



TG/174/3

INTERNATIONAL UNION
FOR THE PROTECTION
OF NEW VARIETIES OF
PLANTS

UNION INTERNATIONALE
POUR LA PROTECTION
DES OBTENTIONS
VÉGÉTALES

INTERNATIONALER
VERBAND ZUM SCHUTZ
VON PFLANZEN-
ZÜCHTUNGEN

UNIÓN INTERNACIONAL
PARA LA PROTECCIÓN
DE LAS OBTENCIONES
VEGETALES

GUIDELINES
FOR THE CONDUCT OF TESTS
FOR DISTINCTNESS, UNIFORMITY AND STABILITY

IRIS (bulbous)

(Iris L.)

GENEVA
2000

Copies of this document are available on request at the price of 10 Swiss francs each, including surface mail, from the Office of UPOV, 34, chemin des Colombettes, P.O. Box 18, 1211 Geneva 20, Switzerland

This document or parts of it may be reproduced, translated and published without obtaining the specific consent of UPOV, provided that the source is acknowledged.

* * * * *



TG/174/3

ORIGINAL: English

DATE: 2000-04-05

**INTERNATIONAL UNION
FOR THE PROTECTION
OF NEW VARIETIES OF
PLANTS**

**UNION INTERNATIONALE
POUR LA PROTECTION
DES OBTENTIONS
VÉGÉTALES**

**INTERNATIONALER
VERBAND ZUM SCHUTZ
VON PFLANZEN-
ZÜCHTUNGEN**

**UNIÓN INTERNACIONAL
PARA LA PROTECCIÓN
DE LAS OBTENCIONES
VEGETALES**

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

IRIS (bulbous)

(Iris L.)

These Guidelines should be read in conjunction with document TG/1/2, which contains explanatory notes on the general principles on which the Guidelines have been established.

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
I. Subject of these Guidelines	3
II. Material Required	3
III. Conduct of Tests	3
IV. Methods and Observations.....	4
V. Grouping of Varieties	4
VI. Characteristics and Symbols	4
VII. Table of Characteristics	5
VIII. Explanations on the Table of Characteristics	13
IX. Literature	13
X. Technical Questionnaire	14

I. Subject of these Guidelines

These Test Guidelines apply to all bulbous varieties of *Iris* L. of the family Iridaceae, including the Xiphion group (*Iris bakeriana* M. Foster, *Iris boissieri* Henriq., *Iris danfordiae* (Bak.) Boiss., *Iris filifolia* Boiss., *Iris histrio* Rchb., *Iris histrioides* (G.F. Wils.) S. Arnott, *Iris juncea* Poir., *Iris reticulata* M.B., *Iris tingitana* Boiss. et Reut., *Iris vartanii* M. Foster, *Iris winogradowii* Fomin., *Iris xiphium* L.).

II. Material Required

1. The competent authorities decide when, where and in what quantity and quality the plant material 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 customs formalities are complied with. As a minimum, the following quantity of plant material is recommended:

30 bulbs.

2. The plant material supplied should be visibly healthy, not lacking in vigor or affected by any important pests or diseases. It should preferably not be obtained from *in vitro* propagation.

3. 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. A test should normally be conducted for one growing period. If distinctness and/or uniformity cannot be sufficiently established in one growing period, the test should be extended for a second growing period.

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 30 plants. 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 or counting should be made on 10 plants or parts taken from each of 10 plants.
2. For the assessment of uniformity a population standard of 2% with an acceptance probability of at least 95% should be applied. In the case of a sample size of 30 plants, the maximum number of off-types allowed would be 2.
3. 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 British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.

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) Flower bud: color (characteristic 6)
 - (b) Flower: number of colors (characteristic 8)

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 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/Merkmalestabelle/Tabla de caracteres

