UPOV

International Union for the Protection of New Varieties of Plants

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Technical Working Party for Ornamental Plants and Forest Trees **TWO/52/7 Add.**

Fifty-Second Session
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ADDENDUM TO

MINIMUM DISTANCES BETWEEN VEGETATIVELY PROPAGATED ORNAMENTAL VARIETIES

Document prepared by the Office of the Union

Disclaimer: this document does not represent UPOV policies or guidance

The annex to this document contains a copy of a presentation on “Minimum distances between vegetatively propagated ornamental varieties - The Pelargonium Case Study”, prepared by an expert from the International Community of Breeders of Asexually Reproduced Ornamental and Fruit-Tree Varieties (CIOPORA), to be considered by the fifty-second session of the Technical Working Party for Ornamental Plants and Forest Trees (TWO).

[Annex follows]

CIOPORA
UNITING BREEDERS
PROTECTING INNOVATION

Minimum distances between vegetatively propagated ornamental varieties

The Pelargonium Case Study

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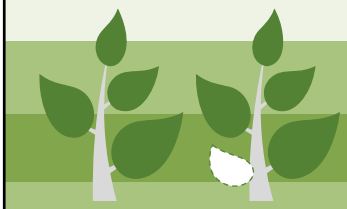
CIOPORA Secretary General

Questions:

CIOPORA



- Is a (uniform and stable) variety, different from another existing variety, automatically eligible for PBR protection?
- Or does it require more than a difference?
- Does a variety, which is different from a protected variety, fall out of the scope of said protected variety?
- Does “different” equal “distinct”?

UPOV 1991 Act

CIOPORA

Article 1

Definitions

(vi) **"variety"** means a plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a breeder's right are fully met, can be

- defined by the expression of the characteristics resulting from a given genotype or combination of genotypes,

- distinguished from any other plant grouping by the expression of at least one of the said characteristics and

- considered as a unit with regard to its suitability for being propagated unchanged;

UPOV 1991 Act

CIOPORA

Article 5

Conditions of Protection

(1) [*Criteria to be satisfied*] The breeder's right shall be granted where the variety is

(i) new,
(ii) **distinct,**
(iii) uniform and
(iv) stable.

Article 7

Distinctness

The variety shall be deemed to be distinct if it is **clearly distinguishable** from any other variety whose existence is a matter of common knowledge at the time of the filing of the application. ...

Relevant Articles in 2100/94

CIOPORA

Article 5	Article 7
Variety	Protectable variety
distinguished ... by the expression of at least one ... characteristic,	Clearly distinguishable (Distinctness)

In our view these two Articles show

that in UPOV 1991 Act two different degrees of "Difference" exist:

- the (smaller) botanical degree which declares a variety just different from an existing variety
- the (broader) legal degree ("Distinctness"), which qualifies a variety for getting PBR Protection.

UPOV 1991 Act

CIOPORA

Article 14

Scope of the Breeder's Right

(1) [Acts in respect of the propagating material] (a) Subject to Articles 15 and 16,

the following acts in respect of the propagating material of the protected variety shall require the authorization of the breeder:

(i) production or reproduction (multiplication), (ii) conditioning for the purpose of propagation, (iii) offering for sale, (iv) selling or other marketing, (v) exporting, (vi) importing, (vii) stocking for any of the purposes mentioned in (i) to (vi), above.5.

(5) [Essentially derived and certain other varieties] (a) The provisions of paragraphs (1) to (4) shall also apply in relation to

...

(ii) varieties which are not clearly distinguishable in accordance with Article 7 from the protected variety and

Three „different" varieties

Protectability	Scope of protection
Variety A (existing/of common knowledge, protected or not)	Protected Variety A
Variety B **distinguished** from variety A by the expression of at least one characteristic, not eligible for protection	Variety B which is not distinct in accordance with the provisions of Article 7 from the protected variety A; falls into the scope of the protected variety A (Art. 14 (5))
Variety C that is **distinct/clearly distinguishable** ... from variety A and any other variety whose existence is a matter of common knowledge, eligible for protection (Art. 5 / 7)	Variety C that is distinct/clearly distinguishable by reference to the expression of the characteristics ... from the protected variety A, does not fall into the scope of the protected variety A

