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GENEVA

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WORKING PAPER ON TEST GUIDELINES FOR CHIVES

Document prepared by experts from Czech Republic

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I. Subject of these Guidelines

These Guidelines apply to all varieties of *Allium schoenoprasum* L.

II. Material Required

1. The competent authorities decide when, where and in what quantity and quality the seed required for testing the variety is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must make sure that all custom formalities are complied with. As a minimum, for each year of test the following quantity of seed is recommended:

6 g.

The quality of the seed to be delivered should not be below the standards of seeds for certification or marketing in the country concerned, especially in regard to germination capacity and moisture content.

2. The plant material must not have undergone any treatment unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

III. Conduct of Tests

1. The minimum duration of tests should normally be two independent growing cycles.

2. The tests should normally be conducted at one place. If any important characteristics of the variety cannot be seen at that place, the variety may be tested at an additional place.

3. The tests should be carried out under conditions ensuring normal growth. The size of the plots should be such that plants or parts of plants may be removed for measurement and counting without prejudice to the observations which must be made up to the end of the growing period. Each test should include a total of 60 plants, which should be divided between two or more replicates. Separate plots for observation and for measuring can only be used if they have been subject to similar environmental conditions.

4. Additional tests for special purposes may be established.

IV. Methods and Observations

1. All observations determined by measurement, weighing or counting should be made on 60 plants or parts taken from each of 60 plants.

2. For the assessment of uniformity of open pollinated and hybrid varieties relative uniformity, standards should be applied.

3. Unless otherwise indicated, all observations on the plant, the leaf and the head should be made at harvest maturity.

4. Unless otherwise indicated, all observations on the flower should be made at full flowering.

V. Grouping of Varieties

1. The collection of varieties to be grown should be divided into groups to facilitate the assessment of distinctness. Characteristics which are suitable for grouping purposes are those which are known from experience not to vary, or to vary only slightly, within a variety. Their various states of expression should be fairly evenly distributed throughout the collection.

2. It is recommended that the competent authorities use the following characteristics for grouping varieties:

(a) Leaf: color (characteristic 6)
(b) Flower: color (characteristic 15)

VI. Characteristics and Symbols

1. To assess distinctness, uniformity and stability, the characteristics and their states as given in the Table of Characteristics should be used.

2. Notes (numbers), for the purposes of electronic data processing, are given opposite the states of expression for each characteristic.

3. Legend:

(*) Characteristics that should be used on all varieties in every growing period over which the examinations are made and always be included in the variety descriptions, except when the state of expression of a preceding characteristic or regional environmental conditions render this impossible.

(+) See Explanations on the Table of Characteristics in Chapter VIII.

VII. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1.	**Plant: height**					
	short				Fitlau	3
	medium				Polyvert, Wilau	5
	tall				NOE-198	7
2.	**Plant: number of leaves**					
	few				Polyvert	3
	medium				Fitlau ,Wilau	5
	many					7

UK: 2. Plant: number of leaves: 3 few 5 medium 7 many

CZ: We agree

PL: Char. 2 to be replaced by two characteristics:

2.	**Plant: number of tillers**					
	few					
	medium					
	many					
2a.	**Plant: number of leaves in tiller**					
	few					
	medium					
	many					

CZ: we do not have any experience with the counting of tillers and comparing with number of leaves. We try to observe it during this vegetation

3.	**Leaf: attitude**					
	erect				Fitlau, Polyvert	1
	semi-erect				NOE-198, Pražská, Wilau	3
	horizontal				Jemná	5

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4.	**Leaf: curvate**					
	absent or very weak				Bohemia, Polyvert	1
	weak				Wilau	3
	medium				Pražská	5
	strong				Kirgo	7
	very strong					9
UK: Leaf: curvature (editorial remark)						
5.	**Leaf: waxiness**					
	weak					3
	medium				Bohemia	5
	strong				Fitlau	7
6. **(*)**	**Leaf: color**					
	yellowgreen					1
	green				Bohemia, Kirgo, Pražská	2
	bluegreen				Moravia, Polyvert	3
7.	**Leaf: intensity of color**					
	light				Kirgo	3
	medium				Bohemia, Pražská	5
	dark					7
8.	**Leaf: anthocyanin coloration at the base**					
	absent					1
	present				Kirgo, Polyvert	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
9.	**Leaf: length**					
	short				Fitlau	3
	medium				NOE-198	5
	long					7
10.	**Leaf: thickness**					
	thin				Wilau	3
	medium				Bohemia	5
	thick				Polyvert	7
11. **(+)**	**Leaf: shape of cross section**					
	round				Bohemia, Kirgo	1
	semi-round				Jemná	2
	dish shape				Moravia, Polyvert	3

UK: definitely needs a drawing

CZ: we agree with a drawing and we propose to make following accurate: 11. Leaf: shape of cross section (in the middle of the leaf)