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. Leaf: width	Feuille: largeur	Blatt: Breite	Hoja: anchura		
narrow	étroite	schmal	estrecha	Carmen	3
medium	moyenne	mittel	media	Saturnus	5
broad	large	breit	ancha	Paris	7
2. Leaf: color	Feuille: couleur	Blatt: Farbe	Hoja: color		
light green	vert clair	hellgrün	verde claro		1
medium green	vert moyen	mittelgrün	verde medio		2
dark green	vert foncé	dunkelgrün	verde oscuro		3
blue green	vert-bleu	blaugrün	verde azulado		4
3. Leaf: profile in cross section (*)	Feuille: profil en section transversale	Blatt: Profil im Querschnitt	Hoja: perfil en sección transversal		
straight	droit	gerade	recta	Paris	1
U-shaped	en forme de U	U-förmig	en forma de U	Pickwick	2
V-shaped	en forme de V	V-förmig	en forma de V	Telstar	3
square	carré	rechteckig	cuadrada		4
4. Peduncle: length (*)	Pédoncule: longueur	Blütenstiel: Länge	Pedúnculo: longitud		
short	court	kurz	corto	Carmen	3
medium	moyen	mittel	medio	White Wedgewood	5
long	long	lang	largo	Saturnus	7
5. Peduncle: thickness	Pédoncule: épaisseur	Blütenstiel: Dicke	Pedúnculo: grosor		
thin	mince	dünn	delgado	Carmen	3
medium	moyen	mittel	medio	Saturnus	5
thick	épais	dick	grueso		7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6. (*)	Flower bud: color	Bourgeon floral: couleur	Blütenknospe: Farbe	Capullo floral: color		
	white or near white	blanc ou presque blanc	weiß oder fast weiß	blanco o casi blanco	White Bridge	1
	yellow	jaune	gelb	amarillo	Golden Emperor	2
	blue	bleu	blau	azul	Professor Blauw	3
7. (*)	Flower: size	Fleur: taille	Blüte: Größe	Flor: tamaño		
	small	petite	klein	pequeño		3
	medium	moyenne	mittel	mediano	White Wedgewood	5
	large	grande	groß	grande	Apollo	7
8. (*)	Flower: number of colors	Fleur: nombre de couleurs	Blüte: Anzahl Farben	Flor: número de colores		
	one	une	eine	uno	White Bridge	1
	two	deux	zwei	dos	Apollo	2
	three	trois	drei	tres	Gipsy Beauty	3
	more than three	plus de trois	mehr als drei	más de tres		4
9.	Perianth tube: length	Tube du périanthe: longueur	Perianthröhre: Länge	Tubo del perianto: longitud		
	short	court	kurz	corto		3
	medium	moyen	mittel	medio	Apollo	5
	long	long	lang	largo	Paris	7
10.	Outer tepal: width of blade	Tépale externe: largeur du limbe	Äußeres Perigonblatt: Breite der Spreite	Tépalo externo: anchura del limbo		
	narrow	étroit	schmal	estrecho	White Wedgewood	3
	medium	moyen	mittel	medio	Apollo	5
	broad	large	breit	ancho	Paris	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11. Outer tepal: shape of blade (*)	Tépale externe: forme du limbe	Äußeres Perigonblatt: Form der Spreite	Tépalo externo: forma del limbo		
elliptic	elliptique	elliptisch	elíptica		1
circular	circulaire	kreisförmig	circular	Apollo	2
ovate	ovale	eiförmig	ovalada	Paris	3
obovate	obovale	verkehrt eiförmig	obovada	Telstar	4
12. Outer tepal: recurving of blade compared to claw (*)	Tépale externe: incurvation du limbe par rapport à l'onglet	Äußeres Perigonblatt: Biegung der Spreite im Verhältnis zum Nagel	Tépalo externo: curvatura del limbo en relación con el mucrón		
weak	faible	gering	débil	Golden Emperor	3
medium	moyenne	mittel	medio	White Wedgewood	5
strong	forte	stark	fuerte	Apollo	7
13. Outer tepal: ground color of <u>upper</u> side of blade (*)	Tépale externe: couleur de fond de la face <u>supérieure</u> du limbe	Äußeres Perigonblatt: Grundfarbe der <u>Oberseite</u> der Spreite	Tépalo externo: color de fondo de la cara <u>superior</u> del limbo		
RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
14. Outer tepal: crenation of margin of blade	Tépale externe: crénelure du bord du limbe	Äußeres Perigonblatt: Kerbung des Randes der Spreite	Tépalo externo: crenado del borde del limbo		
weak	faible	gering	débil	Apollo	3
medium	moyenne	mittel	medio		5
strong	forte	stark	fuerte		7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
15. Outer tepal: conspicuousness of veins on upper side	Tépale externe: netteté des nervures sur la face supérieure	Äußeres Perigonblatt: Ausprägung der Adern auf der Oberseite	Tépalo externo: nitidez de la nervadura sobre la cara superior		
weak	faible	gering	débil	Saturnus	3
medium	moyenne	mittel	media	Ideal	5
strong	forte	stark	fuerte	Apollo Blue	7
16. (*) Outer tepal: size of spot on blade	Tépale externe: taille de la tache sur le limbe	Äußeres Perigonblatt: Größe des Fleckes auf der Spreite	Tépalo externo: tamaño de la mancha en el limbo		
small	petite	klein	pequeño	Otzi Fischer	3
medium	moyenne	mittel	medio	Saturnus	5
large	large	gross	grande	Apollo Blue	7
17. (*) Outer tepal: color of spot on blade	Tépale externe: couleur de la tache sur le limbe	Äußeres Perigonblatt: Farbe des Fleckes auf der Spreite	Tépalo externo: color de la mancha en el limbo		
RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