Variety vs Protectable Variety

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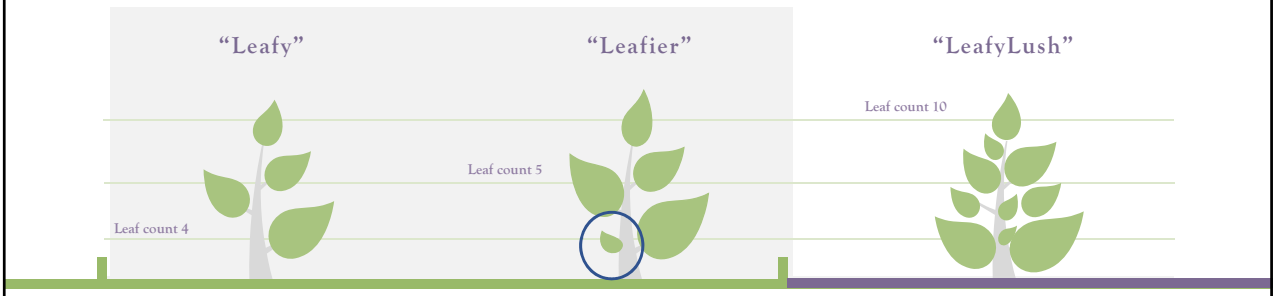


PROTECTED VARIETY	NOT CLEARLY DISTINGUISHABLE Variety	CLEARLY DISTINGUISHABLE Variety
	- It is a VARIETY per se, because it is different from "Leafy" - "Leafier" is not clearly distinguishable from "Leafy" - As to Plant Variety Protection "Leafier" falls into scope of protection of "Leafy".	- Clearly distinguishable compared to "Leafy" - Eligible for separate PVR Protection - Falls out of the scope of protection of "Leafy".

Practical Case Study on Minimum Distance between selected Pelargonium Varieties

CIOPORA

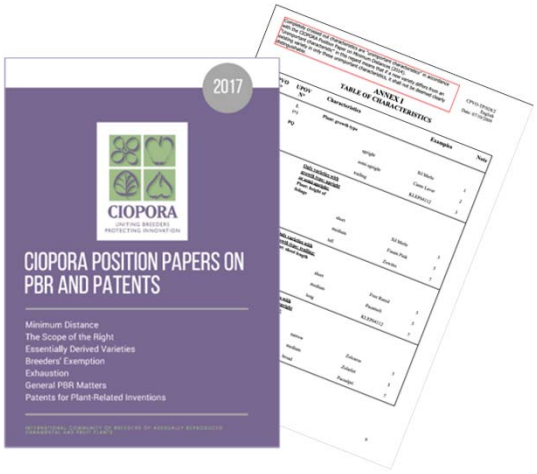
A Joint Study by CIOPORA and the CPVO, with the collaboration of the Bundessortenamt (Germany)

Background

CIOPORA

The CIOPORA Position Paper on Minimum Distance

- Unanimously approved by CIOPORA Members during AGM 2014;
- It demands a sufficient minimum distance between varieties for an effective PVR;
- "Clearly Distinguishable" should be assessed on important characteristics. Differences in unimportant characteristics only should not lead to a distinct variety.
- A difference of only one note in general should not be considered as a sufficiently broad distance.
- Mock Test Protocol: Based on CIOPORA's position, drafted by experts.



Background

- The study was based on the concern about shrinking distances between varieties to the point that in trade some varieties can be no longer distinguished from each other.
- It aimed at defining and harmonizing the legal concept of "clearly distinguishable" by addressing only **Important Characteristics**.
- CIOPORA's members identified the 7-pairs of pelargonium used in the trials.
- The results had no effect on any rights granted.
- The study was completely funded by the CPVO.