12.	**Bud: shape**					
	elliptic				Fitlau, Pražská, Wilau	1
	round				Jemná	2
	broad ovate				Bohemia, Kirgo, NOE-198	3
13.	**Bud: size**					
	small				Fitlau, Kirgo	3
	medium				Polyvert	5
	large					7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14.	**Bud: anthocyanin coloration**					
	absent					1
	present					9
15. (*)	**Flower: color**					
	whitish					1
	purple				Bohemia, Fitlau, Pražská	2
PL: 15. Flower: color to replace by 15. Inflorescence: color of flowers						
CZ: we agree						
16.	**Flower: size**					
	small				Fitlau, Wilau	3
	medium				Polyvert	5
	large				Bohemia	7
PL: 16. Flower: size to replace by 16. Inflorescence: size of head						
CZ: we agree						
17.	**Plant: height in flower stage**					
	short				Bohemia, Wilau	3
	medium				NOE-198, Pražská	5
	tall				Polyvert	7
UK: 17. Plant: height at flowering stage						
PL: 17. Plant: height (flowering plant)						
CZ: we agree with UK (editorial remark)						

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18.	**Time of sprouting (10% of the plants show new green sprouts)**					
	early					3
	medium					5
	late					7

PL: 18. Time of sprouting (10% of the plants show new green sprouts) to replace 18. Time of shooting (10% of the plants show new green shoots)

CZ: we are not sure, there is editorial remark

19.	**Time of bud formation (10% of the plants show a bud)**					
	early				Bohemia	3
	medium					5
	late				Polyvert	7
20.	**Time of beginning of flowering (10% of the plants show a first inflorescence)**					
	early				Bohemia	3
	medium					5
	late				Kirgo	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
21.	**Time of drawing in of leaves (10% of the plants draw in leaf shoots)**					
	early					3
	medium					5
	late					7

UK: 21. Time of drawing in of leaves (10% of the plants draw in leaf shoots) to replace by 21. Time of senescence (10% of the plants becomes senescence)

PL: 21. *Time of drawing in of leaves (10% of the plants draw in leaf shoots) to replace by 21. Time of falling down in of leaves (10% of the plants fallen in leaf shoots)*

CZ: *we agree with UK, we think there is editorial remark*

22. **(*)** **(+)**	**Male sterility**					
	absent or very weakly expressed					1
	weakly expressed					2
	strongly expressed					3

CZ: *characteristic 22. was added after distribution to the participating experts of the sub group on the base of recommendation of breeders*

VIII. Explanations on the Table of Characteristics

Ad. 11: Leaf: shape of cross section

will be added

Ad. 22: Male sterility

1 absent or very weakly expressed	less than 10% of plants
2 weakly expressed	10% to 50% of plants
3 strongly expressed	more than 50% of plants

IX. Literature

JONS, H.A. and MANN, L.K. (1963): Onions and Their Allies: Botany, Cultivation and Utilisation, Hill Leonard (Books) London Interscience Publishers INC., New York

BREWSTER, J.L. (1994): Crop Production Science in Horticulture 3: Onions and other vegetables *Alliums,* CAB International

KONVICKA, O. (1998): Cesnek, Základy biologie a pestování, obsahové látky a lécivé úcinky, Tešínská tiskárna a.s. Ceský Tešín

VOGEL, G. (1996): Handbuch des Speziiellen Gemüsebaues, Ulmer Verlag Stuttgart

X. Technical Questionnaire

	Reference Number (not to be filled in by the applicant)
TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights	
1.1 Species	*Allium schoenoprasum* L. CHIVES
2. Applicant (Name and address)	
3. Proposed denomination or breeder's reference	
4. Information on origin, maintenance and reproduction of the variety 4.1 Method of maintenance and reproduction (i) hybrid [ ] (ii) open-pollinated variety [ ] 4.2 Other information	

5. Characteristics of the variety to be given (the number in brackets refers to the corresponding characteristics in the Test Guidelines; please mark the state of expression which best corresponds).

	Characteristics	Example Varieties	Note
5.1 (1)	**Plant: height**		
	short	Fitlau	3 [ ]
	medium	Polyvert, Wilau	5 [ ]
	tall	NOE-198	7 [ ]
5.2 (3)	**Leaf: attitude**		
	erect	Fitlau, Polyvert	1 [ ]
	semi-erect	NOE-198, Pražská, Wilau	3 [ ]
	horizontal	Jemná	5 [ ]
5.3 (6)	**Leaf: color**		
	yellowgreen		1 [ ]
	green	Bohemia, Kirgo, Pražská	2 [ ]
	bluegreen	Moravia, Polyvert	3 [ ]
5.4 (10)	**Leaf: thickness**		
	thin	Wilau	3 [ ]
	medium	Bohemia	5 [ ]
	thick	Polyvert	7 [ ]
5.5 (15)	**Flower: color**		
	whitish		1
	purple	Bohemia, Fitlau, Pražská	2

PL: 15. Flower: color to replace by 15. Inflorescence: color of flowers

CZ: we agree

	Characteristics	Example Varieties	Note
5.6 (22)	**Male sterility**		
	absent or very weakly expressed		1 [ ]
	weakly expressed		2 [ ]
	strongly expressed		3 [ ]

CZ: characteristic 22 was added after distribution to the participating experts of the subgroup on the basis of Czech breeders' recommendation..

6. Similar varieties and differences between these varieties

Denomination of similar variety	Characteristic in which the similar variety is different o)	State of expression of similar variety	State of expression of candidate variety

o) In the case of identical states of expressions of both varieties, please indicate the size of the difference.

7. Additional information which may help to distinguish the variety

7.1 Resistance to pests and diseases

7.2 Special conditions for the examination of the variety

7.3 Other information

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

If the answer to that question is yes, please attach a copy of such an authorization.

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