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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

OSTEOSPERMUM *

UPOV Code: OSTEO

Osteospermum L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from Canada

to be considered by the
Technical Working Party for Ornamental Plants and Forest Trees
at its fortieth session, to be held in Kunming, China, from July 2 to 6, 2007

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Osteospermum L.	Osteospermum	Ostéospermum	Osteospermum	Osteospermum

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 Test Guidelines should be read in conjunction with the General Introduction and its associated TGP documents.

* 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.]

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Osteospermum* L. of the family *Asteraceae*.

Comment regarding subject of these Test Guidelines: As some of the varieties on the market are crossings between Osteospermum and Dimorphotheca ("Symphony" series of Sakata) we should discuss whether the Guidelines could be used for the whole genus Dimorphotheca as well or only for the crossings between Osteospermum and Dimorphotheca.

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 rooted cuttings.

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

15 rooted cuttings

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 a single growing cycle.

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

3.3.1 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. Except where otherwise indicated, the optimum stage of development for the assessment of the characteristics is at the time of full flowering.

3.3.2 Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within

the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.

3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 15 plants.

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 on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observations made on all plants in the test.

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 For the assessment of uniformity a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 15 plants, 1 off-type is allowed.

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 plant 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 are 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:

(a) Plant: attitude of shoots (characteristic 1)
(b) Leaf: variegation (characteristic 6)
(c) Ray floret: inward rolling of longitudinal margins (characteristic 15)
(d) Ray floret: number of colors on upper side (base excluded) (characteristic 18)

Comment regarding Page 5, point 5.3 (e) and (f) We are not sure that it is possible to discriminate between yellow and yellow orange, between yellow orange and orange and between orange and orange brown. Therefore the yellow orange and the orange brown group might not be suitable for grouping and we should discuss whether they should be deleted.

(e) Ray floret: main color on upper side (characteristic 19) with the following groups:
Gr. 1: white
Gr. 2: yellow
Gr. 3: yellow orange
Gr. 4: orange
Gr. 5: orange brown
Gr. 6: pink
Gr. 7: red
Gr. 8: purple
Gr. 9: violet

(f) Ray floret: secondary color on upper side (characteristic 21) with the following groups:
Gr. 1: white
Gr. 2: yellow
Gr. 3: yellow orange
Gr. 4: orange
Gr. 5: orange brown
Gr. 6: pink
Gr. 7: red
Gr. 8: purple
Gr. 9: violet

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 Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3
QN Quantitative characteristic – see Chapter 6.3
PQ Pseudo-qualitative characteristic – Chapter 6.3

(a)-(d) See Explanations on the Table of Characteristics in Chapter 8.1.
(+) See Explanations on the Table of Characteristics in Chapter 8.2

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

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. **(*)**		**Plant: attitude of shoots**					
QN		erect				Florsteo White	1
		semi-erect				Oste Pinkbic	2
		horizontal				Julia	3
2. **(*)**		**Shoot: length**					
QN		short				Sakost 12	3
		medium				Kleo 01103	5
		long				Akkapin	7
Comment for Characteristic 2: Proposal to provide method showing how to measure shoot length.							
3.		**Leaf: length including petiole**					
QN	**(a)**	short				Sakost 12	3
		medium				Akkapin	5
		long				Balserwhit	7
4.		**Leaf: width**					
QN	**(a)**	narrow				Oslalipu	3
		medium				Sunny Amanda	5
		broad				Oste Pinkbic	7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
5. **(+)**		**Leaf: depth of incisions of margin**					
QN	**(a)**	absent or very shallow				Kleoe 05119	1
		shallow				Oste Pinkbic	3
		medium				Julia	5
		deep				Oste Yel	7
		very deep				Zulu	9
Comment for Characteristic 5: If the guideline is for all varieties of Osteospermum and you start using O. pinnatum in your breeding program the current Note 9 (very deep) won't be very deep. I'm still looking for a good photograph to send to you. But maybe, with the current varieties we don't have to worry about this one.							
6. **(*)**		**Leaf: variegation**					
QL	**(a)**	absent				Sparkler	1
		present				Silver Sparkler	9
7.		**<u>Only varieties with variegation absent:</u>** **Leaf: green color of upper side**					
QN	**(a)**	light					1
		medium				Oste Pinkbic	2
		dark				Zimba	3
8.		**Young flower head: main color of upper side of ray floret**					
PQ	**(b)**	RHS Color Chart (indicate reference number)					
Proposal to add a new characteristic for the assessment of the “paracorolla” as shown in 8.2. “Flower head: paracorolla” with states of expression absent (1) and present (9). This may affect the observation of characteristic 9. Could provide an explanation to exclude paracorolla when determining characteristic 9 Source: Webster's Revised Unabridged Dictionary (1913) Paracorolla \Par`a*co*rol"la\, n. [Pref. para- + corolla.] (Bot.) A secondary or inner corolla; a corona, as of the Narcissus.							

