

UPOV

TG/67/5(proj.1)

ORIGINAL: English

DATE: 2004-06-15

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

**RED FESCUE, SHEEP'S FESCUE
(including Hard Fescue)**

UPOV code: FESTU_RUB
FESTU_OVI
FESTU_HET

(*Festuca rubra* L. sensu lato
& *Festuca ovina* L. sensu lato)

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from the Netherlands

*to be considered by the
Technical Working Party for Agricultural Crops at its thirty third session,
to be held in Poznań (Poland) from June 28 to July 2, 2004*

Alternative Names:*

Latin	English	French	German	Spanish
<i>Festuca rubra</i> L. sensu lato	Red Fescue	Féтуque rouge	Rotschwengel I	Cañuela roja
<i>Festuca rubra</i> L. ssp. <i>commutata</i>	Chewings Fescue	F. rouge gazonnante	Horstrotschwengel	Cañuela roja
<i>Festuca rubra</i> L. ssp. <i>rubra</i>	Creeping Red Fescue	Féтуque rouge traçante	Ausläuferrotschwengel	Cañuela roja
<i>Festuca trichophylla</i> L. ssp.	Slender Creeping Red Fescue	F. rouge demitraçante	R. mit kurzen Ausläufern	Cañuela roja
<i>Festuca ovina</i> L. sensu lato	Sheep's Fescue	Féтуque ovine	Schafschwengel	Cañuela de ovejas
<i>Festuca ovina</i> L. ssp. <i>vulgaris</i>	Sheep's Fescue	Féтуque ovine	Schafschwengel	Cañuela de ovejas
<i>Festuca ovina</i> L. ssp. <i>tenuifolia</i>	Fineleaved Sheep's Fescue	F. ovine à feuilles menues	Haarfeiner Schwengel	Cañuela de ovejas
<i>Festuca ovina</i> L. ssp. <i>duriuscula</i>	Hard Fescue	Féтуque durette	Härtlicher Schwengel	Cañuela de ovejas
<i>Festuca rubra</i> L ssp <i>litoralis</i>				
<i>Festuca rubra</i> L. ssp <i>pruinosa</i>				
<i>Festuca heterophylla</i>				
<i>Festuca pseudo ovina</i>				

* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

The purpose of these guidelines (“Test Guidelines”) is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

ASSOCIATED DOCUMENTS

These guidelines (“Test Guidelines”) should be read in conjunction with document TG/1/3, “General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of New Varieties of Plants” (hereinafter referred to as the “General Introduction”) and its associated “TGP” documents.

{Other associated UPOV documents:}

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1. SUBJECT OF THESE TEST GUIDELINES.....	4
2. MATERIAL REQUIRED	4
3. METHOD OF EXAMINATION.....	4
3.1 Number of Growing Cycles	4
3.2 Testing Place	4
3.3 Conditions for Conducting the Examination.....	4
3.4 Test Design	5
3.5 Number of Plants / Parts of Plants to be Examined.....	5
3.6 Additional Tests	5
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY	6
4.1 Distinctness	6
4.2 Uniformity.....	6
4.3 Stability	6
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL	7
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS	7
6.1 Categories of Characteristics.....	7
6.2 States of Expression and Corresponding Notes.....	7
6.3 Types of Expression	7
6.4 Example Varieties	8
6.5 Legend.....	8
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES.....	9
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS	14
9. LITERATURE	18
10. TECHNICAL QUESTIONNAIRE.....	19

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Festuca rubra* L. sensu lato (including a.o. *Festuca rubra* L. ssp. *commutata* Gaud., *Festuca rubra* L. ssp. *rubra*, *Festuca rubra* L. ssp. *trichophylla*, *Festuca rubra* L. ssp. *litoralis* (Meyer) Auqu., *Festuca rubra* L. ssp. *pruinosa* (Hack.) Piper), *Festuca ovina* L. sensu lato (including a.o. *Festuca ovina* L. ssp. *vulgaris*, *Festuca ovina* L. ssp. *tenuifolia* and *Festuca ovina* L. ssp. *duriuscula*), *Festuca pseudo ovina* Hack. and *Festuca heterophylla* Lam.

