Naktuinbouw calibration book

Phalaenopsis Blume

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Introduction

The primary function of this Phalaenopsis book is to supply the user with practical guidance in assessing the official characteristics of this crop. To achieve this we have tried to illustrate and elucidate each characteristic as clear as possible. Since 2010, the year we started to develop calibration books in different crops, they have proved to be of immeasurable help for both the layman in his first acquaintance with a certain crop as the experienced examiner that wants to calibrate and fine-tune his observations.

We wish you every success in the use of this manual!

Sources used

The basis for this book is the CPVO protocol TP/213/2 Final that in its turn is based on UPOV Guideline TG/25/9. Please also use these sources for reference when using this calibration book. The application of this calibration book is based on the general UPOV principles on the definitions and use of characteristics of variety descriptions (UPOV TG/213/2).

Websites UPOV and CPVO
The most recent protocol versions, documents and general information can be found on the websites of the UPOV and CPVO

International Union for the Protection of New Varieties of Plants (UPOV)
http://www.upov.int/portal/index.html.en

Community Plant Variety Office (CPVO)
http://www.cpvo.europa.eu/main/en/home

Methodology

The UPOV system is based on the expression of characteristics that are related to the expression values of example varieties. In the calibration book you find two types of characteristics; visually assessed characteristics and measured characteristics. The value of the visually assessed characteristics can be compared with the visual value of the expression of example varieties. In the calibration book you may find drawings or pictures to assist in the decision on the applicable expression. For measured characteristics this is more complicated as in many cases the value of the measurements is depending on the (climatical) conditions of the trials. The use of example varieties in these cases is indispensable. The same applies for those visually assessed characteristics that appear to be sensitive for climate conditions (e.g. anthocyanin colouration).

About Naktuinbouw

Naktuinbouw (Dutch Inspection Service for Horticulture) is an independent agency carrying out official inspection and certification tasks in horticultural seeds and plants, under accreditation and responsibility of the Dutch government. Naktuinbouw is an Autonomous Public Authority (APA) regulated by the Ministry of Economic Affairs.

Registration and Plant Breeders' Rights

Naktuinbouw is the organisation in the Netherlands authorised to assess varieties of agricultural, floricultural, arboricultural and vegetable crops for distinctness, uniformity and stability (DUS testing) for registration purposes and/or granting Plant Breeders' Rights, both on Dutch an EU level.

Inspection

In the obligatory inspection system, Naktuinbouw applies the prescribed European directives and legislation for propagating material for floricultural, arboricultural and vegetable crops. These directives are anchored in Dutch legislation in the form of the Dutch Seeds and Planting Materials Act. Naktuinbouw is an independent and unbiased party. Public duties relating to basic inspections that are the responsibility of other quality and/or inspection services (national and international) are not performed or only performed on a cooperative basis.

Voluntary quality inspections
Naktuinbouw also operates various voluntary quality inspections. These systems (Naktuinbouw Elite, NAL) complement the inspections or place more stringent requirements than the legislative directives. One of the areas in which this applies is, for instance, testing plant material for plant health, quality, identity and purity. This testing is carried out for producers of propagating material, either individual companies or groups of producers.

Promoting quality
Naktuinbouw also focuses on promoting quality (partially via a system of quality brands) and certain specialisms. This concerns national and international companies from the entire horticultural chain.

Website Naktuinbouw
http://www.naktuinbouw.eu/en

Helpdesk

For possible remarks, suggestions and questions on the calibration books, you may use the kalibratieboek@naktuinbouw.nl e-mail account.

How to use this manual

To maximise the benefits of this calibration book please note of the following:

- This calibration book was developed in The Netherlands and the photos are taken from material grown under Dutch climate conditions.

  Characteristics that are sensitive for climate- and environmental conditions can express themselves stronger, weaker, and/or in a different (part of the) scale than presented in this book. Therefore the user should be cautious and always cross-check (calibrate) information gained from this book with locally existing knowledge and conditions.

- Images and photos of certain characteristics such as leaf- and fruit colour serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

-  Observations should not be influenced or disturbed by too strong or too weak light conditions. Choose a cloudy day, a favourable time or create favourable circumstances for observations

- Use and adapt this calibration-book to fit local conditions

We appreciate and invite your comments on this calibration-book

Regards,
Bert Scholte
Manager Varieties and Trials
Naktuinbouw, The Netherlands

Contents

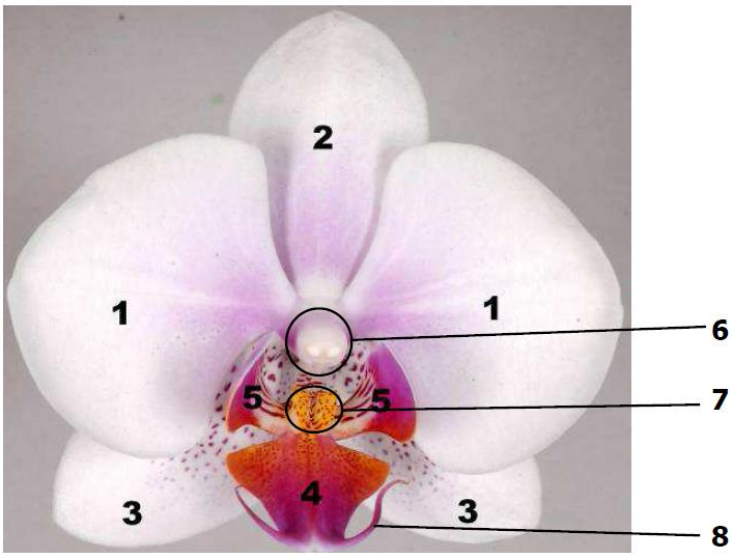
Nr.	Part	Characteristic
42	Lateral sepal	Ground colour of upper side
43	Lateral sepal	Over colour (if present)
44	Lateral sepal	Number of spots
45	Lateral sepal	Colour of spots
46	Lateral sepal	Number of stripes
47	Lateral sepal	Colour of stripes
48	Lateral sepal	Density of netting
49	Lateral sepal	Colour of netting
50	Petal	Length
51	Petal	Width
52	Petal	Shape
53	Petal	Position of broadest part
54	Petal	Curvature of longitudinal axis
55	Petal	Shape in cross section
56	Petal	Twisting
57	Petal	Undulation of margin
58	Petal	Ground colour of upper side
59	Petal	Over colour (if present)
60	Petal	Area of over colour
61	Petal	Number of spots
62	Petal	Size of spots
63	Petal	Colour of spots
64	Petal	Number of stripes
65	Petal	Colour of stripes
66	Petal	Density of netting
67	Petal	Colour of netting
68	Lip	Length of apical lobe
69	Lip	Width of apical lobe
70	Lip	Shape of apical lobe
71	Lip	Whiskers
72	Lip	Length of whiskers
73	Lip	Bump and ridge on apical lobe
74	Lip	Shape of lateral lobe
75	Lip	Curvature of lateral lobe
76	Lip	Size of lateral lobe relative to apical lobe
77	Apical lobe	Ground colour
78	Apical lobe	Over colour (if present)
79	Apical lobe	Number of spots
80	Apical lobe	Size of spots
81	Apical lobe	Colour of spots
82	Apical lobe	Number of stripes
83	Apical lobe	Colour of strips
84	Apical lobe	Density of netting
85	Apical lobe	Colour of netting

Nr.	Part	Characteristic
87	Lateral lobe	Over colour (if present)
88	Lateral lobe	Number of spots
89	Lateral lobe	Colour of spots
90	Lateral lobe	Number of stripes
91	Lateral lobe	Colour of stripes
92	Lateral lobe	Density of netting
93	Lateral lobe	Colour of netting
94	Lip	Callus
95	Callus	Colour
96	Callus	Pubescence
97	Column	Colour

Flower structure in front view

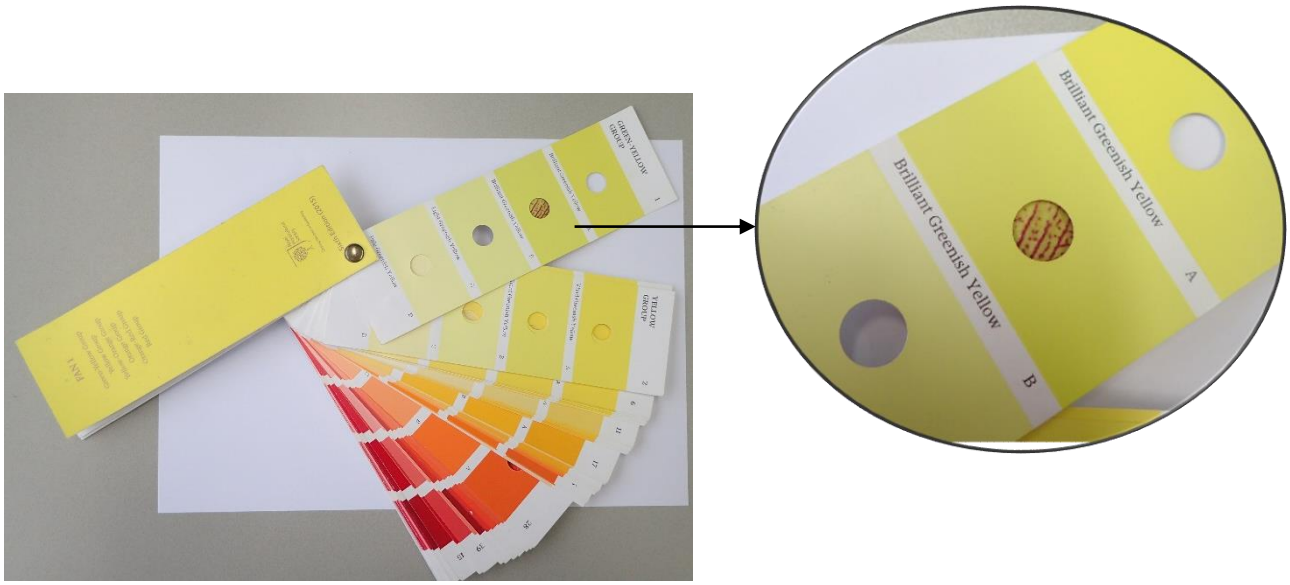
The image below clarifies each part of the flower, to which this calibration book will refer frequently.

1: petal
2: dorsal sepal
3: lateral sepal
4: apical lobe
5: lateral lobe
6: column
7: callus
8: whiskers



Using the RHS colour chart

This calibration book regularly refers to the RHS colour chart as a main means of determining the approximate colours of the different parts of the Phalaenopsis. When using the RHS colour chart to decide upon shades, it is important to do so in a room with natural light and to use a white sheet of paper underneath to minimise disturbance caused by other colours.



01. Plant: length

Grouping characteristic: yes

Type of characteristic: **QN** – Quantitative characteristic.

