countries. Level playing field.
- *Variety list with DUS and Sustainability test (VCSU)
- *Guarantee for identification and quality via certification
- *Common Catalogue is a needed info for the farmers



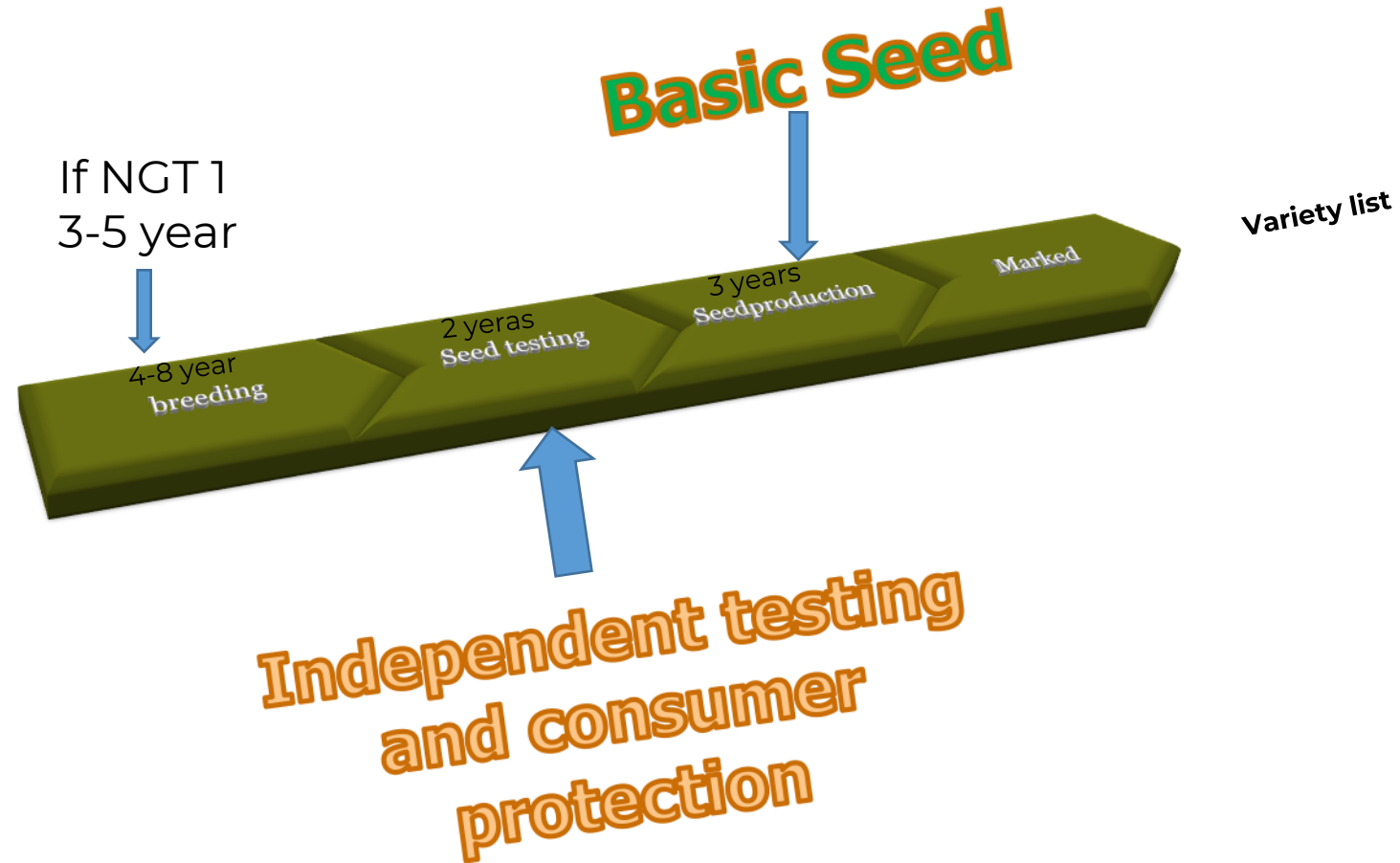
Patents versus Plant Variety Rights

| Patents | Plant Variety Rights |
|--|--------------------------|
| Breeders Genepool= invention | Gene pool ≠ invention |
| IP protection closed | IP protection open |
| Exclusive right for the patent holder | Breeders' privilege |
| License = grey zone | Royalties |