2. Material Required

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of seed.

2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

1200 grams (**DE asks 1500 grams**)

The seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority.

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

3. Method of Examination

3.1 *Number of Growing Cycles*

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

3.2 *Testing Place*

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 "Examining Distinctness".

3.3 *Conditions for Conducting the Examination*

The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

3.3.1 Stage of development for the assessment

The optimum stage of development for the assessment of each characteristic is indicated by a decimal code for growth stage in the second column of the Table of Characteristics. The stages of development denoted by the code are described in Chapter 8.

3.3.2 Type of observation – visual or measurement

The recommended method of observing the characteristic is indicated by the following key in the second column of the Table of Characteristics:

- MG: single measurement of a group of plants or parts of plants
- MS: measurement of a number of individual plants or parts of plants
- VG: visual assessment by a single observation of a group of plants or parts of plants
- VS: visual assessment by observation of individual plants or parts of plants

3.3.3 Type of plot for observation

The recommended type of plot in which to observe the characteristic is indicated by the following key in the second column of the Table of Characteristics:

- A: spaced plants
- B: row plot
- C: special test

3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 60 spaced plants which should be divided between 3 replicates. Optionally the test may be conducted with row plots (2 replicates per variety with 2 rows per plot and a minimum plot length of 2 m, that is a minimum of 8 meters in total).

3.4.2 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

3.5 *Number of Plants / Parts of Plants to be Examined*

Unless otherwise indicated, all observations or measurements on spaced plants should be made on 60 plants or parts taken from each of 60 plants and any other observations or measurements should be made on all plants in the test. In the case of observations or measurements of parts taken from single plants, the number of parts to be taken from each of the plants should be 1.

3.6 *Additional Tests*

Additional tests, for examining relevant characteristics, may be established.

4. Assessment of Distinctness, Uniformity and Stability

4.1 *Distinctness*

4.1.1 General Recommendations

It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in these Test Guidelines.

4.1.2 Consistent Differences

The differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner. Therefore, it is important that users of these Test Guidelines are familiar with the recommendations contained in the General Introduction prior to making decisions regarding distinctness.

4.2 *Uniformity*

4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

4.2.2 The assessment of uniformity should be according to the recommendations for cross-pollinated varieties in the General Introduction.

4.3 *Stability*

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.

4.3.2 Where appropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing a new seed stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness is aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

Char. 1 Plant: ploidy
Char. 4 Plant: rhizomes

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction.

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by *) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

6.2 *States of Expression and Corresponding Notes*

States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.3 *Types of Expression*

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction.

6.4 *Example Varieties*

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

6.5 *Legend*

(*) Asterisked characteristic – see Section 6.1.2

QL Qualitative characteristic – see Section 6.3

QN Quantitative characteristic – see Section 6.3

PQ Pseudo-qualitative characteristic – see Section 6.3

MG: single measurement of a group of plants or parts of plants – see Section 3.3.2

MS: measurement of a number of individual plants or parts of plants – see Section 3.3.2

VG: visual assessment by a single observation of a group of plants or parts of plants
– see Section 3.3.2

VS: visual assessment by observation of individual plants or parts of plants
– see Section 3.3.2

(+) See Explanations on the Table of Characteristics in Chapter 8

Decimal Code for Growth Stage – see Chapter 8.1

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

Method of Examination	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
	1. 10-29 Plant: ploidy (* (+) VG-A VG-B MG-C					
QL	diploid					2
	tetraploid					4
	hexaploid					6
	octoploid					8
2. 23-25 Leaf sheath: anthocyanin coloration (* (+) VG-A			France proposes to add another characteristic which might be linked to this characteristic: Inflorescence: anthocyanin coloration of the panicle. To be observed at DC 60-68. experience with such a new characteristic ?		Who has	
QN	absent or very weak					1
	weak					3
	medium					5
	strong					7
	very strong					9
3. 29 Leaf blade: folding VG A			To be deleted			
QL	closed					1
	open					2
4. 29 Plant: rhizomes (* VS A						
QL	absent					1
	present					9