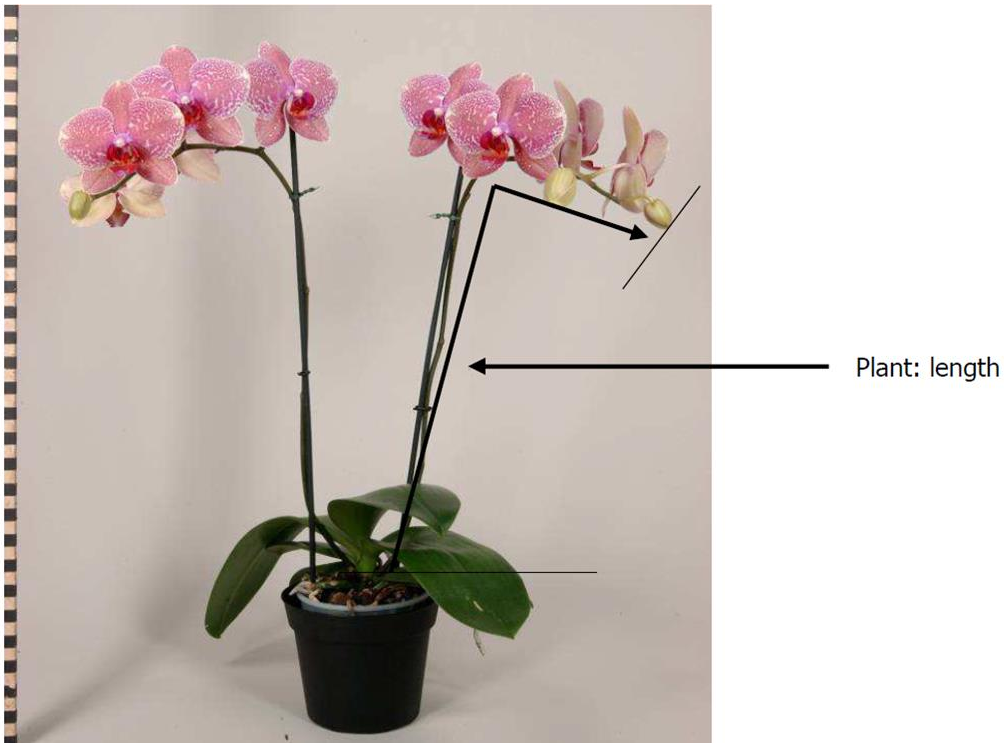
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence

Method of observation: The length of the plant should be observed from soil level to the top of the plant, including the flowers. In case of multiple inflorescences, choose the longest. The length of a stem which represents the variety is measured and converted to a note. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	Phalboezeq
4: short to medium	
5: medium	Phalpnizok, Red Eye
6: medium to long	
7: long	Puccini
8: long to very long	
9: very long	



02. Plant: number of inflorescences

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence

Method of observation: Count the number of inflorescences on each plant in the trial to determine the proper note. If nine out of ten plants have only one inflorescence, but one plant has two, choose the expression *2: one or two*.

Notes and states of expression:
1: only one
2: one or two
3: only two
4: two or three
5: only three
6: more than three

Examples of amount of inflorescences:

one two three four

03. Leaf: length

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

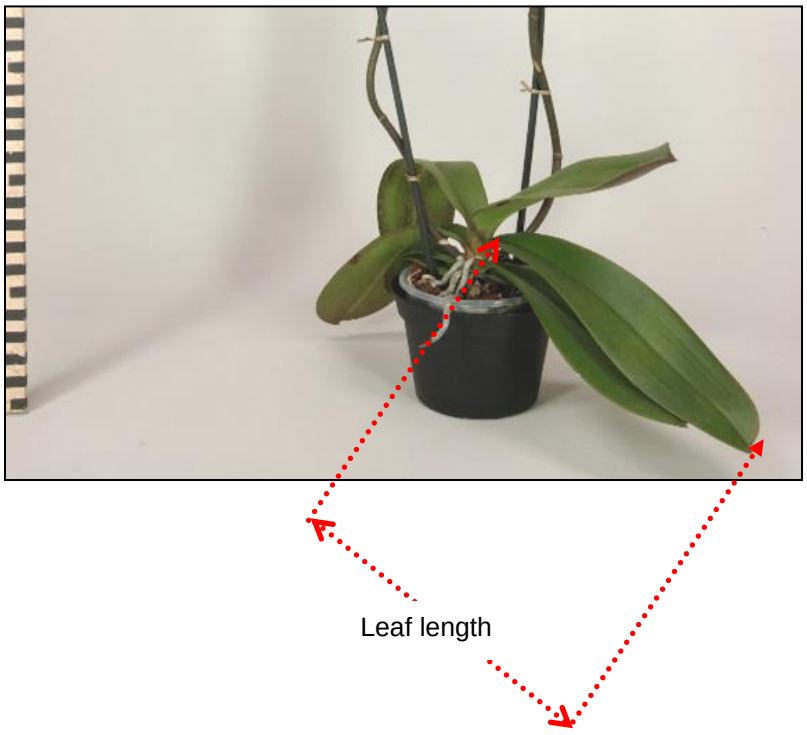
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Leaf length should be measured on the longest and fully expanded leaf of a flowering plant, from the leaf base to its apex. Consequently, the data must be converted into a note according to the grade range listed below. Use example varieties in the trial to decide on the proper note. The image below displays how this characteristic is to be measured.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	Phalbexi, SOGO F1384, Taida Black Leopard
4: short to medium	
5: medium	Puccini, Zhen Yu 5707
6: medium to long	
7: long	Corneille
8: long to very long	
9: very long	



04. Leaf: width

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Leaf width should be measured on the broadest part of the longest and fully expanded leaf of a flowering plant. Consequently, data must be converted into a note according to the grade range listed below. Use example varieties in the trial to decide on the proper note. The image below displays how this characteristic is to be measured.

Notes and states of expression:

1: very narrow	
2: very narrow to narrow	
3: narrow	SOGO Fairyland
4: narrow to medium	
5: medium	Mrs Brown, SOGO F-1442
6: medium to broad	
7: broad	Moonwalker
8: broad to very broad	
9: very broad	

Leaf width

05. Leaf: shape

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG** – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

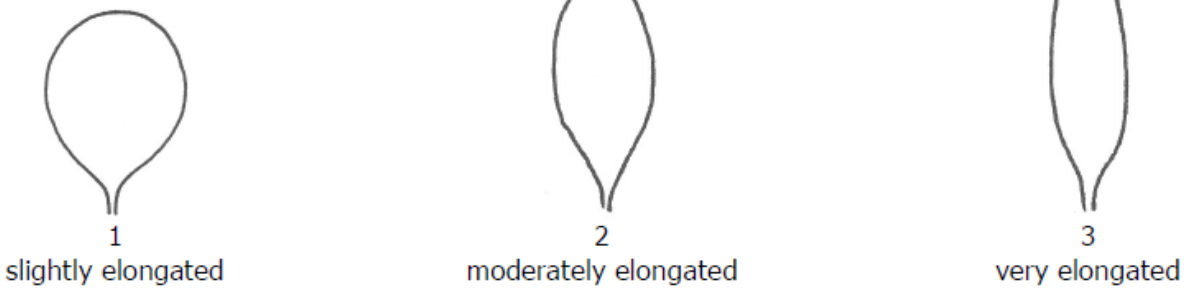
Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Choose an average plant and visually observe the general shape of the fully developed leaves. The image below displays how this characteristic is to be assessed.

Notes and states of expression:
1: slightly elongated
2: moderately elongated
3: very elongated

SOGO F2006
Phalmache

CPVO explanation:



1 slightly elongated 2 moderately elongated 3 very elongated

06. Leaf: position of the broadest part

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Determine where the broadest part of the leaf is positioned relative to the leaf as a whole. The image below displays how this characteristic is to be assessed.

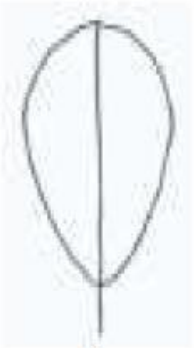
Notes and states of expression:

1: towards base	
2: at middle	Aïda
3: towards apex	Lollypop, Trivium

CPVO explanation:

1
towards base

2
at middle



3
towards apex

1 towards base

2 at middle

3 towards apex

07. Leaf: shape of apex

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: **VG** – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Choose an average plant and visually observe the shape of the apex of the fully developed leaves. The image below displays examples of the three notes belonging to this characteristic.

Notes and states of expression:

1: acute	SOGO fairyland, SOGO F-1016
2: obtuse	An Ching Green Apple, Mrs Brown
3: emarginate	Fire Fox, Happy Sheena Kirara’

CPVO explanation:

1
acute

2
obtuse

3
emarginate

08. Leaf: symmetry of apex

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

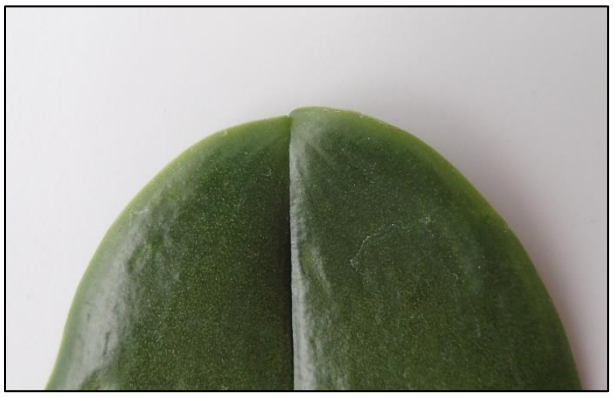
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Choose an average plant and visually observe the symmetry of the apex of the fully developed leaves. Determine the symmetry by looking at two halves of the same leaf. The last to images are both strongly asymmetric, regardless of whether the two halves are attached to each other at the extreme apex.

Notes and states of expression:

1: symmetric or slightly asymmetric	Symphony
2: moderately asymmetric	SOGO Fairyland, SOGO F-688
3: strongly asymmetric	



1 symmetric or slightly asymmetric

2 moderately asymmetric

3 strongly asymmetric

3 strongly asymmetric

09. Leaf: attitude

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Visually observe the attitude of the fully developed leaves on an average plant. Young and too old leaves should not be included. The images display different variations in leaf attitude.

Notes and states of expression:

1: erect	
2: erect to semi-erect	
3: semi-erect	Phalpnizok, SOGO Yukidian ‘V3’
4: semi-erect to horizontal	
5: horizontal	Pink Butterfly, Symphony
6: horizontal to semi-drooping	
7: semi-drooping	Moonwalker, N16’, Tai Lin Lady
8: semi-drooping to drooping	
9: drooping	

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

10. Leaf: variegation

Grouping characteristic: yes

Type of characteristic: **QL** – Qualitative characteristic.

Type of observation: **VG** – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Visually observe the presence of variegation on the leaves of an average plant.

Notes and states of expression:

1: absent	Symphony
9: present	SOGO F2806

1 absent

9 present

11. Leaf: spots on upper side

Grouping characteristic: yes

Type of characteristic: **QL** – Qualitative characteristic.

Type of observation: **VG** – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Visually observe the presence of clear spots on the leaves of an average plant.

Notes and states of expression:

1: absent	SOGO Fairyland, Sunrise Beautiful Girl
9: present	Phalnasxu, SOGO F-1320

1 absent

9 present

12. Leaf: main colour of upper side

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: **VG** – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Determine the main colour of the upper side of the fully developed leaves by visually observing. Young and old leaves should not be observed. The main colour is the colour with the largest surface area. In cases where the areas of main and secondary colour are too similar to reliably decide which colour has the largest area, the darkest colour is considered to be the main colour. Determine the correct shade of green by using example varieties.

Notes and states of expression:

1: yellowish green	Phalapek
2: light green	King Car Hebe, Vivaldi
3: medium green	Symphony, Torce N92
4: dark green	Puccini

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

13. Leaf: anthocyanin coloration of upper side

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence. Observations on the leaves should be made on the largest fully expanded leaf.