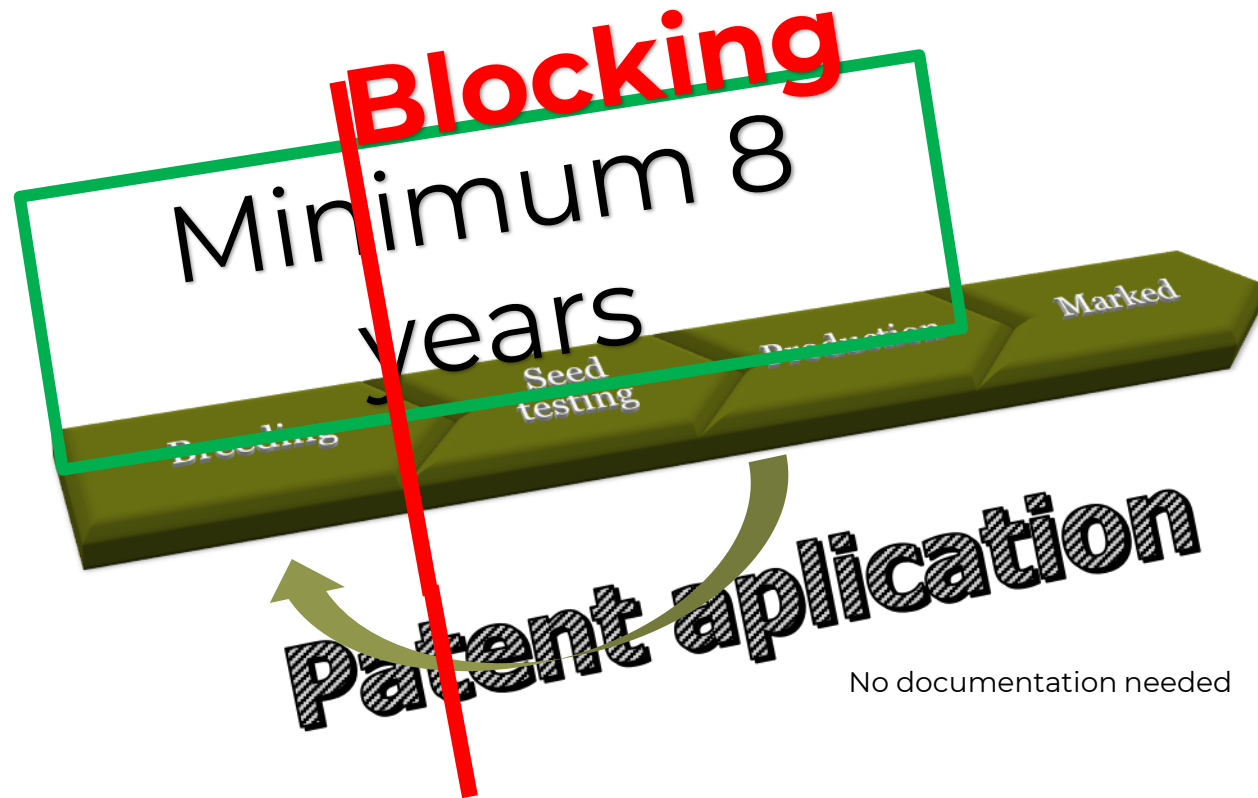
- * Farmers will not pay more in royalties Patents will only make the FSS to bigger problem