Method of Examination	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
	5. 29	Plant: growth habit	France proposes to introduce a new characteristic: Plant: natural height (in the year of sowing, before vernalization). This characteristic might be highly correlated with growth habit. Who has experience with such a new characteristic ?			
(+)	VG - A VG - B					
QN	erect					1
	semi erect					3
	medium					5
	semi prostrate					7
	prostrate					9
6. 29	Leaf: length	New proposal				
(+)	VG - A VG - B					
	very short					1
	short					3
	medium					5
	long					7
	very long					9
7. 29	Leaf: width					
	VG - A VG - B					
QN	very narrow					1
	narrow					3
	medium					5
	wide					7
	very wide					9

Method of Examination	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
8. 29	Leaf: color					
	VG - A					
	VG - B					
QN	very light green					1
	light green					3
	medium green					5
	dark green					7
	very dark green					9
9. 29	Leaf: glaucosity		To be deleted			
	VG		France proposes to keep this Characteristic			
	A					
QL	absent					1
	present					9
10. 49-52	Plant: natural height at the time of heading		New proposal			
	MS - A					
	MG - B					
	(excluding the flag leafblade)					
QN	short					3
	medium					5
	long					7
11 (*)	Plant: time of heading					
(+)	MS - A					
	MG - B					
QN	very early					1
	early					3
	medium					5
	late					7
	very late					9

Method of Examination	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
12	52-56	Flag leaf: length				
(*)						
(+)	MS					
	A					
		very short				1
		short				3
		medium				5
		long				7
		very long				9
13	52-56	Red Fescue varieties only: Flag leaf: width				
(*)						
(+)	MS					
	A					
QN		narrow				3
		medium				5
		wide				7
14	52-56	Red Fescue varieties only: Flag leaf: length/width			New proposal	
(*)						
	MS					
	A					
QN		small				3
		medium				5
		large				7
15	60-68	Plant: length (inflorescence included)				
(*)						
	MS					
	A					
QN		very short				1
		short				3
		medium				5
		long				7
		very long				9

	Method of Examination	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
16	60-68	Stem: length above upper node (inflorescence excluded)		New proposal			
(*)	MS						
(+)	A						
QN		very short					1
		short					3
		medium					5
		long					7
		very long					9
17	60-68	Inflorescence: length					
(*)	MS						
(+)	A						
QN		very short					1
		short					3
							5
		medium					7
		long					9
		very long					
18.	68	Awns		To be deleted			
	VG			France proposes to			
	A			keep this			
				Characteristic			
QL		absent					1
		present					9
19.	68+	Lemma: hairiness		To be deleted			
	VS						
	A						
QL		absent					1
		present					9

8. Explanations on the Table of Characteristics

8.1 *Explanations for individual characteristics*

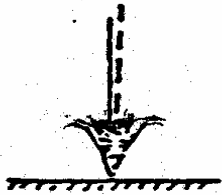
Ad. 1: Plant: ploidy

	WITH RHIZOMES	WITHOUT RHIZOMES
HEXAPLOID	<i>F. rubra trichophylla</i>	<i>F. rubra commutata</i> <i>F. ovina</i>
OCTOPLOID	<i>F. rubra rubra</i>	

Ad. 2: Leaf sheath: anthocyanin coloration

The optimal stage to observe this characteristic is at DC 23-25, which is usually in the greenhouse, on seedlings, before planting in the field.