18. (*) Outer tepal: shape of tip of spot on blade	Tépale externe: forme du sommet de la tache sur le limbe	Äußeres Perigonblatt: Form der Spitze des Fleckes auf der Spreite	Tépalo externo: forma de la punta de la mancha en el limbo		
acute	aigu	spitz	aguda	Paris	1
rounded	arrondi	abgerundet	redondeada	White Wedgewood	2
flame-like	en forme de flamme	flammenförmig	en forma de llama	Apollo	3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
19. Outer tepal: width of claw	Tépale externe: largeur de l'onglet	Äußeres Perigonblatt: Breite des Nagels	Tépalo externo: anchura del mucrón		
narrow	étroit	schmal	estrecho	White Wedgewood	3
medium	moyen	mittel	medio	Apollo	5
broad	large	breit	ancho	Amber Beauty	7
20. Outer tepal: ground color of <u>upper</u> side of claw	Tépale externe: couleur de fond de la face <u>supérieure</u> de l'onglet	Äußeres Perigonblatt: Grundfarbe der <u>Oberseite</u> des Nagels	Tépalo externo: color de fondo de la cara <u>superior</u> del mucrón		
RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
21. Inner tepal: length (*)	Tépale interne: longueur	Inneres Perigonblatt: Länge	Tépalo interno: longitud		
short	court	kurz	corto	White Cloud	3
medium	moyen	mittel	medio	Paris	5
long	long	lang	largo	Apollo	7
22. Inner tepal: width (*)	Tépale interne: largeur	Inneres Perigonblatt: Breite	Tépalo interno: anchura		
narrow	étroit	schmal	estrecho	Professor Blauw	3
medium	moyen	mittel	medio	Paris	5
broad	large	breit	ancho	Apollo	7
23. Inner tepal: shape of blade (*)	Tépale interne: forme du limbe	Inneres Perigonblatt: Form der Spreite	Tépalo interno: forma del limbo		
ovate	ovale	eiförmig	ovalada	White Wedgewood	1
elliptic	elliptique	elliptisch	elíptica	Paris	2
obovate	obovale	verkehrt eiförmig	obovada	Apollo	3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
24. Inner tepal: color (*)	Tépale interne: couleur	Inneres Perigonblatt: Farbe	Tépalo interno: color		
RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
25. Inner tepal: shape of tip (*)	Tépale interne: forme du sommet	Inneres Perigonblatt: Form der Spitze	Tépalo interno: forma de la punta		
acute	aigu	spitz	aguda	White Wedgewood	1
rounded	arrondi	abgerundet	redondeada	Apollo	2
emarginate	échancré	gekerbt	emarginada	White Bridge	3
26. Inner tepal: undulation of margin	Tépale interne: ondulation du bord	Inneres Perigonblatt: Randwellung	Tépalo interno: ondulación del borde		
weak	faible	gering	débil	White Bridge	3
medium	moyenne	mittel	media	Apollo	5
strong	forte	stark	fuerte		7
27. Filament: color (*)	Filament: couleur	Staubfaden: Farbe	Filamento: color		
white	blanchâtre	weiß	blanco	White Wedgewood	1
yellowish	jaunâtre	gelblich	amarillento	Golden Emperor	2
bluish	bleuâtre	bläulich	azulado	Paris	3
28. Anthers: color	Anthères: couleur	Antheren: Farbe	Anteras: color		
whitish	blanchâtres	weiß	blanquecino	White Wedgewood	1
yellow	jaunes	gelb	amarillo	Golden Emperor	2
light brown	brun clair	hellbraun	marrón claro		3
29. Pollen: intensity of yellow color	Pollen: intensité de la couleur jaune	Pollen: Intensität der Gelbfärbung	Polen: intensidad del color amarillo		
light	claire	hell	claro		3
medium	moyenne	mittel	medio		5
dark	foncée	dunkel	oscuro		7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
30. Pistil: width of bridge	Pistil: largeur du pont	Griffel: Breite der Brücke	Pistilo: anchura del puente		
narrow	étroit	schmal	estrecho		3
medium	moyen	mittel	medio	Carmen	5
broad	large	breit	ancho	Paris	7
31. (*) Pistil: color of upper side of bridge	Pistil: couleur de la face supérieure du pont	Griffel: Farbe der Oberseite der Brücke	Pistilo: color de la cara superior del puente		
RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro deréférence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
32. (*) Crest: length	Crête: longueur	Haube: Länge	Cresta: longitud		
short	courte	kurz	corta	Carmen	3
medium	moyenne	mittel	media	White Wedgewood	5
long	longue	lang	larga	Apollo	7
33. (*) Crest: width	Crête: largeur	Haube: Breite	Cresta: anchura		
narrow	étroite	schmal	estrecha	Carmen	3
medium	moyenne	mittel	media	White Wedgewood	5
broad	large	breit	ancha	Apollo	7
34. (*) Crest: color of upper side	Crête: couleur de la face supérieure	Haube: Farbe der Oberseite	Cresta: color de la cara superior		
RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro deréférence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
35. Crest: depth of incisions of margin	Crête: profondeur des incisions du bord	Haube: Tiefe der Randeinschnitte	Cresta: profundidad de las incisiones del borde		
shallow	peu profondes	flach	poco profundas	Carmen	3
medium	moyennes	mittel	medias	Apollo	5
deep	profondes	tief	profundas		7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
36. Stigma: color (*)	Stigmate: couleur	Narbe: Farbe	Estigma: color		
white	blanc	weiss	blanco		1
yellowish	jaunâtre	gelblich	amarillento		2
bluish	bleuâtre	bläulich	azulado		3

