UPOV

International Union for the Protection of New Varieties of Plants

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ADDENDUM TO EXPERIENCE IN THE MANAGEMENT OF REFERENCE COLLECTIONS WITH THE SELECT METHOD

Document prepared by an expert from Germany

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The Annex to this document contains a copy of a presentation on "Experience in the management of reference collections with the SELECT method", made at the thirty-sixth session of the Technical Working Party on Automation and Computer Programs (TWC).

[Annex follows]

EXPERIENCE IN THE MANAGEMENT OF REFERENCE COLLECTIONS WITH THE SELECT METHOD

Presentation prepared by an expert from Germany

Bundessortenamt

Experience in the management of reference collections with the ‘SELECT’ method

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‘SELECT’

Introduction

- developed for cereal crops (3 years test)
- clear difference for at least one characteristic
- characteristic by characteristic procedure
- summation of small differences is not allowed

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Basis:

- orthogonal comparisons = variety data out of the same growing trial
- non-orthogonal comparisons = variety data out of different growing trials (different years, same location)
- qualitative characteristics:
  - any non zero difference = variety distinct
- quantitative characteristics:
  - consideration of origin of data necessary
  - larger difference required for non-orthogonal comparison

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Approach:

- own observations of first year for candidates
- description of reference varieties (minimum of two years within the last 10 years)
- seed sample of all reference varieties in storage

⇒ the minimum difference for comparisons against the database are set in a way that a clear difference can be expected for the direct comparison in the same trial

Decision rules for Barley

UPOV No. (Barley)	Characteristic	Notes	Difference between descriptions in notes and the corresponding weight							
			1	2	3	4	5	6	7	8
1	Growth habit	1-9	0	2	4	6				
2	Hairiness of leaf sheaths	1, 9	6							
(3+4)*	Anthocyanin auricula	1-9	0	2	4	6				
7	Time ear emergence	1-9	2	4	6					
(8+9)*	Anthocyanin awns	1-9	0	2	4	6				
10	Ear glaucosity	1-9	0	2	4	6				
12	Plant length	1-9	0	4	6					
13	Ear number rows	1, 2	6							
15	Ear density	1-9	0	4	6					
16	Ear length	1-9	0	4	6					
17	Awn length	1-9	0	4	6					
-	Development sterile spikelet	1, 2	6							
20	Sterile spikelet attitude	1, 2, 3	0	6						
22	Rachilla hair type	1, 2	6							
23	Grain: husk	1, 2	6							
24	Anthocyanin lemma verves	1-9	0	2	4	6				
26	Hairiness ventral furrow	1, 9	6							
28	Color aleurone	1, 2, 3	0	6						

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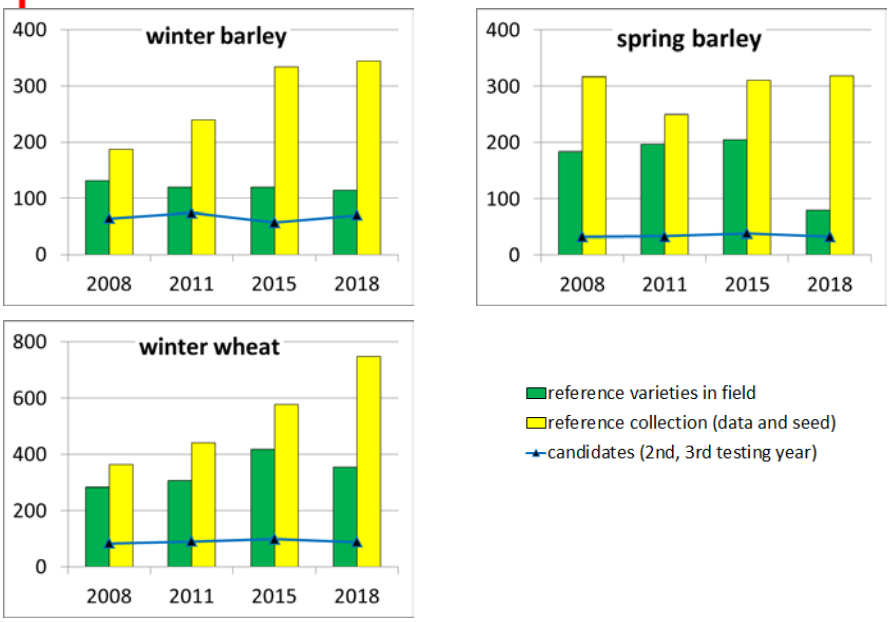
Determination of the minimum difference per characteristic and the corresponding weight:

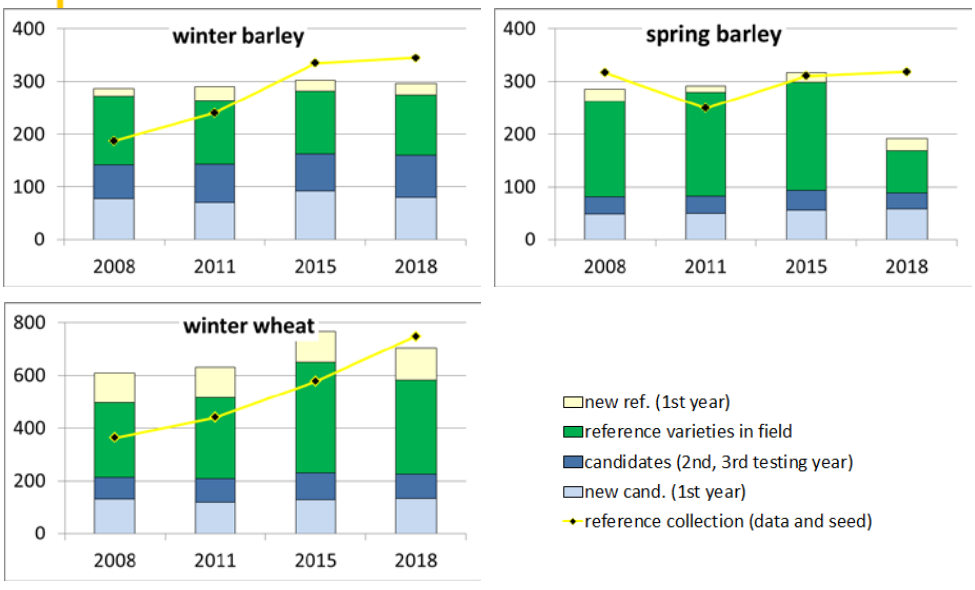
- by crop expert
- per location
- has to be revised regularly

=> a weight of 6 allows to exclude the reference variety

Reference varieties selected for candidates



Field trial composition



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Summary

- Stabilize the workload and size of the field trial
- Increase the size of the reference collection (own data and seed)
- Constant improvement of the quality of DUS tests regarding Distinctness for PBR and NLI

[End of Annex and of document]