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
9. **(*)**		**Flower head: number of ray florets**					
QN	**(c)**	few				Oslalipu	3
		medium				Kleo 03103	5
		many				Durban	7
Comment for characteristic 9: Ray florets of the “paracorolla” should not be included when assessing characteristic 9.							
10. **(*)**		**Flower head: diameter**					
QN	**(c)**	small				Akkapin	3
		medium				Sunny Fleix	5
		large				Kleo 05119	7
11. **(*)**		**Ray floret: length**					
QN	**(c)**	short				Kleo 03103	3
		medium				Sunny Felix	5
		long				Duetisunye	7
12. **(*)** **(+)**		**Ray floret: width**					
QN	**(c)**	narrow				Oslalipu	3
		medium				Sunny Amanda	5
		broad				Kleo 03103	7
13.		**Ray floret: length/width ratio**					
QN	**(c)**	small					3
		medium					5
		large					7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14. **(+)**		**Ray floret: shape of apex**					
PQ	**(c)**	acute					1
		obtuse					2
		rounded					3
		notched					4

Comment for Characteristic 14: According to TGP 14.2.1 draft 5, state (4) "notched" could be called "laciniate".

2nd Comment for Characteristic 14: You can keep it as is or change the term notched to emarginated. However, you will find that some ray florets with a rounded apex are slightly notched. So you can add a characteristic. In this case, modify characteristic 14 to read "Ray floret: shape of apex" with states of expression acute (1), obtuse (2) and rounded (3) and

Add new characteristic 14b: "Ray floret: depth of incisions of (at) apex" with states of expression absent (1), shallow (3), medium (5), deep (7) and very deep (9).

3rd Comment for Characteristic 14: Don't think that "notched" should be changed to "laciniate" because notched refers to one or two notches at the apex while laciniate is more of a fringing characteristic. If a laciniate apex occurs in Osteospermums than it could be added. Agree to divide this characteristic into two sections as proposed ("apex shape" with states of expression acute, obtuse or rounded and new characteristic "depth of incisions at apex").

15. **(*)** **(+)**		**Ray floret: inward rolling of longitudinal margins**					
QL	**(c)**	absent on all flowers				Brightside	1
		present on some flowers				Osjaseclipur	2
		present on all flowers				Balserlabli	3

Comment for Characteristic 15: There may be some confusion with the different states of expression for this characteristic. (i.e. does it refer to all or some flowers of all plants of the variety OR does it refer to all or some flowers of one plant of the variety). Perhaps an explanation or clarification of the states of expression is needed.

2nd Comment for Characteristic 15: Suggest that this characteristic be split into two. Modify characteristic 15 to read "Ray floret: inward rolling of longitudinal margins" with states of expression absent (1) and present (9).

Add new characteristic 15b: "Ray floret: inward rolling of longitudinal margins present" with states of expression present on some flowers (1) and present on all flowers (9).

As a result, there would be no need for clarification of the states of expression as proposed above.

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
16.		**<u>Only varieties with inward rolling ray floret margins:</u> Ray floret: approximate portion of ray floret with rolled margin**					
QN	**(c)**	up to one-third				Duetispocre	1
		up to one-half				Aknawim	2
		up to two-thirds				Osjamspowit	3

Comment for Characteristic 16: A diagram should be added to explain this characteristic. In our experience the following example varieties could be used: 'Duetidpocre' (1), 'Aknawim' (2) and 'Osjamspowit' (3). See Ad. 16 in 8.2.