Background

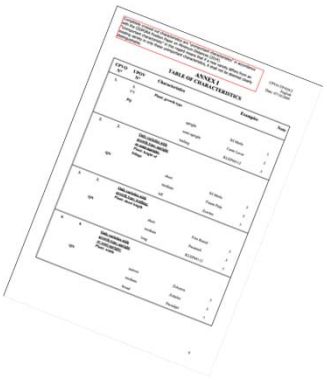
CIOPORA

"Mock protocol" on Pelargonium, based on the CPVO-TP/28/2

Out of 60 characteristics 16 characteristics (= 26%) have been classified as "unimportant", i.e. irrelevant for the determination of distinctness.

3 *** asterisked characteristics have been classified as irrelevant for the determination of distinctness

Within the remaining 44 important characteristics the notes have been broadened in 2 characteristics.



Completely crossed out characteristics are "unimportant characteristics" in accordance with the CIOPORA Position Paper on Minimum Distances (2014).
"Unimportant characteristic" in this regard means that if a new variety differs from an existing variety in only these unimportant characteristics, it shall not be deemed clearly distinguishable.

ANNEX I
TABLE OF CHARACTERISTICS

CPVO N°	UPOV N°	Characteristics		Examples	Note
1.	1. (+)	**Plant: growth type**			
	PQ		upright	Sil Merle	1
			semi-upright	Cante Laver	2
			trailing	KLEP04112	3
2.	2.	**Only varieties with growth type: upright or semi-upright: Plant: height of foliage**			
	QN		short	Sil Merle	3
			medium	Fisum Pink	5
			tall	Zowitre	7
3.	3.	**Only varieties with growth type: trailing: Plant: shoot length**			
	QN		short	Free Rured	3
			medium	Pacameli	5
			long	KLEP04112	7
4.	4.	**Only varieties with growth type: upright or semi-upright: Plant: width**			
	QN		narrow	Zolcaros	3
			medium	Zolarlet	5
			broad	Pacsalpri	7

CPVO N°	UPOV N°	Characteristics		Examples	Note
5.	5.	**Stem: colour (excluding anthocyanin)**			
	QL (a)		whitish		1
			green		2
6.	6.	**Stem: anthocyanin coloration**			
	QN (a)		absent or very weak	KLEP03612	1
			medium	Fisrocky Dark Red	3
			strong	Balgaldepro	5
7.	7. (+)	**Leaf blade: length**			
	QN (a)		short	KLEP03612	3
			medium	Zolirsca	5
			long	Pacvica	7
8.	8. (+)	**Leaf blade: width**			
	QN (a)		narrow	KLEP03612	3
			medium	Zolirsca	5
			broad	Pacvica	7
9.	9. (+)	**Leaf blade: depth of sinus**			
	QN (a)		absent or very shallow		1
			shallow	Zolcaros	3
			medium	KLEP01052	5
			deep	Cante Laver	7

CPVO N°	UPOV N°	Characteristics		Examples	Note
~~10.~~	~~10.~~	**Leaf blade: undulation of margin**			
	QN (a)		~~weak~~	~~Zolirsca~~	~~3~~
			~~medium~~	~~Zolarlet~~	~~5~~
			~~strong~~	~~Wevvilsu~~	~~7~~
11.	11. (+)	**Leaf blade: base**			
	QN (a)		wide open		1
			~~slightly open~~		~~3~~
			closed		~~5~~ 2
			~~partly overlapping~~		~~7~~
			strongly overlapping		~~9~~ 3
12.	12.	**Leaf blade: variegation**			
	QL (a)		absent	Sil Merle	1
			present	Penevro	9
13.	13. (+)	**Leaf blade: main colour (zone excluded)**			
	PQ (a)		yellow		1
			light green		2
			~~light green to~~ medium green	Zowit	3
			~~medium green~~	~~Sil Merle~~	~~4~~
			~~medium green to~~ dark green	KLEP03106	~~5~~ 4
			~~dark green~~	~~Zolirsca~~	~~6~~
			dark red /purple	Vancouver Centennial	~~7~~ 5
			~~brown purple~~	~~Black Magic~~	~~8~~