CPVR/PRM



CPVR or Patent systemet



Does not need to be documented,
You just have to make a probable description

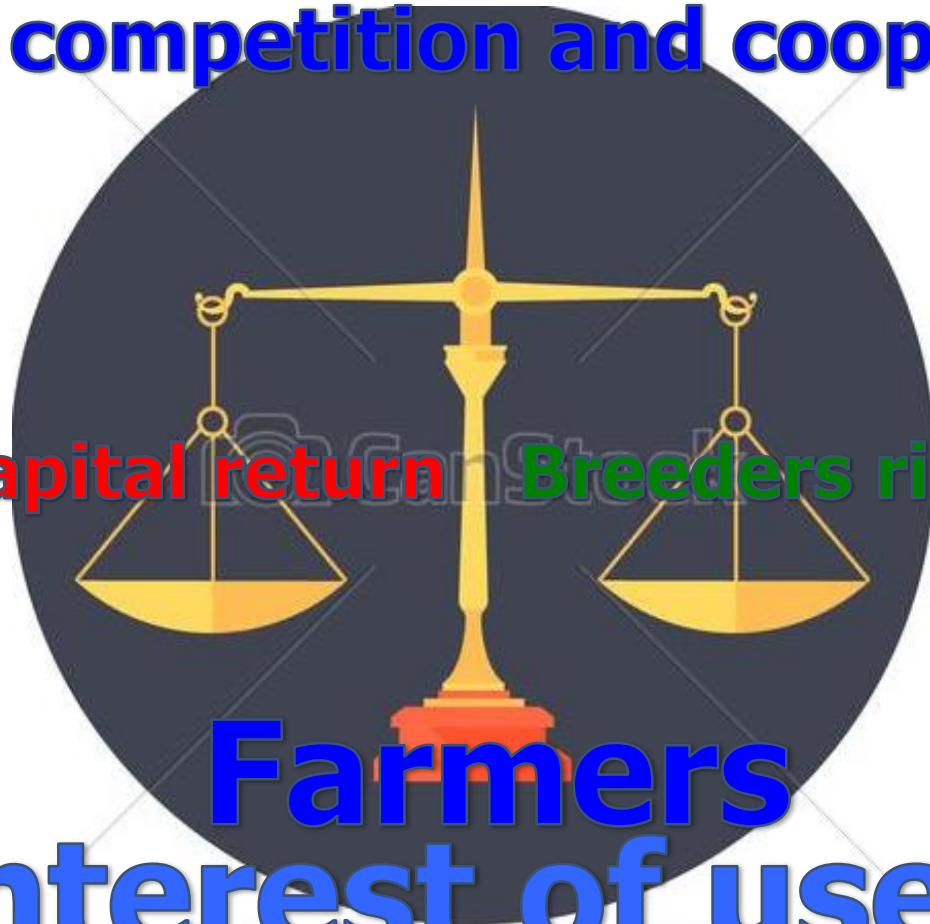


Finding the balance to get innovation!