2nd Comment for Characteristic 16: to change state 3 from "up to two-thirds" to "more than two-thirds". We would like to confirm condition of state 3 "more than two-thirds". Would the following picture represent this state of expression?

3rd Comment for Characteristic 16: The states of expression are overlapping (up to two-thirds covers states of expression (1) and (2)). Should be re-worded.

4th Comment for Characteristic 16: Considering the comments above maybe an alternative way of describing the states of expression should be up to one-third (1), from one-third to one-half (2), greater than one-half (3)

5th Comment for Characteristic 16: Don't agree that "up to two thirds" should be changed to "more than two thirds". "More than two thirds" (in other words the whole ray floret) would be a forth option. Prefer to leave this characteristic with only 3 options since it is a trait that varies within each variety and adding more rigid options would cause the rating to be less accurate. Sometimes the degree of rolling of the ray florets differs per flower, as well.

Proposal to add an additional characteristic for "spoon-type" varieties which would consider the degree of rolling of the ray floret margins. For example, is the rolled portion of the ray floret forming a tight tube or are the side moderately incurved towards each other? I have seen both the length and degree of rolling vary between "spoon-type" varieties in the past.

17.		**Ray floret: color of base**					
PQ	**(c)** **(d)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18. **(*)** **(+)**		**Ray floret: number of colors on upper side (base excluded)**					
QL	**(c)** **(d)**	one				Aksinto	1
		two				Balserlabli	2
		more than two					3
19. **(*)** **(+)**		**Ray floret: main color on upper side**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
20.		**<u>Only varieties with one color on upper side</u>: Ray floret: color distribution on upper side**					
QN	**(c)**	lighter towards base					1
		even					2
		lighter towards apex					3
21. **(*)** **(+)**		**<u>Only varieties with two or more colors on upper side:</u> Ray floret: secondary color on <u>upper</u> side**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22.		**Only varieties with two or more colors on upper side: Ray floret: distribution of secondary color on upper side**					
PQ	**(c)** **(d)**	apical zone					1
		middle zone (new state)					2
		basal zone					3
		longitudinal stripes					4
23. **(*)** **(+)**		**Only varieties with more than two colors on upper side: Ray floret: tertiary color on upper side**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
24. **(*)**		**Ray floret: color group on <u>lower</u> side**					
PQ	**(c)**	very light yellow to light yellow				Osjamvan	1
		medium yellow to dark yellow				Caprivi Milk, Kleo 03105	2
		orange to brown orange				Seipepan, Wesosora	3
		brown red				Shiela	4
		purple to brown purple				Oste Pinkbic	5
		light blue violet				Oseclav, Oslawit	6
		dark blue violet				Akzapib, Florsteo White	7
		very light brown				Sekilavan	8
		yellow brown				Kleoe 05119	9
		medium brown to dark brown				Feldost 06, Lanaval	10
		yellow with brown stripes				Duetisunye, Oste Yel	11
		orange with brown stripes				Sunny Dark Florence	12

Comment for Characteristic 24: Varieties with inward rolling of margin often have a different colour at the base of the lower side and at the middle part and the apex. Therefore we need an explanation (or diagram) where to observe the colour of the lower side of these varieties. From the pictures we have I would assume that the basal part should be excluded from the observation, but we should discuss this.

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota

2nd Comment for Characteristic 24: Even if main color on upper side of ray floret is the same, there are different main color and secondary color on lower side of ray floret as seen in the following photos. So we would propose to change how to assess using the following solution for example:

Keep characteristic 24: "Ray floret: main color on lower side" and use RHS Colour Chart for assessment in detail.

To add new characteristic 24b: "Ray floret: secondary color on lower side" and to use RHS Colour Chart for assessment in detail.

3rd Comment for Characteristic 24: Adding an additional characteristic "secondary color on the lower side" is problematic due to the fact that a main and secondary colour distinction is too difficult to establish. The colors are often blended, with no one color clearly dominating. There is not usually an obvious bi-colored surface pattern. This characteristic is difficult to describe without using a free-form approach (naming all the colors and describing their locations).