Method of observation: Visually observe an average plant for anthocyanin coloration on the upper side of the fully developed leaves. Then determine the degree of anthocyanin coloration by comparing it to example varieties.

Notes and states of expression:

1: absent or very weak	Mrs Brown
2: very weak to weak	
3: weak	Phalcoqeo
4: weak to medium	
5: medium	Memories
6: medium to strong	
7: strong	Phalaguc
8: strong to very strong	
9: very strong	

Anthocyanin coloration absent

Anthocyanin coloration present

14. Inflorescence: type

Grouping characteristic: no

Type of characteristic: **QL** – Qualitative characteristic.

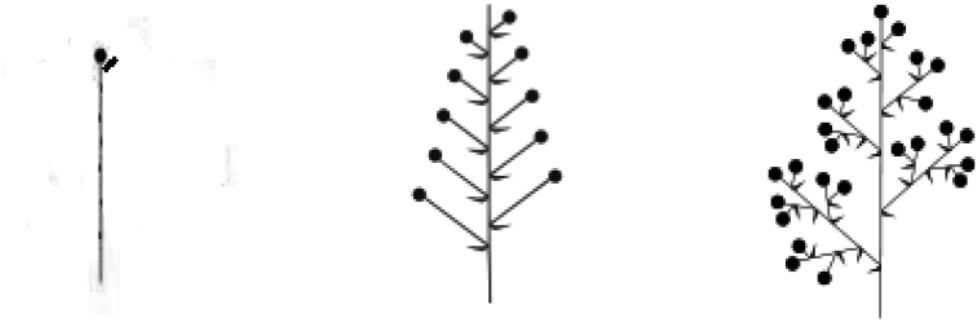
Type of observation: **VG** – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence.

Method of observation: Visually observe the type of inflorescence on an average plant. The image below represents a delineation of the three different types of inflorescences. In case the type of inflorescence vary between raceme and panicle in the trial, choose 'panicle' provided that panicle inflorescences cannot be considered an exception in the trial.

Notes and states of expression:
1: single flowered
2: raceme
3: panicle

CPVO explanation:



1
single flowered

2
raceme

3
panicle

2 raceme

3 panicle

15. Inflorescence: length of flowering part

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence.

Method of observation: Measure the length of the flowering part from the start of the first flower or the start of the first branch on the peduncle to the end of the last flower. In case of multiple inflorescences, choose the longest. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	Mrs Brown
4: short to medium	
5: medium	Puccini
6: medium to long	
7: long	Pinnacle
8: long to very long	
9: very long	

CPVO explanation:

16. Inflorescence: number of flowers

Excluding varieties with inflorescences type: single flowered

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence.

Method of observation: Count the number of flowers on the main stem. Use the longest stem in case the plant consists of more than one. Count all flowers, including the faded flowers and the buds and then convert the number of flowers into a note. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very few	
2: very few to few	
3: few	Puccini
4: few to medium	
5: medium	Alabaster
6: medium to many	
7: many	SOGO Fairyland
8: many to very many	
9: very many	

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

17. Peduncle: length

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

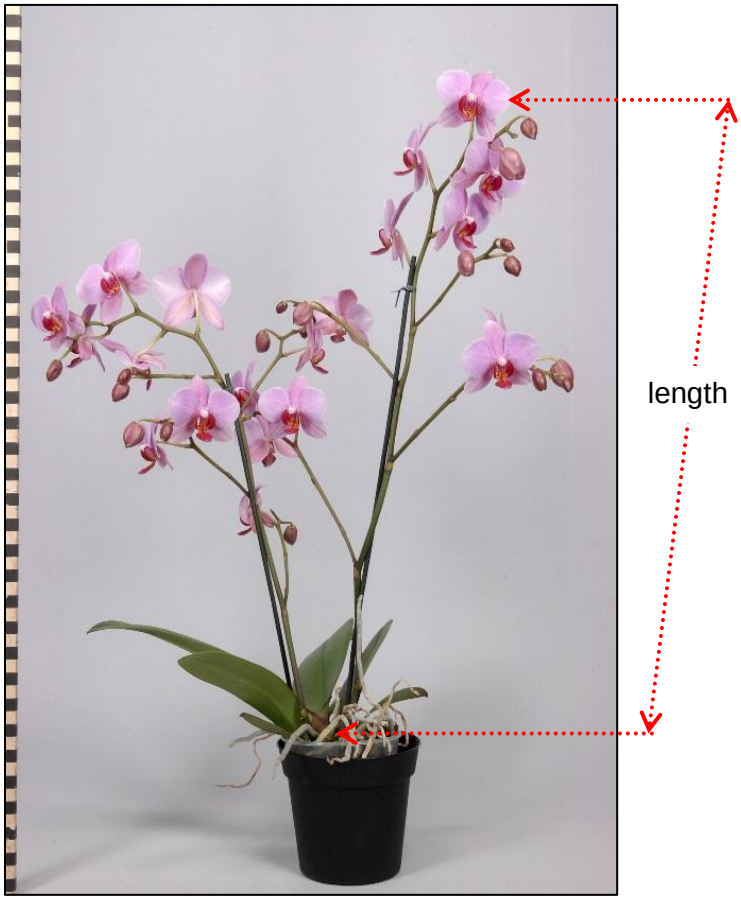
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence.

Method of observation: Measure the length of the peduncle from its base to the top. The flower on top of the peduncle is not to be included for the peduncle length. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	SOGO F1567
4: short to medium	
5: medium	Phaltulen, SOGO F2451
6: medium to long	
7: long	Puccini
8: long to very long	
9: very long	



18. Peduncle: thickness

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence.

Method of observation: Measure the diameter at the center part of the main peduncle. It is suggested to use a micrometer ruler. The thickness in millimeters should be converted into a note. To decide on the proper note, use example varieties in the trial.

Notes and states of expression:

1: thin	Phaladadel
2: medium	Moonwalker
3: thick	Queen of Hearts

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

19. Peduncle: anthocyanin coloration

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG** – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the plant and the stem should be made when 50% of flowers have opened on the first inflorescence.

Method of observation: Visually observe the degree of anthocyanin coloration on the main peduncle of an average plant. Decide on the proper note by using example varieties.

Notes and states of expression:

1: absent or weak	Phaltulen
2: weak to medium	
3: medium	
4: medium to strong	
5: strong	Mrs Brown

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

20. Flower: shape in lateral view

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: **VG** – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the shape of a fully expanded flower on an average plant. The images below illustrate the three notes.

Notes and states of expression:
1: concave
2: flat
3: convex

CPVO explanation:

1
concave

2
flat

3
convex

21. Flower: length in front view

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

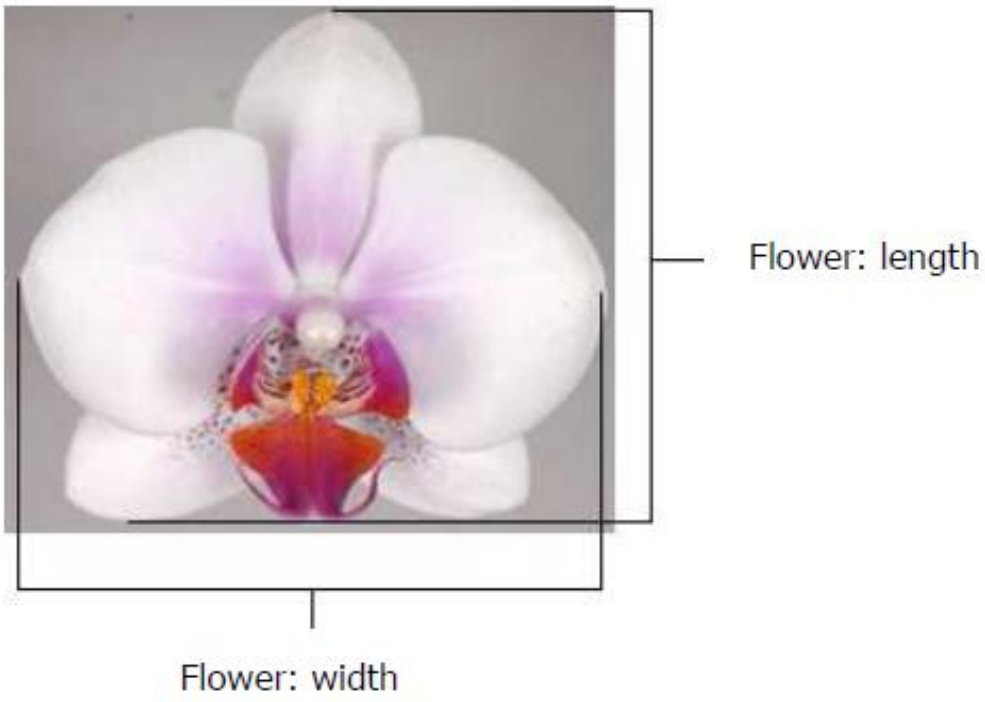
Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the length of the flower in millimeters from the lowest point at the lateral sepal to the highest point on the dorsal sepal, as illustrated in the image below. Use an average, fully expanded flower and convert the date into a note. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	Mrs Brown
4: short to medium	
5: medium	Phaladadel
6: medium to long	
7: long	Phalbobol
8: long to very long	
9: very long	Cygnus Renaissance

CPVO explanation:



22. Flower: width in front view

Grouping characteristic: yes

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

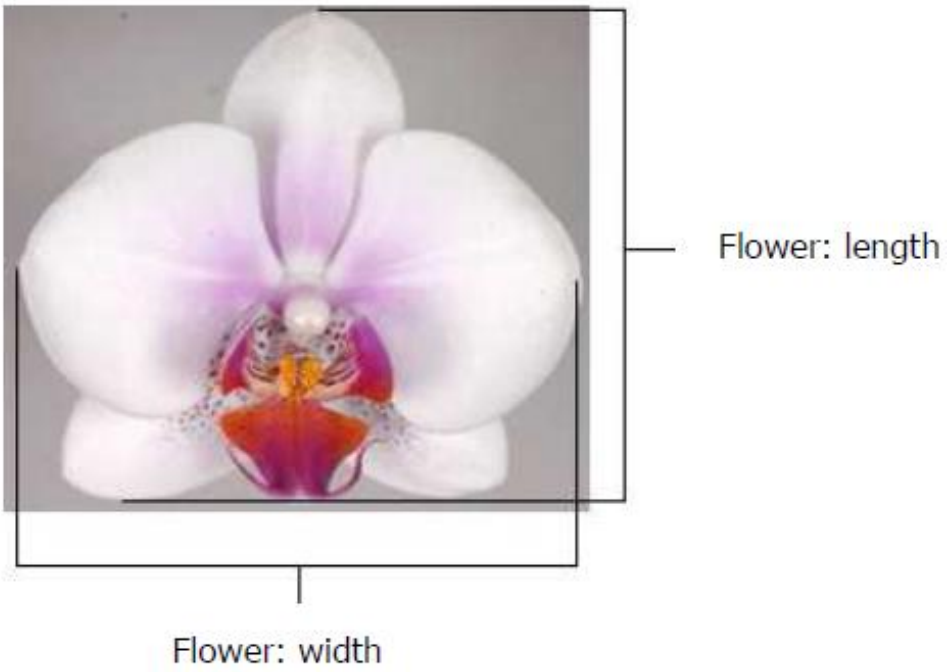
Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the width of the flower at its broadest point in millimeters, usually the distance between the tips of the petals. This is illustrated in the image below. Use an average, fully expanded flower and convert the date into a note according to the grade range below. To decide on the proper note, use example varieties in the trial.