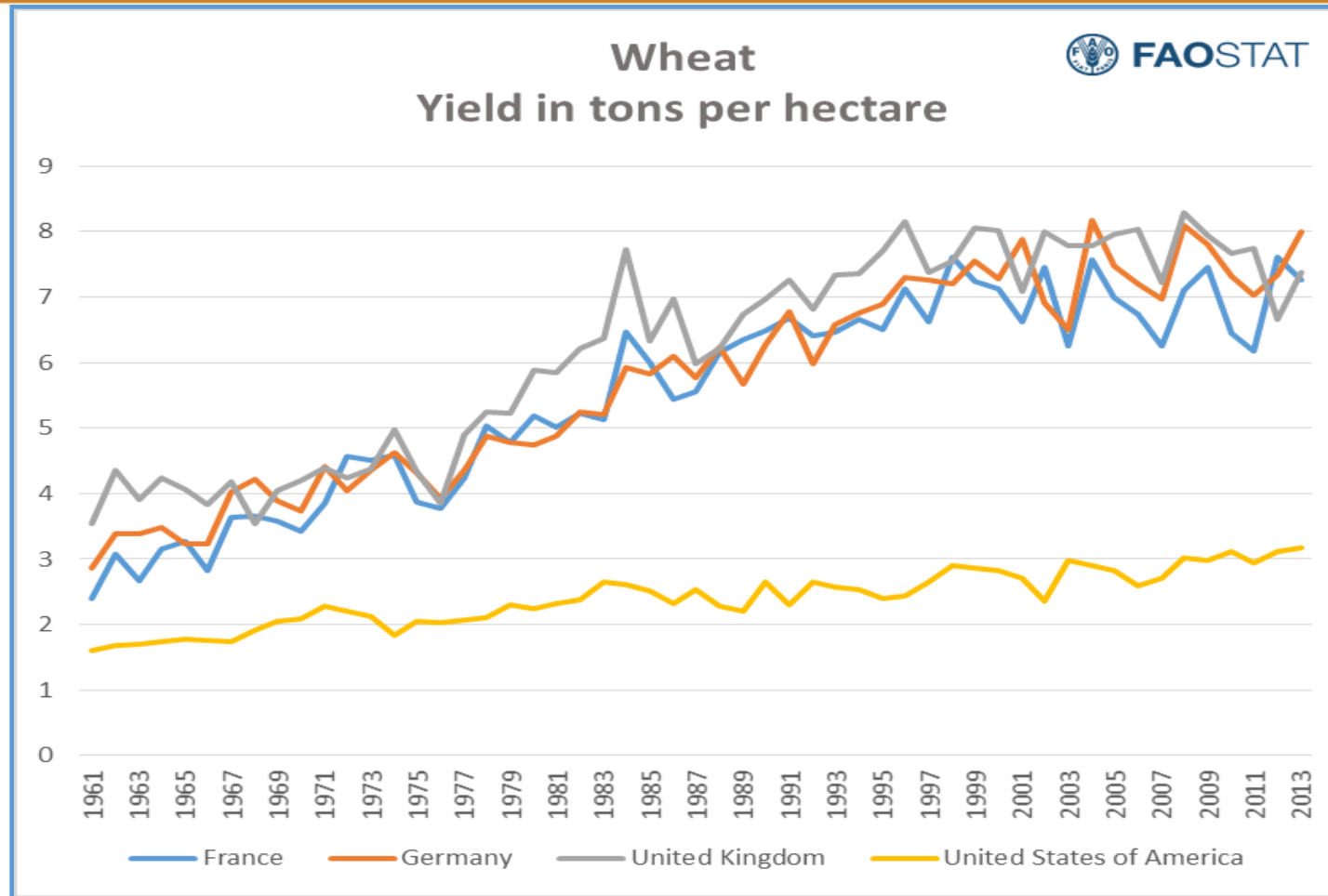
Free competition and cooperation

The capital return **Breeders rights**

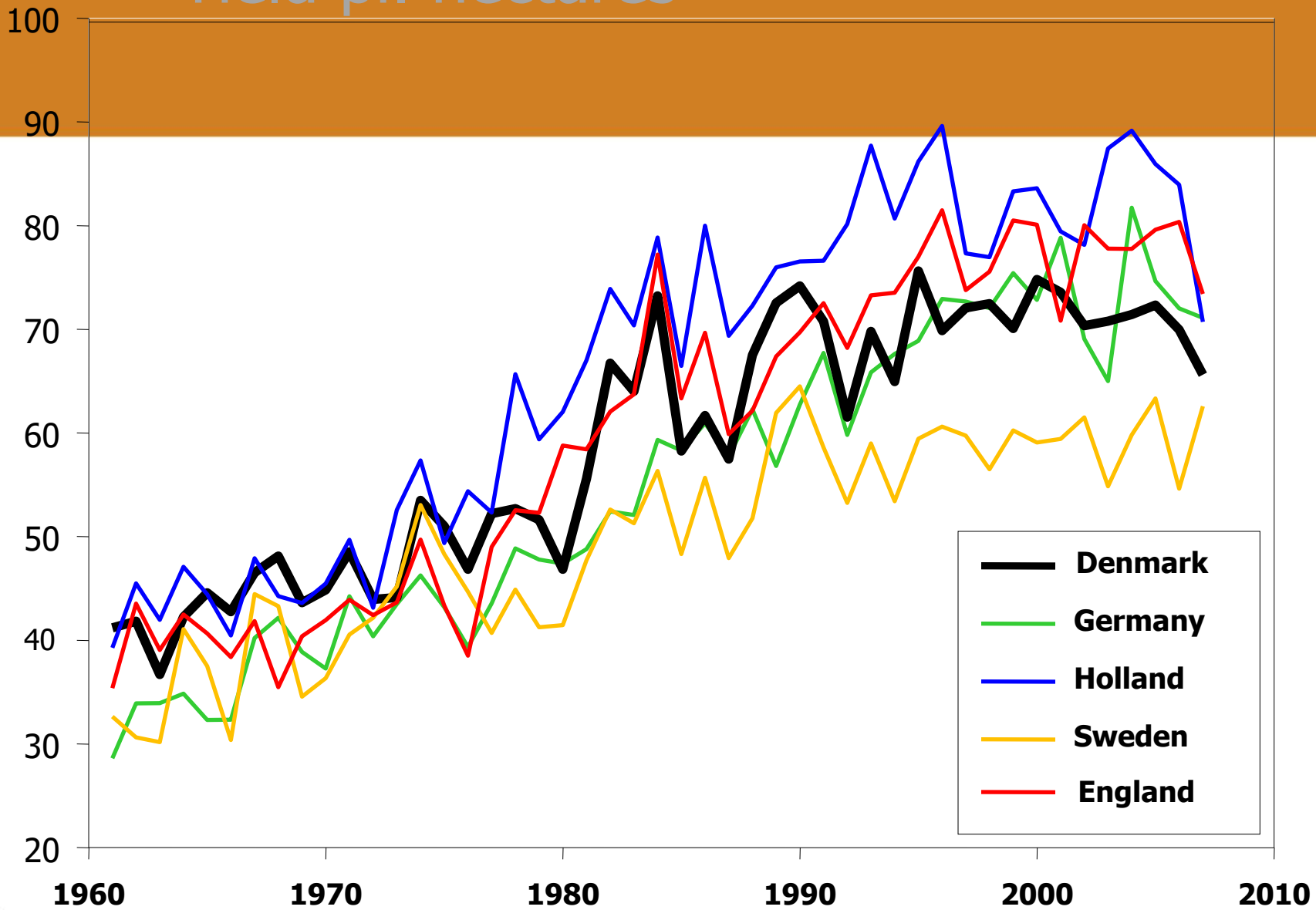
Farmers
Interest of users



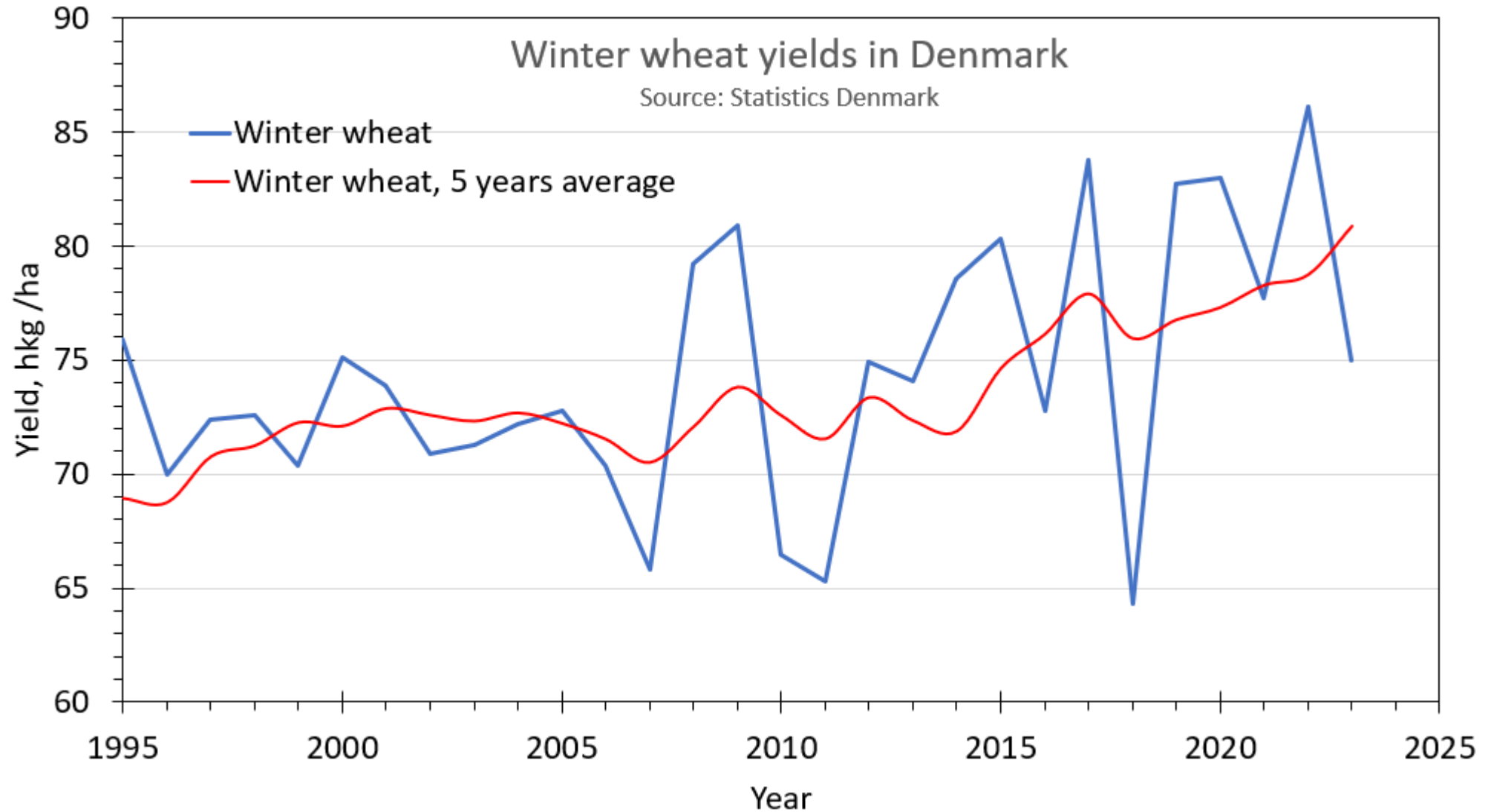
EU Main producers /USA



Yield pr. hectares



Reduction of N with 50 % in 30 year and the use of PPP with 20 year



Treatment Index in Denmark and Germany

| | DK 2024 | | Gernay 2021-23 | |
|-------------|---------|---------|----------------|-------------|
| | Wheat | W. Rape | Wheat | Winter rape |
| Herbac. | 1,24 | 1,71 | 2,0 | 2,2 |
| Growsreg. | 0,26 | 0,02 | ? | ? |
| Fungi | 1,12 | 0,43 | 2,4 | 1,0 |
| Insect | 0,33 | 0,83 | 0,8 | 2,7 |
| TI in total | 2,95 | 2,78 | > 5,2 | > 5,9 |