25.		**Disc: diameter**		
QN	**(c)**	small		3
		medium		5
		large		7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
26. (*)		**Disc: color**					
PQ	**(c)**	light grey				Kleo 03105	1
		yellow				Akyel	2
		yellow green				Lanaca	3
		medium grey green				Kleoe 05526	4
		dark grey green				Lemon Symphony	5
		dark grey				Sunny Dark Amanda	6
		purple				Sunny Sabrina	7
		violet				Kleo 03103	8
		light blue				Balserwhit	9
		dark blue				Akapin	10
		brown				Shiela	11
		black				Sunny Stephanie	12

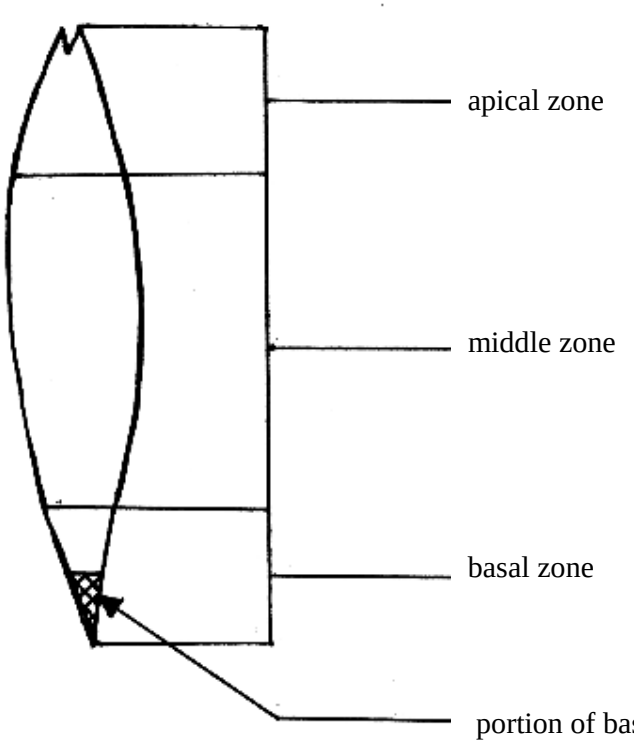
8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

Unless otherwise indicated, all observations should be made at the time of full flowering.

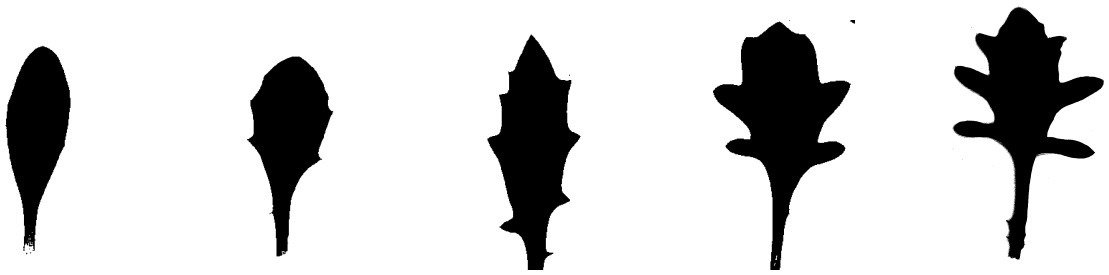
Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

(a) All observations on the leaf should be made on fully developed leaves from the middle part of the plant
(b) All observations on the young flower should be made when all ray florets are fully expanded and there are no open disc florets.
(c) All observations on the flower should be made when one row of disc florets has opened.
(d) Diagram of parts of ray floret



8.2 Explanations for individual characteristics

Ad. 5: Leaf: depth of incisions of margins



1	3	5	7	9
absent or very shallow	shallow	medium	deep	very deep

New Ad. Flower head: paracorolla

The paracorolla is a secondary or inner corolla; a corona of the flower head.

1
absent

9
present

Ad. 12 Ray floret: width

For ray florets with inward rolling of longitudinal margins, observe the broadest part.

Ad. 14: Ray floret: shape of apex

1
acute

2
obtuse

3
rounded

4
notched (?)