VIII. Explanation on the Table of Characteristics

No specific explanations.

IX. Literature

Iris in: "International Checklist for Hyacinths and Miscellaneous Bulbs" pp. 297-340, 1991, Royal Bulbgrowers' Association KAVB, Hillegom NL, ISBN 90-73350-01-8, NL.

Frank, R., 1986: Zwiebel- und Knollengewächse, Verlag Eugen Ulmer, Stuttgart, DE.

Köhlein, F., 1981: Iris, Verlag Eugen Ulmer, Stuttgart, DE.

Weberling, F., 1981: Morphologie der Blüten und der Blütenstände, Verlag Eugen Ulmer, Stuttgart, DE.

X. Technical Questionnaire

	<p>Reference Number (not to be filled in by the applicant)</p>
<p style="text-align: center;">TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights</p>	
<p>1. Species</p>	<p style="text-align: center;"><i>Iris</i> L. IRIS (bulbous)</p>
<p>2. Applicant (Name and address)</p>	
<p>3. Proposed denomination or breeder's reference</p>	

4. Information on origin, maintenance and reproduction of the variety

4.1 Origin

(a) Seedling (indicate parent varieties)

..... []

(b) Mutation (indicate parent variety)

..... []

(c) Discovery (indicate where and when)

..... []

(d) Other (specify)

..... []

4.2 Other information

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

Characteristics	Example Varieties	Note
5.1 Flower bud: color (6)		
white or near white	White Bridge	1[]
yellow	Golden Emperor	2[]
blue	Professor Blauw	3[]
5.2 Flower: number of colors (8)		
one	White Bridge	1[]
two	Apollo	2[]
three	Gipsy Beauty	3[]
more than three		4[]

6. Similar varieties and differences from 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 pest and diseases

7.2 Special conditions for the examination of the variety

7.3 Other information

A representative color photo of the variety should be added to the Technical Questionnaire.

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.

[End of document]