CPVO N°	UPOV N°	Characteristics		Examples	Note
14.	14. (+)	**Leaf blade: secondary colour (zone excluded)**			
	PQ (a)		white	Evka, Penevro	1
			yellow	Raimu Kissu	2
			light green	Vancouver Centennial	3
			medium green	Black Magic	4
15.	15.	**Only varieties with growth type: trailing: Leaf blade: glossiness**			
	QN (a)		weak	Free Rured	3
			medium	Zopihosd	5
			strong	KLEP04112	7
16.	16. (+)	**Leaf blade: conspicuousness of zone**			
	QN (a)		absent or very weak	Zowit	1
			~~weak~~	~~Zolirsca~~	~~3~~
			medium	Zolarlet	~~5~~ 2
			~~strong~~	~~Pascalpri~~	~~7~~
			very strong	Baldescarim	~~9~~ 3
~~17.~~	~~17.~~ ~~(+)~~	**Leaf blade: position of zone**			
	QN (a)		~~towards base~~		~~1~~
			~~in middle~~		~~2~~
			~~towards margin~~		~~3~~

CPVO N°	UPOV N°	Characteristics		Examples	Note
~~18.~~	~~18.~~ (+)	**Leaf blade: relative size of zone**			
	QN	(a)	~~small~~		~~1~~
			~~medium~~		~~3~~
			~~large~~		~~5~~
19.	19.	**Peduncle: length**			
	QN	(b)	short	Duefuerto	3
			medium	Sil Merle	5
			long	Fisroweiss	7
20.	20. (+)	**Peduncle: anthocyanin coloration of middle third**			
	QN	(b)	absent or very weak	Zowit	1
			weak	Realcastor	3
			medium	Gentreo	5
			strong	Clips Scarl	7
21.	21. (+)	**Inflorescence: height**			
	QN	(b)	short	Pachla	3
			medium	Fisrowi	5
			tall	Fisrocky Dark Red	7
22.	22. (+)	**Inflorescence: width**			
	QN	(b)	narrow	KLEP01052	3
			medium	KLEP03106	5
			broad	Zolirsca	7

CPVO N°	UPOV N°	Characteristics		Examples	Note
~~23.~~	~~23.~~ (+)	**Inflorescence: number of open flowers**			
	QN	(b)	~~few~~	~~Tikvio~~	~~3~~
			~~medium~~	~~KLEP01052~~	~~5~~
			~~many~~	~~KLEP03106~~	~~7~~
24.	24. (+)	**Inflorescence: length of largest flower**			
	QN	(b)	short	Genvired	3
			medium	Genam	5
			long	Fislunova	7
25.	25. (+)	**Inflorescence: width of largest flower**			
	QN	(b)	narrow		3
			medium	Fisum Pink	5
			broad	Fisroweiss	7
26.	26.	**Inflorescence: length of longest pedicel**			
	QN	(b)	short	Cante Dereds	3
			medium	Fisum Pink	5
			long	Zoldarobo	7

CPVO N°	UPOV N°	Characteristics		Examples	Note
~~27.~~	~~27.~~	**Pedicel: anthocyanin coloration of upper third**			
	QN	(b)	~~absent or very weak~~		~~1~~
			~~weak~~	~~Paclai~~	~~3~~
			~~medium~~	~~Fisrocky Dark Red~~	~~5~~
			~~strong~~	~~Zonabriscal~~	~~7~~
			~~very strong~~	~~Clip Velred~~	~~9~~
~~28.~~	~~28.~~ (+)	**Pedicel: swelling**			
	QL	(b)	~~absent~~		~~1~~
			~~present~~		~~9~~
29.	29. (+)	**Flower: type**			
	QL		single		1
			double		2
30.	30. (+)	**Only varieties with flower type: single: Flower: arrangement of upper petals in relation to lower petals**			
	QN	(b)	free		1
			touching		3
			moderately overlapping		5