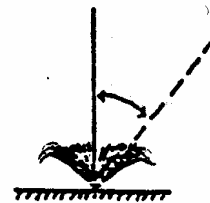
Ad. 5: Plant: growth habit



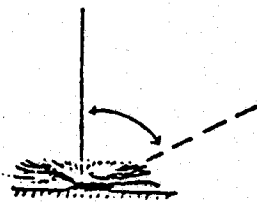
1
erect



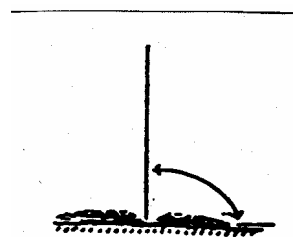
3
semi erect



5
medium

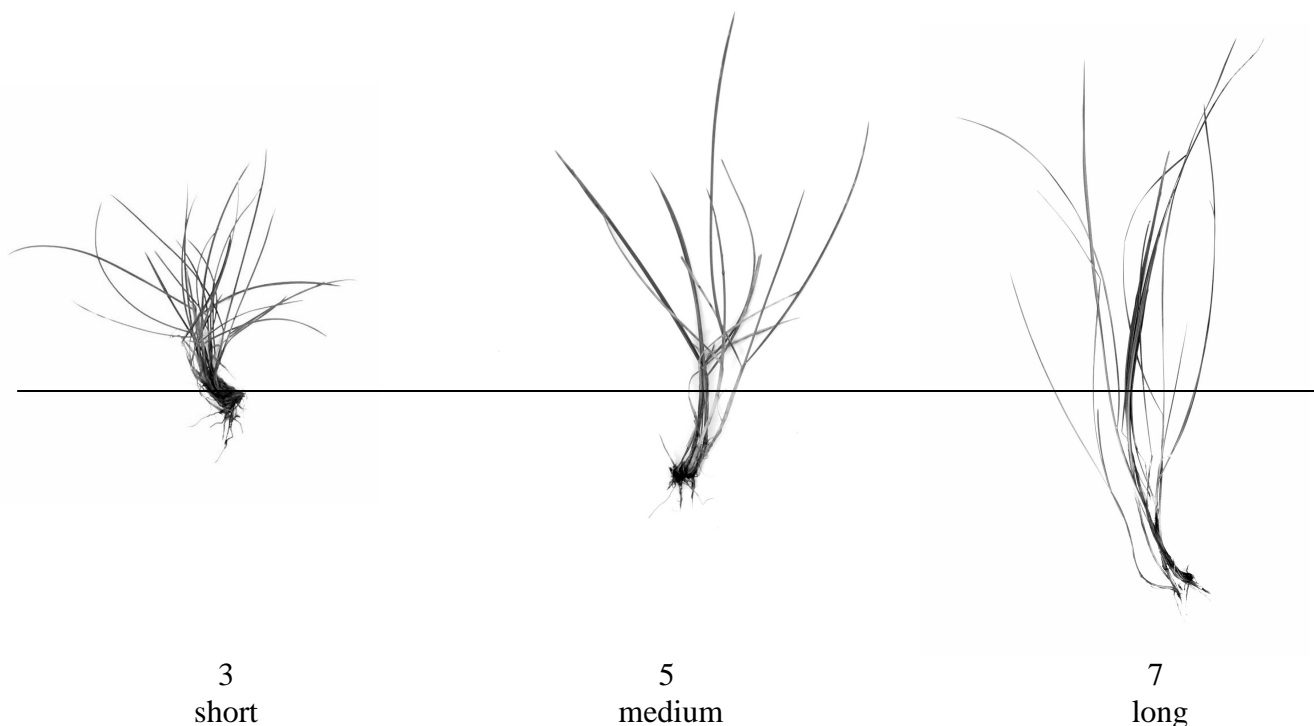


7
semi prostrate



9
prostrate

Ad. 6: Leaf length (at stage DC 29: Main shoot and 9 or more tillers) = total leaf length, including leaf blade and leaf sheath.