Notes and states of expression:

1: very narrow	
2: very narrow to narrow	
3: narrow	Mrs Brown
4: narrow to medium	
5: medium	Beauty Sheena Rinrin
6: medium to broad	
7: broad	Phaladadel
8: broad to very broad	
9: very broad	Cygnus Renaissance

CPVO explanation:



23. Flower: arrangement of petals

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

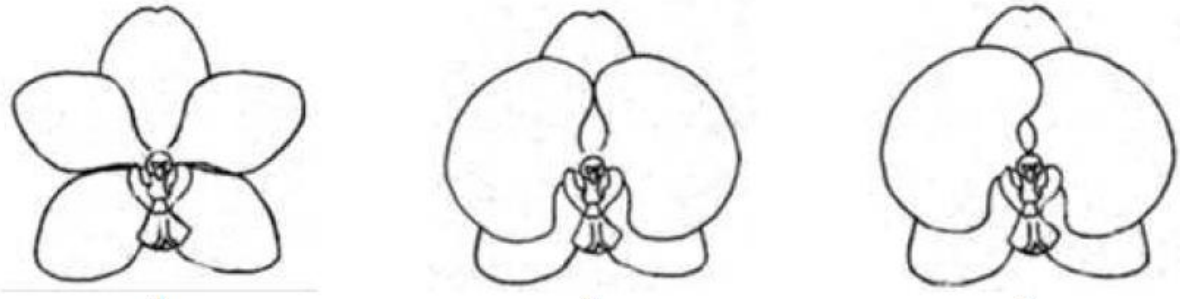
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the arrangement of petals on an average, fully expanded flower. The images below illustrate the three different notes belonging to this characteristic.

Notes and states of expression:
1: free
2: touching
3: overlapping

CPVO explanation:



1 free 2 touching 3 overlapping

24. Flower: fragrance

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Evaluate the fragrance of the flower by smelling and determine the degree of fragrance based on the example varieties.

Notes and states of expression:

1: absent or weak	SOGO Fairyland
2: moderate	
3: strong	Sun Passat

25. Dorsal sepal: length

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the length in millimeters of the dorsal sepal of an average, fully expanded flower. The dorsal sepal should be measured from its tip to its base. Convert the date into a note according to the grade range below. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	Green star
4: short to medium	
5: medium	Phaladadel
6: medium to long	
7: long	Hawaii Dream
8: long to very long	
9: very long	

26. Dorsal sepal: width

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

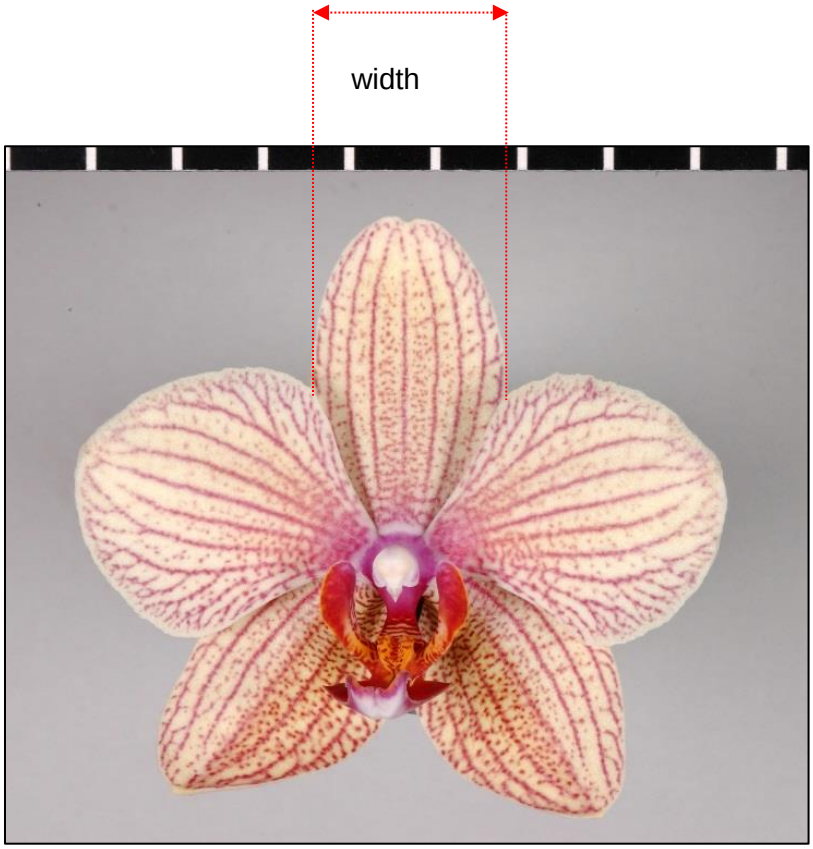
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the width of the dorsal sepal in millimeters of an average, fully expanded flower. The width must be measured at its broadest point. Convert the date into a note according to the grade range below. Use example varieties in the trial to decide on this grade range.

Notes and states of expression:

1: very narrow	
2: very narrow to narrow	
3: narrow	Green Star
4: narrow to medium	
5: medium	Happy Days
6: medium to broad	
7: broad	Paloma
8: broad to very broad	
9: very broad	



27. Dorsal sepal: shape

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Determine the shape of the dorsal sepal by visual observation. The shape is moderately compressed when the width is larger than the length. It is moderately elongated when the length is longer than the width. When the length equals the width, the shape can be considered medium. Use an average, fully developed flower.

Notes and states of expression:

3: moderately compressed	Starbust
4: moderately compressed to medium	
5: medium	Taisuco Anna
6: medium to moderately elongated	
7: moderately elongated	Phalciny



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

28. Dorsal sepal: position of broadest part

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe an average, fully developed flower to indicate the position of the broadest part of the dorsal sepal.

Notes and states of expression:

1: towards base	Heavenly
2: at middle	Phalbipxip
3: towards apex	Santa Clara

1 towards base

2 at middle

3 towards apex

29. Dorsal sepal: curvature of longitudinal axis

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

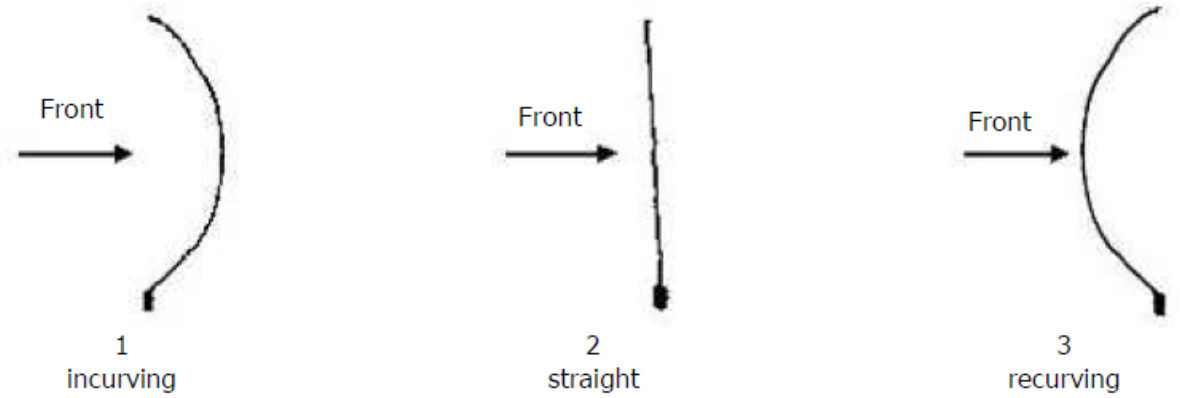
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the general curvature of the dorsal sepal of the fully developed flowers in longitudinal axis by looking at the dorsal sepal from a lateral perspective. When part of the dorsal sepals on the plant is incurving and another part is recurving, the average dorsal sepal can be considered straight.

Notes and states of expression:
1: incurving
2: straight
3: recurving

CPVO explanation:



1 incurving 2 straight 3 recurving

30. Dorsal sepal: shape in cross section

Grouping characteristic: no

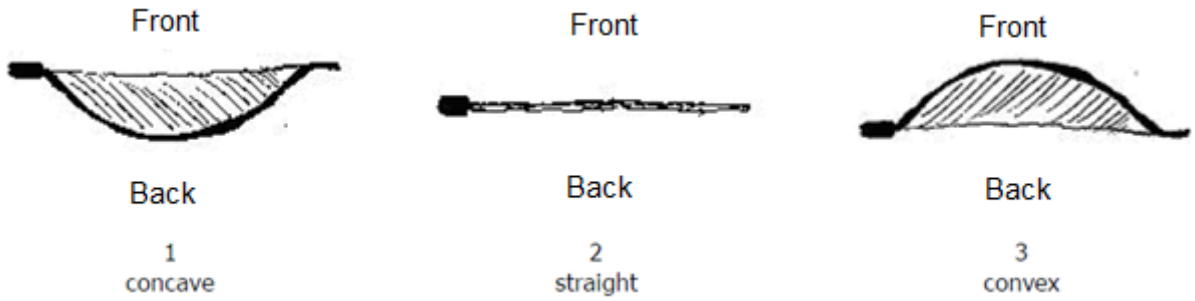
Type of characteristic: **QN** – Quantitative characteristic.

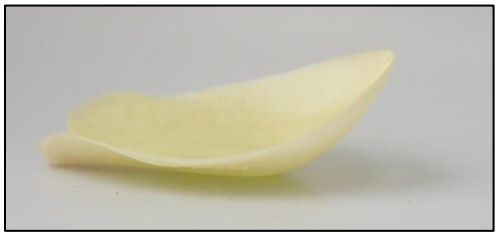
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

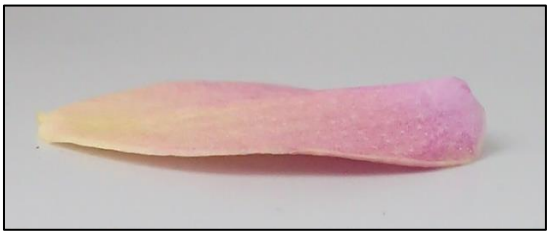
Method of observation: Place the backside of a fully developed dorsal sepal on a flat surface and determine the shape in cross section by visual observations. Generally the dorsal sepals that are incurving have a concave shape in cross section and dorsal sepals that are recurving have a convex shape in cross section. However, exceptions apply.

Notes and states of expression:
1: concave
2: straight
3: convex





1 concave



2 straight

3 convex

31. Dorsal sepal: twisting

Grouping characteristic: no

Type of characteristic: **QL** – Qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the presence of twisting on the dorsal sepal of a fully developed flower.

Notes and states of expression:
1: absent
9: present

Twist is absent

Twist is present

32. Dorsal sepal: undulation of margin

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the presence of undulation on the margin of a fully developed dorsal sepal and indicate its degree.