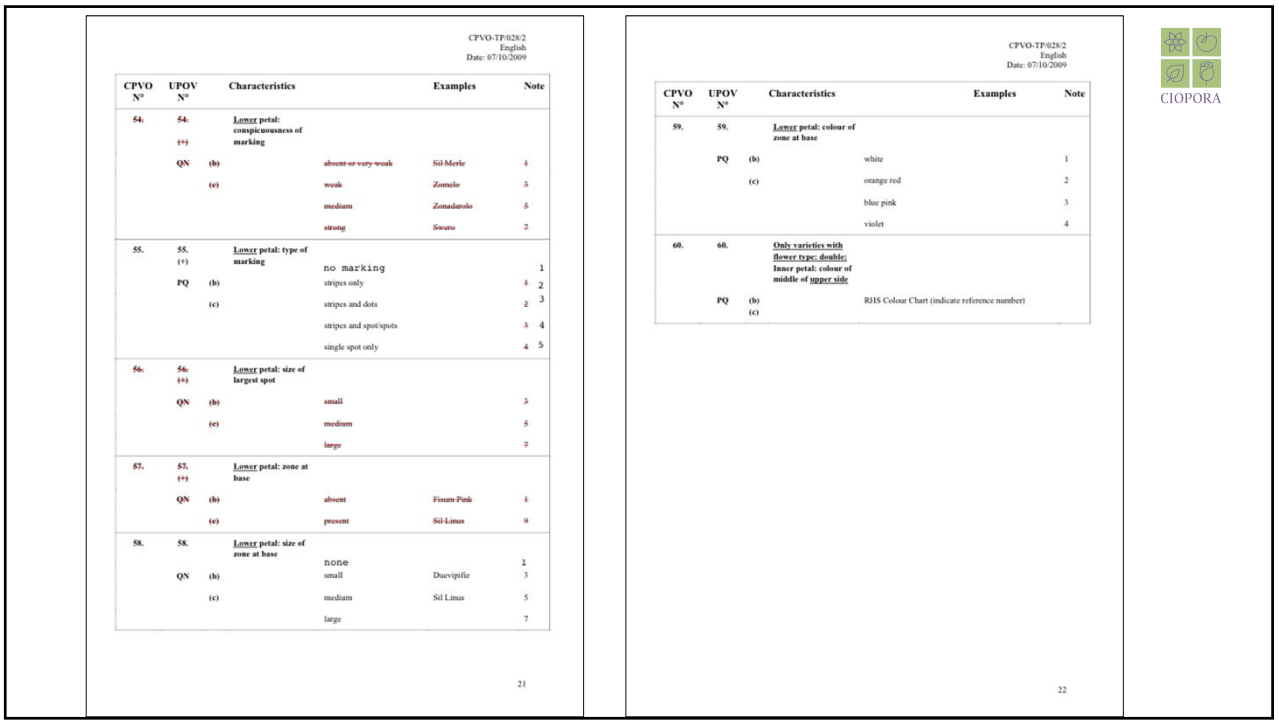
CPVO N°	UPOV N°	Characteristics		Examples	Note
31.	31.	**Only varieties with flower type: double: Flower: number of petals**			
	QN	(b)	~~few~~ 1 -3	KLEP01052	3
			~~medium~~ 4 -7	Fisum Pink	5
			~~many~~ 8 and more	Pacsalkorn	7
32.	32. (+)	**Flower: cross section in lateral view**			
	QN	(b)	concave		1
			flat		2
			convex		3
~~33.~~	~~33.~~ (+)	**Flower: presence of irregularly distributed stripes or blotches**			
	QL	(b)	~~absent~~	~~Sil Merle~~	~~1~~
			~~present~~	~~Gradowi~~	~~9~~
34.	34. (+)	**Only varieties with flowers with irregularly distributed stripes or blotches: Flower: main colour**			
	PQ	(b)	white	Gradowi	1
			pink		2
			red		3

CPVO N°	UPOV N°		Characteristics		Examples	Note
35.	35.		**Only varieties with flowers with irregularly distributed stripes or blotches: Flower: colour of stripes or blotches**			
	PQ	(b)		white and red		~~1~~
				only red	Gradowi	~~2~~
				purple		~~3~~
~~36.~~	~~36.~~ (+)		**Sepal: reflexing**			
	QN	(b)		~~absent or weak~~		~~1~~
				~~moderate~~		~~2~~
				~~strong~~		~~3~~
~~37.~~	~~37.~~		**Sepal: anthocyanin coloration in middle of broadest sepal**			
	QN	(b)		~~absent or very weak~~	~~Fisroweiss~~	~~1~~
				~~weak~~	~~Fisrocky Dark Red~~	~~3~~
				~~medium~~	~~Genbelsca~~	~~5~~
				~~strong~~	~~Sil Tedo~~	~~7~~
				~~very strong~~		~~9~~
~~38.~~	~~38.~~		**Upper petal: width**			
	QN	(b)		~~narrow~~	~~KLEP04133~~	~~3~~
				~~medium~~	~~Zolirsen~~	~~5~~
				~~broad~~	~~KLEP03106~~	7