Ad. 11: Time of heading (mean date in the second year)

Plots with spaced plants and row plots should be observed at least twice a week and more frequently if there is any need to do so.

A. Plots with spaced plants

The date of heading of each single plant should be assessed. A single plant is considered to have headed when the tip of three heads (just after DC 50) can be seen protruding from the flag leaf sheath. From the single plant data, a mean date per plot and a mean date per variety is obtained.

B. Row plots

At each observation date, the average plot stage should be expressed in one of the following growth stages:

- DC 45 Boots swollen
- DC 49 First awns visible (in awned forms only)
- DC 50 First spikelet of inflorescence just visible
- DC 52 $\frac{1}{4}$ of the inflorescence emerged (across all stems)
- DC 54 $\frac{1}{2}$ of the inflorescence emerged (across all stems)
- DC 56 $\frac{3}{4}$ of the inflorescence emerged (across all stems)
- DC 58 Emergence of inflorescence completed

The date of heading is the date at which the average plot stage DC 54 has been reached. This date should – if necessary – be obtained by interpolation.

Ads. 12 and 13: Flag leaf length and flag leaf width

Flag leaf is the first leaf below the inflorescence.

Time: within a period of two to three weeks after heading (DC 52-56).

Measurements should be made on the same (plant-representative) leaf.

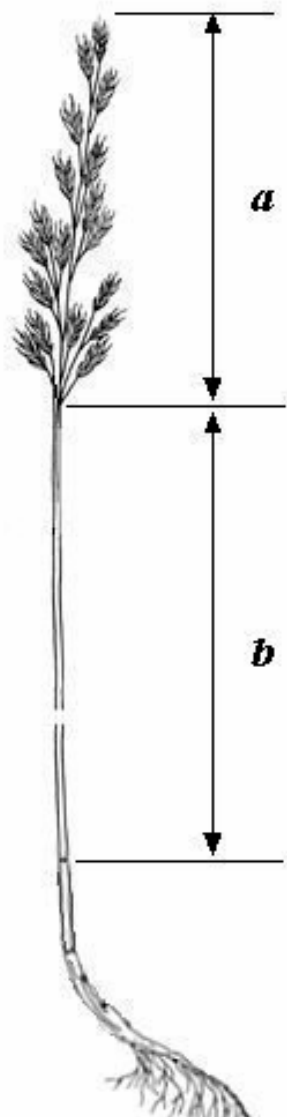
Length should be measured in mm from the tip of the leaf blade until the leaf sheath.

Width should be measured in half mm at the widest point of the leaf blade

Ads. 16 and 17

b = Char. 16: Stem length, above the upper node (inflorescence excluded)

a = Char. 17: Length of the inflorescence



8.2 *Growth stages of grasses derived from the decimal code for the growth stages of cereals (Zadoks, et al., 1974)*

Seedling growth (seedling: one shoot)

- DC 10 First leaf through coleoptile
- DC 15 Five leaves unfolded
- DC 19 Nine or more leaves unfolded

Tillering

- DC 20 Main shoot only (beginning of tillering)
- DC 23 Main shoot and 3 tillers
- DC 25 Main shoot and 5 tillers
- DC 29 Main shoot and 9 or more tillers

Stem elongation

- DC 30 Pseudo-stem erection (formed by sheaths of leaves).
- DC 31 First node detectable (early stem extension across all stems)
- DC 35 Fifth node detectable (50 % extension across all stems)
- DC 39 Flag leaf ligula/collar just visible (pre-boot stage)

Booting

- DC 41 Flag leaf sheath extending (little enlargement of the inflorescence, early boot-stage)
- DC 45 Boots swollen (late-boot stage)
- DC 47 First leaf sheath opening
- DC 49 first awns visible (in awned forms only)

Inflorescence emergence (mostly non-synchronous)

- DC 50 First spikelet of inflorescence just visible
- DC 52 25 % of the inflorescence emerged (across all stems)
- DC 54 50 % of the inflorescence emerged (across all stems)
- DC 56 75 % of the inflorescence emerged (across all stems)
- DC 58 Emergence of inflorescence completed

Anthesis (mostly non-synchronous)

- DC 60 Beginning of anthesis
- DC 64 Anthesis half-way
- DC 68 Anthesis complete

9. Literature

Duyvendak, R., B. Luesink and Vos, H. 1981: Delimitation of taxa and cultivars of red fescue (*Festuca rubra* L. sensu lato). *Rasen, Turf, Gazon* 3: 54 – 62.