Notes and states of expression:

1: absent or weak	Phaladadel
2: moderate	Miss Saigon
3: strong	

Undulation is absent

Undulation is weak

Undulation is moderate

Undulation is strong

33. Dorsal sepal: ground colour of upper side

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the main colour of the dorsal sepal of a fully developed flower from the main stem. The ground colour is not always the main colour, but the colour present at the edges of the dorsal sepal. As a rule of thumb, when a colour on the upper side is the same as the colour on the lower side, this will be the ground colour. The other colours belong to the pattern. Indicate the reference number of the RHS Colour Chart that resembles the ground colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

34. Dorsal sepal: over colour (if present)

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the over colour of the dorsal sepal of a fully developed flower from the main stem. The over colour is the flush upon the ground colour that develops over time. This over colour is not always the colour occupying the smallest surface area of the plant part concerned. Indicate the reference number of the RHS Colour Chart that resembles the over colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

35. Dorsal sepal: number of spots

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

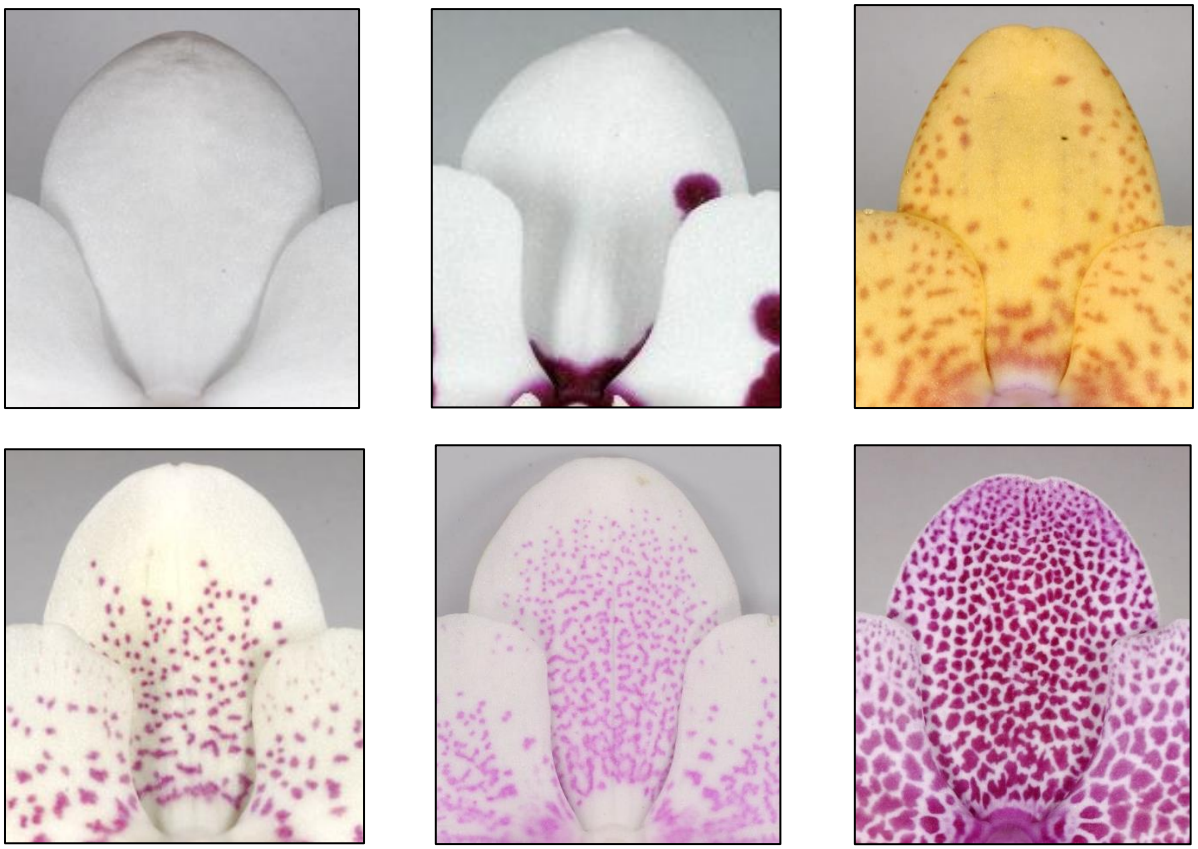
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of spots on a fully developed dorsal sepal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very few to few	
3: few	Parakeet
4: few to medium	
5: medium	Pebble Beach
6: medium to many	
7: many	PROV503GF
8: many to very many	
9: very many	



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

36. Dorsal sepal: size of spots

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

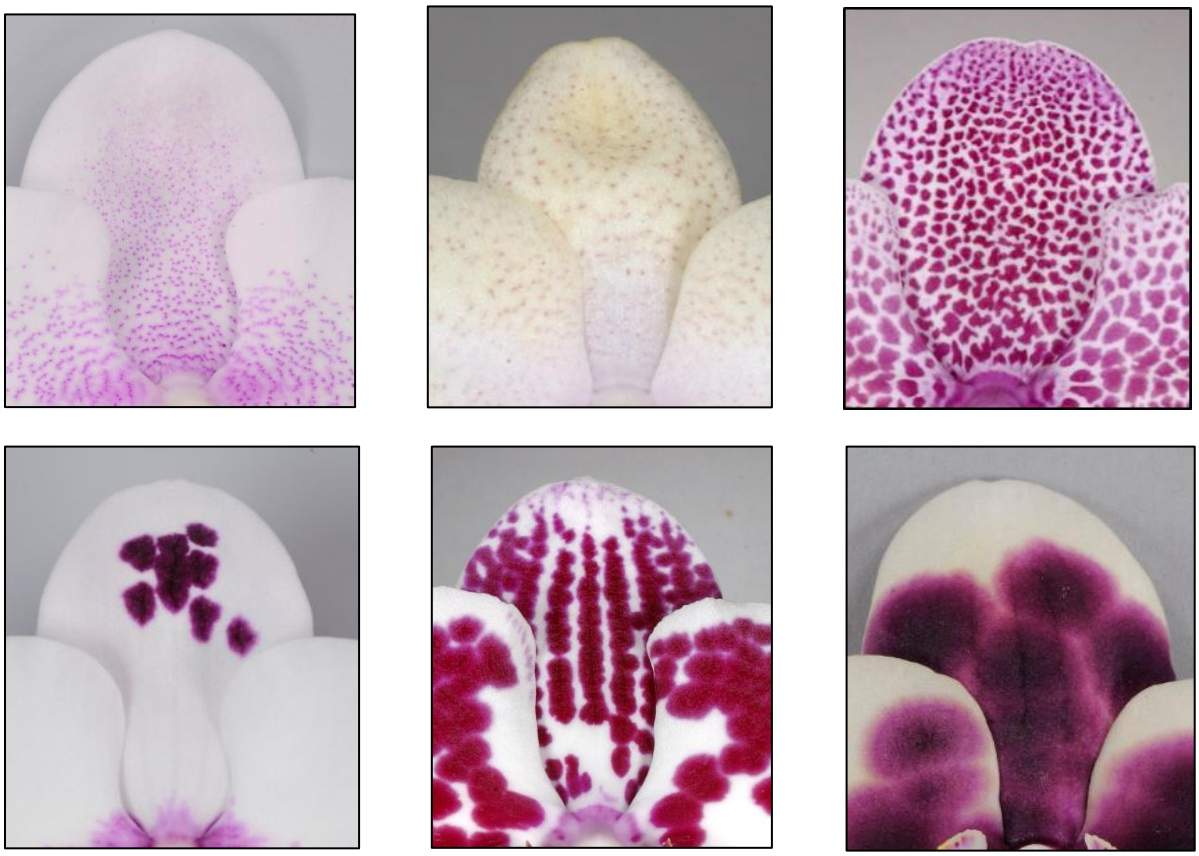
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the size of the spots of a fully developed dorsal sepal. Use example varieties to determine the proper note.

Notes and states of expression:

1: very small	
2: very small to small	
3: small	Phalelbe
4: small to medium	
5: medium	Victory Song
6: medium to large	
7: large	Troubadour
8: large to very large	
9: very large	



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

37. Dorsal sepal: colour of spots

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of the spots of a fully developed dorsal sepal. Indicate the reference number of the RHS Colour Chart that resembles the colour of the spots best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

38. Dorsal sepal: number of stripes

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

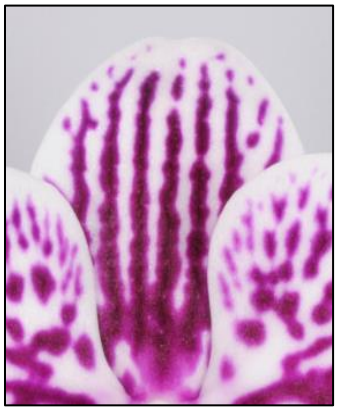
Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of stripes on a fully developed dorsal sepal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very few to few	
3: few	
4: few to medium	
5: medium	Phalopixo
6: medium to many	
7: many	Taida Little Zebra
8: many to very many	
9: very many	



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

39. Dorsal sepal: colour of stripes

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS Colour Chart, visually observe the colour of the spots of a fully developed dorsal sepal. Indicate the reference number of the RHS Colour Chart that resembles the colour of the stripes best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

40. Dorsal sepal: density of netting

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the density of netting on a fully developed dorsal sepal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very low to low	
3: low	Vallier
4: low to medium	
5: medium	Phalpnizok
6: medium to high	
7: high	Happy Days
8: high to very high	
9: very high	

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

41. Dorsal sepal: colour of netting

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS Colour Chart, visually observe the colour of netting of a fully developed dorsal sepal. Indicate the reference number of the RHS Colour Chart that resembles the colour of netting best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

42. Lateral sepal: ground colour of upper side

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS Colour Chart, visually observe the main colour of the lateral sepal of a fully developed flower from the main stem. The ground colour is not always the main colour, but the colour present at the edges of the lateral sepal. As a rule of thumb, when a colour on the upper side is the same as the colour on the lower side, this will be the ground colour. The other colours belong to the pattern. Indicate the reference number of the RHS Colour Chart that resembles the ground colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

43. Lateral sepal: over colour (if present)

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the over colour of the lateral sepal of a fully developed flower from the main stem. The over colour is the flush upon the ground colour that develops over time. This over colour is not always the colour occupying the smallest surface area of the plant part concerned. Indicate the reference number of the RHS Colour Chart that resembles the over colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

44. Lateral sepal: number of spots

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

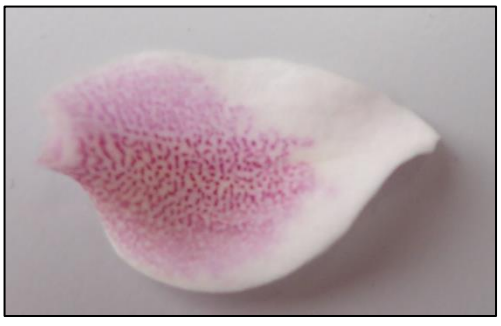
Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of spots on a fully developed lateral sepal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very few to few	
3: few	Pacific Point
4: few to medium	
5: medium	Feeling Groovy
6: medium to many	
7: many	Phalborbol
8: many to very many	
9: very many	



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

45. Lateral sepal: colour of spots

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS Colour Chart, visually observe the colour of the spots of a fully developed lateral sepal. Indicate the reference number of the RHS Colour Chart that resembles the colour of spots best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

46. Lateral sepal: number of stripes

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of stripes on a fully developed lateral sepal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very few to few	
3: few	Phalbembu
4: few to medium	
5: medium	Phalalodu
6: medium to many	
7: many	Taida Little Zebra
8: many to very many	
9: very many	