CPVO N°	UPOV N°		Characteristics		Examples	Note
39.	39. (+)		**Upper petal: shape**			
	PQ	(b)		rhombic		1
				round		2
				obtriangular		3
				spatulate		4
~~40.~~	~~40.~~ ~~(+)~~		**Upper petal: margin at apex**			
	~~PQ~~	~~(b)~~		~~entire~~		~~1~~
				~~emarginate~~		~~2~~
				~~laciniate~~		~~3~~
41.	41. (+)		**Upper petal: colour of margin of upper side**			
	PQ	(b) (c)		RHS Colour Chart (indicate reference number)		
42.	42. (+)		**Upper petal: colour of middle of upper side**			
	PQ	(b) (c)		RHS Colour Chart (indicate reference number)		
43.	43.		**Upper petal: colour of lower side**			
	PQ	(b) (c)		RHS Colour Chart (indicate reference number)		

CPVO N°	UPOV N°		Characteristics		Examples	Note
~~44.~~	~~44.~~ ~~(+)~~		**Upper petal: conspicuousness of marking**			
	QN	(b) (c)		~~absent or very weak~~	~~Fisun Pink~~	~~1~~
				~~weak~~	~~Zoldarobo~~	~~3~~
				~~medium~~	~~Zonadarolo~~	~~5~~
				~~strong~~	~~Genda~~	~~7~~
45.	45. (+)		**Upper petal: type of marking**			
	PQ	(b)		stripes only		1
		(c)		stripes and dots		2
				stripes and spot/spots		3
				single spot only		4
~~46.~~	~~46.~~ ~~(+)~~		**Upper petal: size of largest spot**			
	~~QN~~	~~(b)~~		~~small~~		~~3~~
		~~(c)~~		~~medium~~		~~5~~
				~~large~~		~~7~~
47.	47. (+)		**Upper petal: colour of spot**			
	PQ	(b) (c)		RHS Colour Chart (indicate reference number)		
~~48.~~	~~48.~~ ~~(+)~~		**Upper petal: zone at base**			
	~~QL~~	~~(b)~~		~~absent~~	~~KLEP03106~~	~~1~~
		~~(c)~~		~~present~~	~~Sil Merle~~	~~9~~

CPVO N°	UPOV N°		Characteristics		Examples	Note
49.	49.		**Upper petal: size of zone at base**			
				none		1
	QN	(b)		small	Swero	3
		(c)		medium	Sil Merle	5
				large		7
50.	50.		**Upper petal: colour of zone at base**			
	PQ	(b)		white	Sil Merle	1
		(c)		red pink	Pacsalpri	2
				orange red	Ballarvio	3
				light violet	Clip Velred	4
51.	51. (+)		**Lower petal: colour of margin of upper side**			
	PQ	(b) (c)		RHS Colour Chart (indicate reference number)		
52.	52. (+)		**Lower petal: colour of middle of upper side**			
	PQ	(b) (c)		RHS Colour Chart (indicate reference number)		
53.	53.		**Lower petal: colour of lower side**			
	PQ	(b) (c)		RHS Colour Chart (indicate reference number)		