Zadoks, J.C., T.T. Chang and Konzak C.K. 1974: A decimal code for the growth stages of cereals. *Weed Research* 14: 15 – 421.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1.1 Botanical Name	<input type="text" value="Festucu rubra L.
(Please indicate subspecies)"/>	<input type="checkbox"/>
1.1.2 Common Name	<input type="text" value="Red Fescue"/>	
1.2.1 Botanical Name	<input type="text" value="Festuca ovina L.
(Please indicate subspecies)"/>	<input type="checkbox"/>
1.2.2 Common Name	<input type="text" value="Sheep's Fescue"/>	
1.3 Botanical Name	<input type="text" value="Festuca pseudo ovina Hack.
(Please indicate subspecies)"/>	<input type="checkbox"/>
1.4.1 Botanical Name	<input type="text" value="Festuca heterophylla Lam"/>	<input type="checkbox"/>
1.4.2 Common Name	<input type="text" value="Shade Fescue"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
-------------------------	-----------------	-------------------

3. Proposed denomination and breeder's reference

Proposed denomination
(if available)

Breeder's reference

#4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

- (a) controlled cross
(please state parent varieties)
- (b) partially known cross
(please state known parent variety(ies))
- (c) unknown cross

4.1.2 Mutation
(please state parent variety)

4.1.3 Discovery and development
(please state where and when discovered
and how developed)

4.1.4 Other
(please provide details)]

4.2 Method of propagating the variety

France proposes to ask additional information on the number of components of the polycross and number of generations for commercial seed production. It might also be useful to ask which generation has been submitted for testing (syn1, syn 2).

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
-------------------------	-----------------	-------------------

5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

Characteristics	Example Varieties	Note
5.1 Plant: ploidy (1)		
diploid		2
tetraploid		4
hexaploid		6
octoploid		8
5.2 Plant: rhizomes (4)		
absent		1
present		9
5.3 Plant: time of heading (11)		
very early		1
early		3
medium		5
late		7
very late		9

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
-------------------------	-----------------	-------------------

6. Similar varieties and differences from these varieties

Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>		<i>(example to be inserted) (example to be inserted)</i>	

Comments:

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>#7. Additional information which may help in the examination of the variety</p> <p>7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?</p> <p>Yes [] No []</p> <p>(If yes, please provide details)</p> <p>7.2 Special conditions for the examination of the variety</p> <p>7.2.1 Are there any special conditions for growing the variety or conducting the examination?</p> <p>Yes [] No []</p> <p>7.2.2 If yes, please give details:</p> <p>7.3 Other information</p>		
<p>8. Authorization for release</p> <p>(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?</p> <p>Yes [] No []</p> <p>(b) Has such authorization been obtained?</p> <p>Yes [] No []</p> <p>If the answer to (b) is yes, please attach a copy of the authorization.</p>		

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
-------------------------	-----------------	-------------------

9. Information on plant material to be examined.

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

- | | | |
|---|---------|--------|
| (a) Microorganisms (e.g. virus, bacteria, endophyte) | Yes [] | No [] |
| (b) Chemical treatment (e.g. growth retardant or pesticide) | Yes [] | No [] |
| (c) Tissue culture | Yes [] | No [] |
| (d) Other factors | Yes [] | No [] |

Please provide details of where you have indicated "yes".

.....

10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant's name

Signature

Date

[End of document]