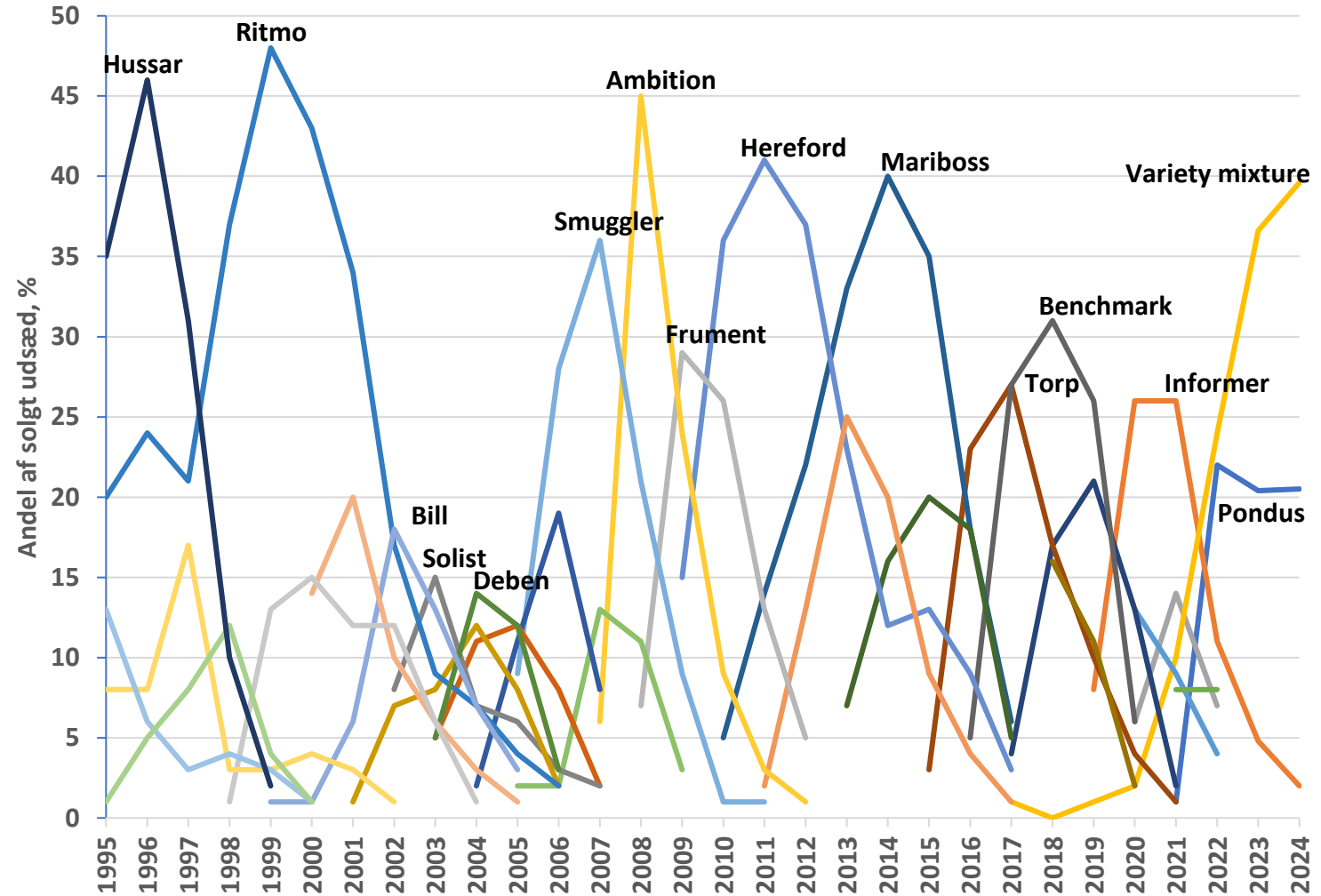


The perfect Variety list

| 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, hkg per ha | Starch, % in dry matter | Crude protein in dry matter, Tested variety | Specific weight, Tested variety | Mildew coverage | Septoria coverage | Yellow rust coverage | Ripening date | Straw length | Lodging | |
| | (index) | (hkg/ha) | (%) | (%) | (kg/hl) | (%) | (%) | (%) | | (cm) | (score 0 - 10) | |
| Year | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | |
| Sorting | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |
| 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. Nakskov | 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) | |



New varieties are old after 2-5 years



Better Varieties needed more than ever!

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



Thank you