CPVO-TP/028/2
English
Date: 07/10/2009

CPVO N°	UPOV N°		Characteristics		Examples	Note
~~54.~~	~~54.~~		Lower petal: conspicuousness of marking			
	~~(+)~~					
	QN	(b)		~~absent or very weak~~	~~Sil Merle~~	~~1~~
		(c)		~~weak~~	~~Zomelo~~	~~3~~
				~~medium~~	~~Zonadarolo~~	~~5~~
				~~strong~~	~~Sworo~~	~~7~~
55.	55.		Lower petal: type of marking			
	(+)			no marking		1
	PQ	(b)		stripes only		~~1~~ 2
		(c)		stripes and dots		~~2~~ 3
				stripes and spot/spots		~~3~~ 4
				single spot only		~~4~~ 5
~~56.~~	~~56.~~		Lower petal: size of largest spot			
	~~(+)~~					
	QN	(b)		~~small~~		~~3~~
		(c)		~~medium~~		~~5~~
				~~large~~		~~7~~
57.	57.		Lower petal: zone at base			
	(+)					
	QN	(b)		absent	~~Fisum Pink~~	~~1~~
		(c)		present	~~Sil Linus~~	~~9~~
58.	58.		Lower petal: size of zone at base			
				none		1
	QN	(b)		small	Duevipifiz	3
		(c)		medium	Sil Linus	5
				large		7

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CPVO-TP/028/2
English
Date: 07/10/2009

CPVO N°	UPOV N°		Characteristics	Examples	Note
59.	59.		Lower petal: colour of zone at base		
	PQ	(b)		white	1
		(c)		orange red	2
				blue pink	3
				violet	4
60.	60.		Only varieties with flower type: double: Inner petal: colour of middle of upper side		
	PQ	(b) (c)		RHS Colour Chart (indicate reference number)	

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CIOPORA

Background

Prior study (on paper) on Minimum Distance

- In 2016, CIOPORA in cooperation with several EOs (Naktuinbouw, NIAB, UKZUZ, GEVES, BSA) carried out a case study on distances between pelargonium, apple and rose varieties. Funded by CPVO.
- The last 50 varieties, which were granted with a right at CPVO were re-examined by the EOs, using the CIOPORA Mock Protocols.
- **Results on Pelargonium**: Two varieties would not be considered distinct. "If the comparison would not have been limited to the varieties in trial, more distinctness problems could have been found."

Timeline

CIOPORA

July 11, 2019

Meeting at the BSA

CIOPORA, CPVO, BSA, with the presence of breeders and IP experts observe the plants and discuss the re-evaluation of distinctness based on the Mock Protocol

Pre-meeting

CIOPORA Secretary General and Legal Counsel visit the BSA trials and obverse the plants with BSA representatives

June 28, 2019

Examination by the BSA

The characteristics of the plants are assessed, according to the Technical Protocol for Pelargonium (and Mock Protocol)

May-Jun 2019

Plants are grown at BSA trials. In January 2019 cuttings are taken.

Oct 2018

Submission Plant Material

Breeders of the selected varieties submit true-to-type plant material to the BSA

Launch New Empirical Case Study

The CPVO accepts CIOPORA's research proposal for the empirical study on pelargonium varieties.

Mid-2018

Prior Study on Paper

Parties agree upon carrying out a new study based on living plants.

2016

Results

The results are based on the descriptions by the BSA, as well as on observations made by the breeders and the IP experts during the meeting on July 11, 2019.

The flower colors were assessed in a room with natural daylight facing north.

The color chart used is the Royal Horticultural Society Color Chart, 2015.

Pair 1: Clearly distinguishable

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Pair 2: Clearly distinguishable

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Pair 3: No consensus

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Pair 4: Clearly distinguishable

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Pair 5: Clearly distinguishable

CIOPORA

Pair 6: Clearly distinguishable

Pair 7: Clearly distinguishable

Conclusions

- Phenotypic differences could be observed in all pairs. The evaluation of all varieties was mainly based on a botanical approach;
- The examiners of the BSA re-confirmed that on the basis of the current rules and their observations all 7 pairs are clearly distinguishable;
- Except for Pairs 6 and 7, Secretary General and Legal Counsel of CIOPORA had doubts whether the other pairs should be declared distinct.
- Pelargonium breeders are satisfied to a large extent with the actual system. However, there was a dispute in Pair 3, whether this should have been declared distinct.

Conclusions

- The decision on which characteristics are relevant for the determination of "clearly distinguishable", on how many of such characteristics must differ from each other and on the distance between such characteristics should be made on a crop-by-crop basis by a panel of experts, including representatives of the breeders of the crop concerned.
- The topic of Minimum Distance remains important for breeders, as it is a key element for the level of protection.

[End of Annex and of document]