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

47. Lateral sepal: colour of stripes

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS Colour Chart, visually observe the colour of the stripes of a fully developed lateral sepal. Indicate the reference number of the RHS Colour Chart that resembles the colour of the stripes best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

48. Lateral sepal: density of netting

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the density of netting on a fully developed lateral sepal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very low to low	
3: low	
4: low to medium	
5: medium	122530
6: medium to high	
7: high	SIO0021
8: high to very high	
9: very high	

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

49. Lateral sepal: colour of netting

Grouping characteristic: no

Type of characteristic: **PQ** – pseudo-qualitative characteristic

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS Colour Chart, visually observe the colour of netting of a fully developed lateral sepal. Indicate the reference number of the RHS Colour Chart that resembles the colour of netting best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

50. Petal: length

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the length of the petal in millimeters from its base to its apex as illustrated in the image below. The length of the petal must then be converted into a note. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	Color Butterfly, SOFO Fairyland
4: short to medium	
5: medium	Phaladadel
6: medium to long	
7: long	Paloma
8: long to very long	
9: very long	

51. Petal: width

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the width of the petal in millimeters at its broadest point as illustrated in the image below. The length of the petal must then be converted into a note. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very narrow	
2: very narrow to narrow	
3: narrow	Mrs Brown, SOGO F2451
4: narrow to medium	
5: medium	Puccini, SOGO F-982
6: medium to broad	
7: broad	Paloma
8: broad to very broad	
9: very broad	

52. Petal: shape

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Determine the shape of the petal by visually observing an average, fully developed petal. The shape is moderately compressed when the width is larger than the length. It is moderately elongated when the length is longer than the width. When the length equals the width, the shape can be considered medium.

Notes and states of expression:

3: moderately compressed	Asian Queen
4: moderately compressed to medium	
5: medium	Phalucops
6: medium to moderately elongated	
7: moderately elongated	Phaljelow

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

53. Petal: position of broadest part

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the leaves should be made on the largest fully expanded leaf.

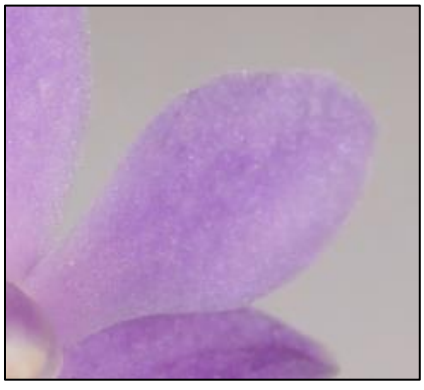
Method of observation: Determine where the broadest part of the leaf is positioned relative to the leaf as a whole.

Notes and states of expression:

1: towards base	Phalcamyl
2: at middle	Phalnasxu
3: towards apex	Aïda

1 towards base

2 at middle



3 towards apex

54. Petal: curvature of longitudinal axis

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

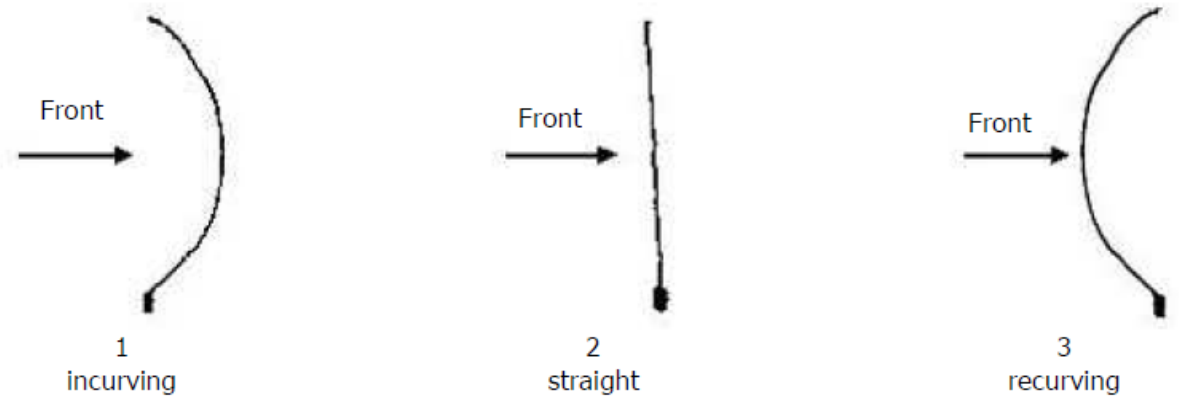
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the general curvature of the petal of the fully developed flowers in longitudinal axis. When part of the petal on the plant is incurving and another part is recurving, the curvature of an average petal can be considered straight.

Notes and states of expression:
1: incurving
2: straight
3: recurving

CPVO explanation:



1 incurving

2 straight

3 recurving

55. Petal: shape in cross section

Grouping characteristic: no

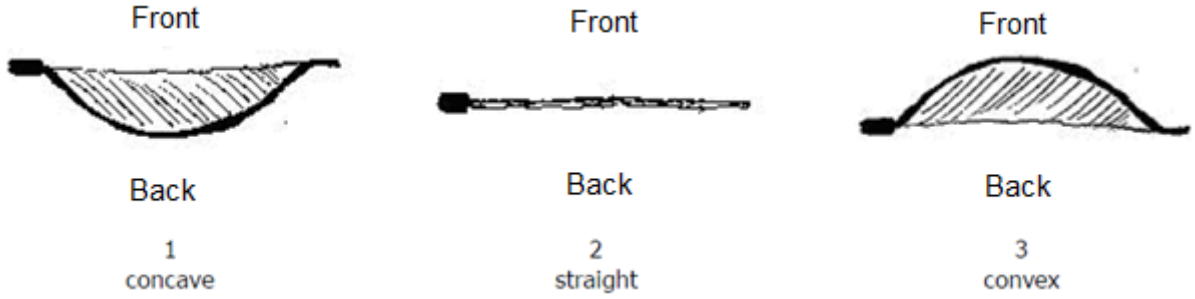
Type of characteristic: **QN** – Quantitative characteristic.

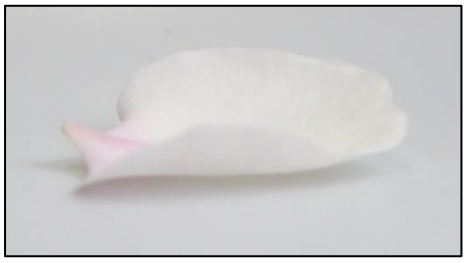
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Place the backside of a fully developed petal on a flat surface and determine the shape in cross section by visual observations. Generally the petals that are incurving have a concave shape in cross section and petals that are recurving have a convex shape in cross section. However, exceptions apply.

Notes and states of expression:
1: concave
2: straight
3: convex





1 concave

2 straight

3 convex

56. Petal: twisting

Grouping characteristic: no

Type of characteristic: **QL** – Qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the presence of twisting on the petal of a fully developed flower.

Notes and states of expression:
1: absent
9: present

1 absent

9 present

57. Petal: undulation of margin

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the degree of undulation on the margin of a fully developed petal.

Notes and states of expression:

1: absent or weak	Phaladadel
2: moderate	Puccini
3: strong	

Undulation is absent

Undulation is weak

Undulation is moderate

Undulation is strong

58. Petal: ground colour of upper side

Grouping characteristic: yes

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the main colour of the petal of a fully developed flower from the main stem. The ground colour is not always the main colour, but the colour present at the edges of the petal. As a rule of thumb, when a colour on the upper side is the same as the colour on the lower side, this will be the ground colour. The other colours belong to the pattern. Indicate the reference number of the RHS Colour Chart that resembles the ground colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

59. Petal: over colour (if present)

Grouping characteristic: yes

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the over colour of the petal of a fully developed flower from the main stem. The over colour is the flush upon the ground colour that develops over time. This over colour is not always the colour occupying the smallest surface area of the plant part concerned. Indicate the reference number of the RHS Colour Chart that resembles the over colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

60. Petal: area of over colour

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the relative size of the area of over colour on the petal. Use the image below and/or use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very small	
2: very small to small	
3: small	Fushengs Glad Lip Tenshi No Hoho
4: small to medium	
5: medium	Phalbiqam
6: medium to large	
7: large	Pink Honeysplash
8: large to very large	
9: very large	

CPVO explanation:

3
small

5
medium

7
large

61. Petal: number of spots

Grouping characteristic: yes

Type of characteristic: **QN** – Quantitative characteristic.

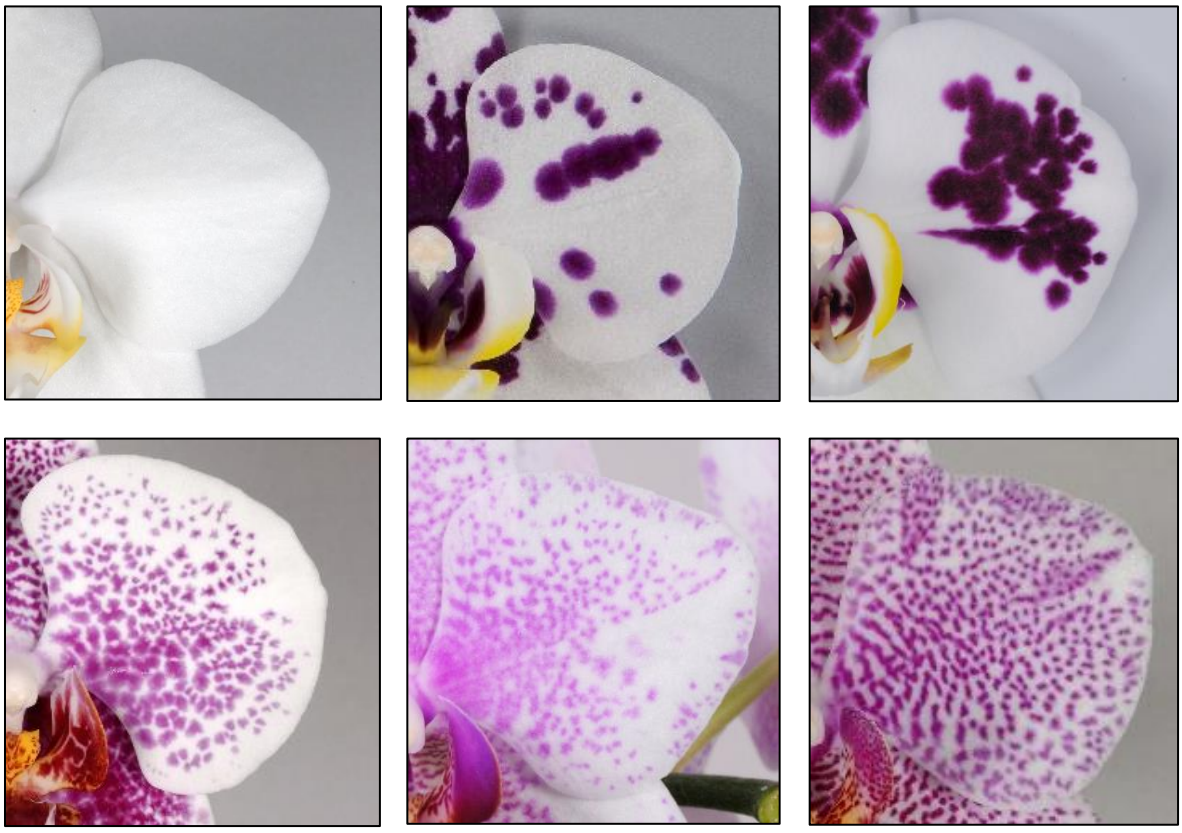
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of spots on a fully developed petal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very few to few	
3: few	P 132
4: few to medium	
5: medium	
6: medium to many	
7: many	Phalborudo
8: many to very many	
9: very many	