Ad. 15: Ray floret: inward rolling of longitudinal margins

absent

present

Ad. 16 Only varieties with inword rolling ray floret margins: Ray floret: approximate portion of ray floret with rolled margin

1
up to one-third

2
up to one-half

3
up to two-thirds

Ad. 18 Ray florets: number of colors on upper side (base excluded)

In varieties with inward rolling ray floret margins, the lower side of the ray floret is visible when viewing the upper side of the flower. In these cases, the color of the now visible lower side is not to be considered a color of the upper side.

Ad. 19 Ray floret: main color on upper side

The main color is the color of the largest surface area. In cases where it is difficult to determine the largest surface area, the darkest color is considered to be the main color.

Ad. 21 Only varieties with two or more colors on upper side: Ray floret: secondary color on upper side

The secondary color is the color of the second largest surface area.

Ad. 23 Only varieties with more than two colors on upper side: Ray floret: tertiary color on upper side

The tertiary color is the color of the third largest surface area.

9. Literature

Heywood, V.H. (ed.), 1993: Flowering Plants of the World, B.T. Batsford., London, U.K.

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 Genus	*Osteospermum* L.	[ ]
1.2 Species		
Botanical name (please complete)		
Common name		

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	
Breeder (if different from applicant)	

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) totally unknown cross [ ]

4.1.2 Mutation [ ]
(please state parent variety)

4.1.3 Discovery [ ]
(please state where, when and how developed)

4.1.4 Other [ ]
(please provide details)

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings [ ]
(b) *in vitro* propagation [ ]
(c) other (state method) [ ]

4.2.2 Seed [ ]

4.2.3 Other [ ]
(please provide details)

[#] 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 (1)	**Plant: attitude of shoots**		
	erect		1[ ]
	semi-erect		2[ ]
	horizontal		3[ ]
5.2 (6)	**Leaf: variegation**		
	absent	Sparkler	1[ ]
	present	Silver Sparkler	9[ ]
5.3 (15)	**Ray floret: inward rolling of longitudinal margins**		
	absent on all flowers	Brightside	1[ ]
	present on some flowers	Osjaseclipur	2[ ]
	present on all flowers	Balserlabi	3[ ]
5.4 (18)	**Ray floret: number of colors on upper side (base excluded)**		
	one	Aksinto	1[ ]
	two	Balserlabli	2[ ]
	more than two		3[ ]
5.5i (19)	**Ray floret: main color on upper side**		
	RHS Colour Chart (indicate reference number)		

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

	Characteristics	Example Varieties	Note
5.5ii (19)	**Ray floret: main color of upper side**		
	white		1[ ]
	yellow		2[ ]
	yellow orange		3[ ]
	orange		4[ ]
	orange brown		5[ ]
	pink		6[ ]
	red		7[ ]
	purple		8[ ]
	violet		9[ ]
	other color (indicate which)		10[ ]
5.6i (21)	**Only varieties with two or more colours on upper side: Ray floret: secondary color on upper side**		
	RHS Colour Chart (indicate reference number)		
5.6ii (21)	**Only varieties with two or more colours on upper side: Ray floret: secondary color on upper side**		
	white		1[ ]
	yellow		2[ ]
	yellow orange		3[ ]
	orange		4[ ]
	orange brown		5[ ]
	pink		6[ ]
	red		7[ ]
	purple		8[ ]
	violet		9[ ]
	other color (indicate which)		10[ ]

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
(Example)	*Ray floret:width*	*broad*	*narrow*

[#]7. Additional information which may help in the examination of the variety

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?

Yes [ ] No [ ]

(If yes, please provide details)

7.2 Are there any special conditions for growing the variety or conducting the examination?

Yes [ ] No [ ]

(If yes, please provide details)

7.3 Other information

A representative color photograph of the variety should accompany the Technical Questionnaire.

[#] 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:

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 (b) is yes, please attach a copy of the authorization.

9. Information on plant material to be examined or submitted for examination.

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, phytoplasma) Yes [ ] No [ ]

(b) Chemical treatment (e.g. growth retardant, pesticide) Yes [ ] No [ ]

(c) Tissue culture Yes [ ] No [ ]

(d) Other factors Yes [ ] No [ ]

Please provide details for 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]