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference

62. Petal: size of spots

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

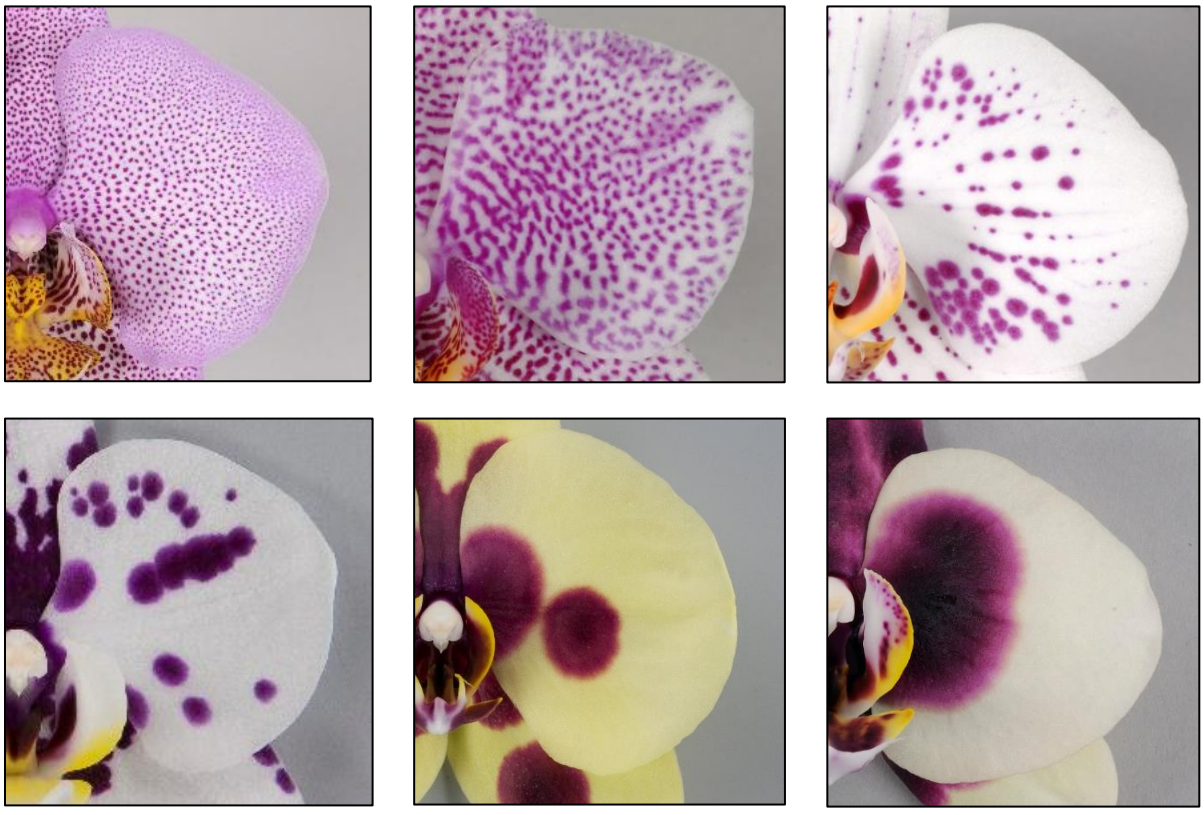
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the size of the spots of a fully developed petal. Use example varieties to determine the proper note.

Notes and states of expression:

1: very small	
2: very small to small	
3: small	
4: small to medium	
5: medium	Phaloqzu
6: medium to large	
7: large	Troubadour
8: large to very large	
9: very large	



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference

63. Petal: colour of spots

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of the spots of a fully developed petal. Indicate the reference number of the RHS Colour Chart that resembles the colour of the spots best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

64. Petal: number of stripes

Grouping characteristic: yes

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of stripes on a fully developed petal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very few to few	
3: few	
4: few to medium	
5: medium	Phaljelow
6: medium to many	
7: many	Firelight
8: many to very many	
9: very many	

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference

65. Petal: colour of stripes

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS Colour Chart, visually observe the colour of the stripes of a fully developed petal. Indicate the reference number of the RHS Colour Chart that resembles the colour of stripes best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

66. Petal: density of netting

Grouping characteristic: yes

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the density of netting on a fully developed petal. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Florina
2: very low to low	
3: low	Vallier
4: low to medium	
5: medium	Phalpnizok
6: medium to high	
7: high	Happy Days
8: high to very high	
9: very high	

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference

67. Petal: colour of netting

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of netting of a fully developed petal. Indicate the reference number of the RHS Colour Chart that resembles the colour of netting best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

68. Lip: length of apical lobe

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

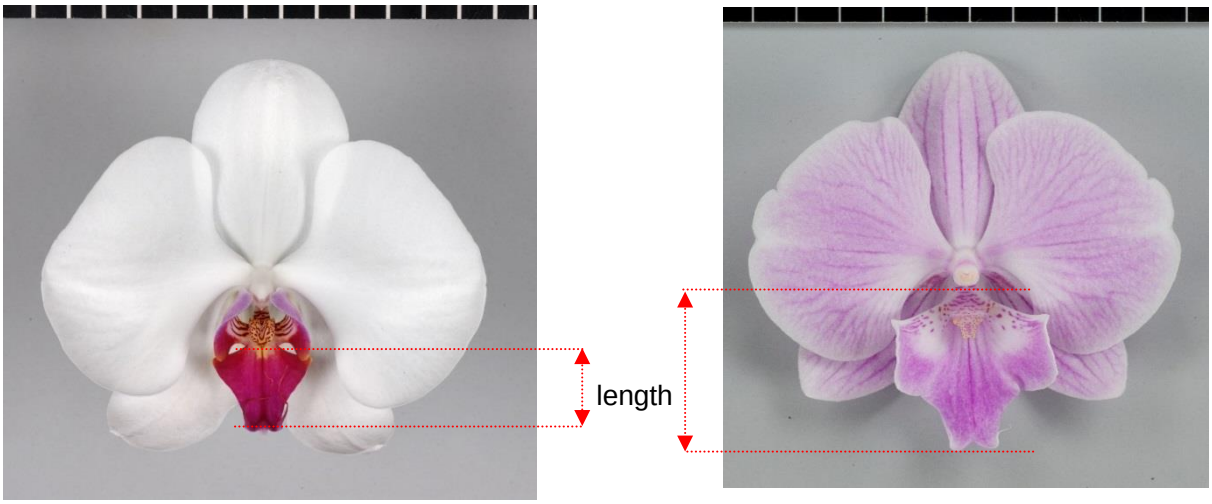
Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the length of the apical lobe in millimeters as illustrated in the picture. The length of the apical lobe must then be converted into a note. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	Mrs Brown
4: short to medium	
5: medium	Puccini
6: medium to long	
7: long	
8: long to very long	
9: very long	



69. Lip: width of apical lobe

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the width of the apical lobe in millimeters as illustrated in the picture. The width of the apical lobe must then be converted into a note. Use example varieties in the trial to decide on the proper note.

Notes and states of expression:

1: very narrow	
2: very narrow to narrow	
3: narrow	Moonwalker
4: narrow to medium	
5: medium	Miss Saigon
6: medium to broad	
7: broad	Phalmomen
8: broad to very broad	
9: very broad	

width

width

70. Lip: shape of apical lobe

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

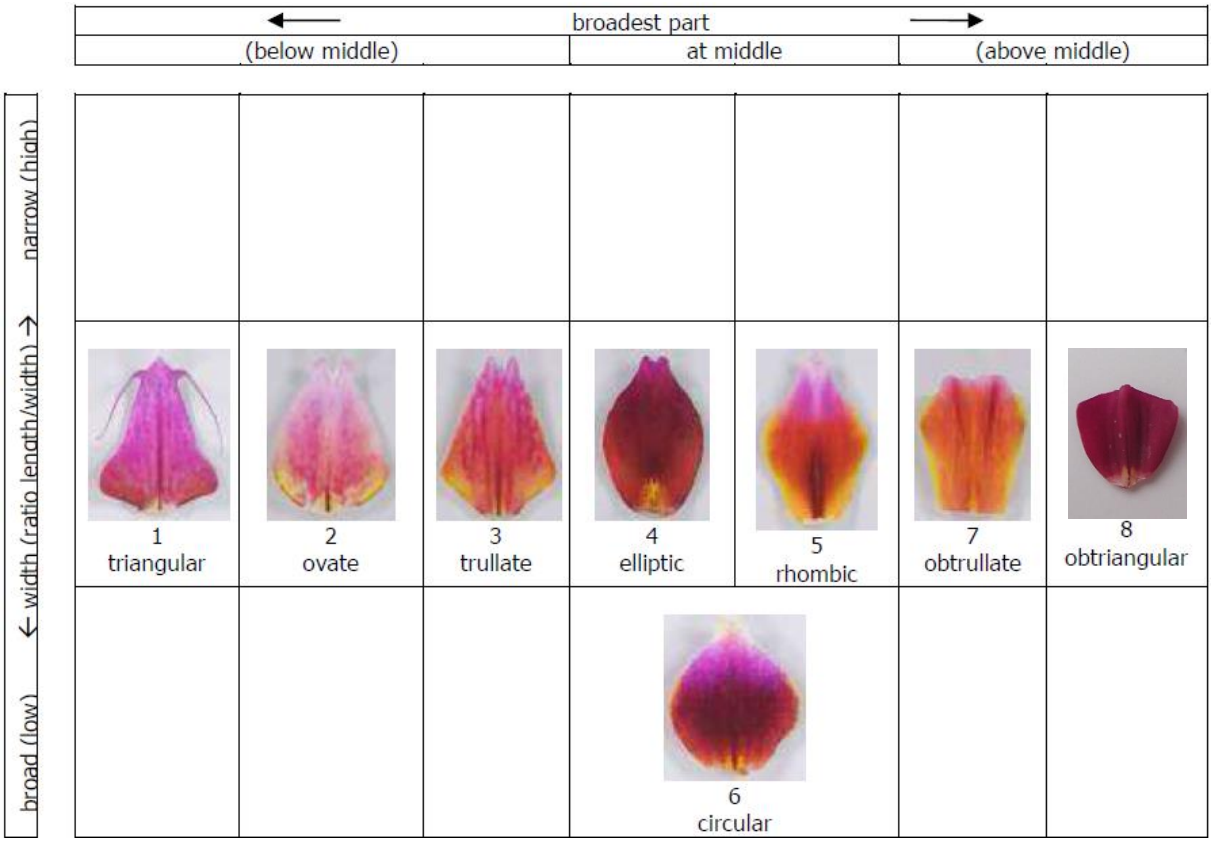
Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Determine the shape of the apical lobe by visual observation. Compare an average apical lobe of a fully developed flower with the table below and decide on which illustration fits best.

Notes and states of expression:

1: triangular	Paloma
2: ovate	Puccini
3: trullate	
4: elliptic	
5: rhombic	Green Star
6: circular	Phalnasxu
7: obtrullate	SOGO F2451
8: obtriangular	Halcyon

CPVO explanation:



70. Lip: shape of apical lobe

The flowers above have a so-called *big lip*, meaning that the apical lobe and the lateral lobes are fused. In this case, make a remark about the big lip in the remarks section and the shape of the lateral lobes become ‘not applicable’.

71. Lip: whiskers

Grouping characteristic: no

Type of characteristic: **QL** – Qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Determine by visual observation the presence of whiskers on the apical lobe.

Notes and states of expression:

1: absent	Moonwalker
9: present	Phalmomen

Whiskers absent

Whiskers present

72. Lip: length of whiskers

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Measure the length of the whiskers in millimeters from its base to its tip as illustrated in the image below. Use a fully developed flower from an average plant. The length must then be converted into a note. Use example varieties in trial to decide on the proper note.

Notes and states of expression:

1: very short	
2: very short to short	
3: short	Green Star, SOGO F-982
4: short to medium	
5: medium	Cuckoo, SOGO F-1302
6: medium to long	
7: long	Jiang Firebird, Snow Tiger
8: long to very long	
9: very long	

73. Lip: bump and ridge on apical lobe

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Determine the presence and consequently the size of the bump an ridge on the apical lobe. Do this by touching the middle line of the lobe with your fingers. The illustration below displays the different classes of this characteristic.

Notes and states of expression:

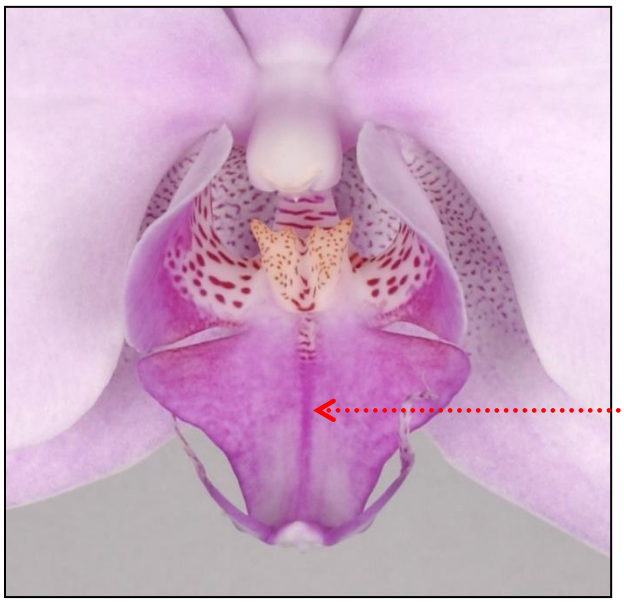
1: absent or small	SOGO F1567, Torce N92
2: medium	
3: large	SOGO F-1016

CPVO explanation:

1
absent or small

2
medium

3
large



74. Lip: shape of lateral lobe

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the shape of the lateral lobe of a fully developed flower and compare it to the five types illustrated below. Choose the note of the type that resembles the lateral lobe best.

Notes and states of expression:

1: type I	SOGO F-728
2: type II	Amy Lee, LK V13509
3: type III	Golden Jaguar
4: type IV	Caroline
5: type V	SOGO Fairyland, Torce N92

CPVO explanation:

1
type I

2
type II

3
type III

4
type IV

5
type V

type I

type III

type IV

type V

75. Lip: curvature of lateral lobe

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

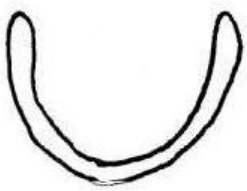
Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the curvature of the lateral lobe on all fully developed flowers on an average plant. Use the illustration below to determine the correct note.

Notes and states of expression:

1: weak	SOGO Fairyland, SOGO F-1016
2: medium	Beaugard
3: strong	Snow Tiger

CPVO explanation:



1
weak

2
medium

3
strong

1 weak

2 medium

3 strong

76. Lip: size of lateral lobe relative to apical lobe

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Compare the size of the lateral lobe to that of the apical lobe and visually observe whether lateral lobe is smaller, equal or larger than the apical lobe. Do this by placing the lateral lobe on top of the apical lobe. Use a fully developed flower from an average plant. The image on the right illustrates how to measure the relative size. Do not only include the length or width of the lobes, but determine the size based on the lobes as a whole.

Notes and states of expression:

1: much smaller	
2: much smaller to smaller	
3: smaller	Phaladadel
4: smaller to equal	
5: equal	Puccini
6: equal to larger	
7: larger	Hawaii Dream, Ruey Hih Beauty
8: larger to much larger	
9: much larger	






These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

77. Apical lobe: ground colour

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the main colour of the apical lobe of a fully developed flower from the main stem. The ground colour is not always the main colour, but the colour present at the edges of the apical lobe. Indicate the reference number of the RHS Colour Chart that resembles the ground colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

78. Apical lobe: over colour (if present)

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the over colour of the apical lobe of a fully developed flower from the main stem. The over colour is the flush upon the ground colour that develops over time. This over colour is not always the colour occupying the smallest surface area of the plant part concerned. Indicate the reference number of the RHS Colour Chart that resembles the over colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

79. Apical lobe: number of spots

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of spots on a fully developed apical lobe. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	SIO0037
2: few	
3: medium	Margarita
4: many	PROV501GF

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

80. Apical lobe: size of spots

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the size of the spots of a fully developed apical lobe. Use example varieties to determine the proper note.

Notes and states of expression:

1: very small	
2: very small to small	
3: small	Phalelbe
4: small to medium	
5: medium	PROV501GF
6: medium to large	
7: large	
8: large to very large	
9: very large	




These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

81. Apical lobe: colour of spots

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of the spots of a fully developed apical lobe. Indicate the reference number of the RHS Colour Chart that resembles the colour of the spots best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

82. Apical lobe: number of stripes

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of stripes on a fully developed apical lobe. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	SIO0037
2: few	Taida Little Zebra
3: medium	Phalbipxip
4: many	



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

83. Apical lobe: colour of stripes

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of the stripes of a fully developed apical lobe. Indicate the reference number of the RHS Colour Chart that resembles the colour of the stripes best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

84. Apical lobe: density of netting

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the density of netting on a fully developed apical lobe. Use example varieties to determine the proper note.

Notes and states of expression:
1: none
2: low Lollypop
3: medium
4: high



These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

85. Apical lobe: colour of netting

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of netting of a fully developed apical lobe. Indicate the reference number of the RHS Colour Chart that resembles the colour of netting best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

86. Lateral lobe: ground colour

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the main colour of the lateral lobe of a fully developed flower from the main stem. The ground colour is not always the main colour, but the colour present at the edges of the lateral lobe. As a rule of thumb, when a colour on the upper side is the same as the colour on the lower side, this will be the ground colour. The other colours belong to the pattern. Indicate the reference number of the RHS Colour Chart that resembles the ground colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

87. Lateral lobe: over colour (if present)

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the over colour of the lateral lobe of a fully developed flower from the main stem. The over colour is the flush upon the ground colour that develops over time. This over colour is not always the colour occupying the smallest surface area of the plant part concerned. Indicate the reference number of the RHS Colour Chart that resembles the over colour best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

88. Lateral lobe: number of spots

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of spots on a fully developed lateral lobe. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	Baby Seal
2: few	Margarita
3: medium	PROV501GF
4: many	Phalborbol




These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

89. Lateral lobe: colour of spots

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of the spots of a fully developed lateral lobe. Indicate the reference number of the RHS Colour Chart that resembles the colour of the spots best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

90. Lateral lobe: number of stripes

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the number of stripes on a fully developed lateral lobe. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	
2: few	Sea Breeze
3: medium	Phalbapfoz
4: many	

These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

91. Lateral lobe: colour of stripes

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of the stripes of a fully developed lateral lobe. Indicate the reference number of the RHS Colour Chart that resembles the colour of the stripes best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

92. Lateral lobe: density of netting

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the density of netting on a fully developed lateral lobe. Use example varieties to determine the proper note.

Notes and states of expression:

1: none	PROV0005GF
2: low	SOGO F842
3: medium	PROV0002GF
4: high	Aubrey




These images serve only to illustrate the variation present in the crop and should not be used as an absolute reference.

93. Lateral lobe: colour of netting

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of netting of a fully developed lateral lobe. Indicate the reference number of the RHS Colour Chart that resembles the colour of netting best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

94. Lip: callus

Grouping characteristic: no

Type of characteristic: **QN** – Quantitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

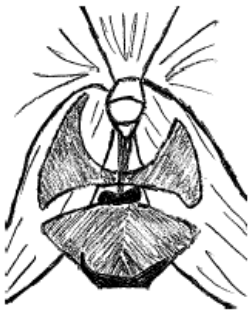
Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe the callus of a fully developed flower of an average plant to determine to what degree the callus is raised. The illustration below displays the classes belonging to the different notes.

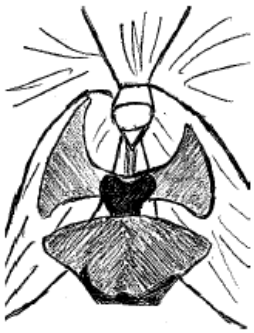
Notes and states of expression:

1: flat or slightly raised	Stage girl
2: moderately raised	PROV507GF
3: strongly raised	Mrs Brown

CPVO explanation:



1
flat or slightly raised

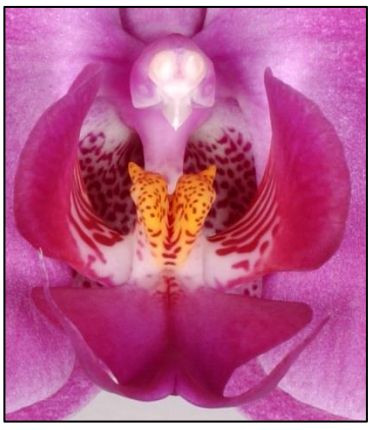


2
moderately raised

3
strongly raised

1 slightly raised

2 moderately raised



3 strongly raised

95. Callus: colour

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: **VG/MS** – Choice between:
- Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant
- Calculated average of the measurement of 20 plants or parts of plants

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of the callus of a fully developed flower. Indicate the reference number of the RHS Colour Chart that resembles the colour of the callus best. If the callus has spots, mention it as well as the colour of the spots in the remarks.

Notes and states of expression:
RHS Colour Chart (indicate reference number)

96. Callus: pubescence

Grouping characteristic: no

Type of characteristic: **QL** – Qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Visually observe a fully developed flower for the presence of pubescence on the callus. The images below display a lip with and without pubescence.

Notes and states of expression:

1: absent	Mrs Brown
9: present	Zuma's Pixie 'Malibu'

1 Pubescence absent

2 Pubescence present

97. Column: colour

Grouping characteristic: no

Type of characteristic: **PQ** – Pseudo-qualitative characteristic.

Type of observation: VG – Single visual assessment of a group of plants or parts of plants; in practice a single assessment of an average single plant or part of plant.

Stage of observation: Observations on the flowers should be made on fully expanded flowers when 50% of the flowers have opened.

Method of observation: Using the RHS colour chart, visually observe the colour of the dorsal side of the column apex of a fully developed flower. Indicate the reference number of the RHS Colour Chart that resembles the colour of the column best.

Notes and states of expression:
RHS Colour Chart (indicate reference number)