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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

DRAFT**ANTIRRHINUM***

UPOV Code: ANTIR_MAJ

*(Antirrhinum majus L.)***GUIDELINES****FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY***prepared by an expert from Japan*

*to be considered by the Technical Committee at its forty-first session,
to be held in Geneva, Switzerland, from April 4 to 6, 2005*

Alternative Names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Antirrhinum majus</i> (L.)	Antirrhinum, Common snapdragon	Gueule de lion, Gueule de loup, Muflier	Löwenmaul	Boca de dragón

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

ASSOCIATED DOCUMENTS

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

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

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Antirrhinum majus* L. of the family *Scrophulariaceae*.

2. Material Required

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

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

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

- seed-propagated varieties: 600 seeds;
- vegetatively propagated varieties: 30 rooted cuttings

2.4 In the case of seed, the seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should, be stated by the applicant.

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

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

3. Method of Examination

3.1 *Number of Growing Cycles*

The minimum duration of tests should normally be a single growing cycle.

3.2 *Testing Place*

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

3.3 *Conditions for Conducting the Examination*

3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination. In particular, unless otherwise indicated, all observation should be made on flowering plants at the time of full flowering.

3.3.2 Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.

3.4 *Test Design*

3.4.1 In the case of seed-propagated varieties, each test should be designed to result in a total of at least 40 plants.

3.4.2 In the case of vegetatively propagated varieties, each test should be designed to result in a total of at least 20 plants.

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

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

3.5.1 In the case of seed-propagated varieties, unless otherwise indicated, all observations on single plants should be made on 20 plants or parts taken from each of 20 plants and any other observations made on all plants in the test.

3.5.2 In the case of vegetatively propagated varieties, unless otherwise indicated all observations on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observations made on all plants in the test.

3.6 *Additional Tests*

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

4. Assessment of Distinctness, Uniformity and Stability

4.1 *Distinctness*

4.1.1 General Recommendations

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

4.1.2 Consistent Differences

The differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One

means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

4.1.3 Clear Differences

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

4.2 *Uniformity*

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

4.2.2 For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 40 plants, 2 off-types are allowed. In the case of a sample size of 20 plants, 1 off-type is allowed.

4.3 *Stability*

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

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

5. Grouping of Varieties and Organization of the Growing Trial

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

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

5.3 The following have been agreed as useful grouping characteristics:

- (a) Plant: growth habit (characteristic 1)
- (b) Only varieties with bushy plant growth habit: Plant: attitude of shoots (characteristic 2)
- (c) Flower: form (characteristic 15)
- (d) Upper lip: main color of upper side (characteristic 22) with the following groups:

- Gr. 1: white
- Gr. 2: yellow
- Gr. 3: orange
- Gr. 4: red
- Gr. 5: pink
- Gr. 6: purple

- (e) Lower lip: main color of upper side of cusp (characteristic 26) with the following groups:

- Gr. 1: white
- Gr. 2: yellow
- Gr. 3: orange
- Gr. 4: red
- Gr. 5: pink
- Gr. 6: purple

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

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

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

6.1.2 Asterisked Characteristics

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

6.2 *States of Expression and Corresponding Notes*

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

6.3 *Types of Expression*

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

6.4 *Example Varieties*

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

6.5 *Legend*

(*) Asterisked characteristic – see Chapter 6.1.2

QL: Qualitative characteristic – see Chapter 6.3

QN: Quantitative characteristic – see Chapter 6.3

PQ: Pseudo-qualitative characteristic – see Chapter 6.3

(a) – (c) See Explanations on the Table of Characteristics in Chapter 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8.2

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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1. (*) (+)	Plant: growth habit	Plante: type de croissance	Pflanze: Wuchsform	Planta: porte		
QL	single stem	tige unique	eintriebig	tallo único		1
	bushy	buissonnant	buschig	arbustivo		2
2. (*) (+)	<u>Only varieties with bushy plant growth habit:</u> Plant: attitude of shoots	<u>Variétés à type de croissance buissonnant seulement:</u> Plante: port des rameaux	<u>Nur Sorten mit buschiger Wuchsform:</u> Pflanze: Haltung der Triebe	<u>Sólo variedades con porte arbustivo:</u> Planta: porte de las ramas		
QN	upright	dressé	aufrecht	erecto		1
	semi upright	demi-dressé	halbaufrecht	semierecto		3
	horizontal	horizontal	waagrecht	horizontal		5
	semi drooping	demi-retombant	halbhängend	semicolgante		7
	drooping	retombant	hängend	colgante		9
3. (*)	Stem: length	Tige: longueur	Trieb: Länge	Tallo: longitud		
QN	short	courte	kurz	corta	Lared	3
	medium	moyenne	mittel	media	Bridal Pink	5
	long	longue	lang	larga	Napoleon Red	7
4.	Stem: anthocyanin coloration	Tige: pigmentation anthocyanique	Trieb: Anthocyan-färbung	Tallo: pigmentación antociánica		
QN (a)	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil		3
	medium	moyenne	mittel	media		5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte		9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
5.	<u>Only varieties with bushy plant growth habit:</u> Stem: position of branching	<u>Variétés à type de croissance buissonnant</u> seulement: Tige: localisation de la ramification	<u>Nur Sorten mit buschiger Wuchsform:</u> Trieb: Position der Verzweigung	<u>Sólo variedades con porte arbustivo:</u> Tallo: posición de las ramas		
QL	upper half only	sur la moitié supérieure seulement	nur obere Hälfte	sólo mitad superior		1
	along entire stem	sur toute la longueur	ganze Pflanze	en la totalidad		2
	lower half only	sur la moitié inférieure seulement	nur untere Hälfte	sólo mitad inferior		3
6.	Stem: number of primary branches	Tige: nombre de ramifications primaires	Trieb: Anzahl primärer Seitentriebe	Tallo: número de ramificaciones primarias		
QN	few	rare	gering	bajo	Chihaya Yellow Igo	3
	medium	peu nombreuses	mittel	medio	Yapear	5
	many	nombreuses	groß	alto	Sankisupink	7
7. (*)	Leaf: length	Feuille: longueur	Blatt: Länge	Hoja: longitud		
QN (b)	short	courte	kurz	corta	Lared	3
	medium	moyenne	mittel	media	Bridal Pink	5
	long	longue	lang	larga	Iyonokurenai	7
8. (*)	Leaf: width	Feuille: largeur	Blatt: Breite	Hoja: anchura		
QN (b)	narrow	étroite	schmal	estrecha	Lared	3
	medium	moyenne	mittel	media	Bridal Pink	5
	broad	large	breit	ancha	Iyonokurenai	7
9. (*)	Leaf: variegation	Feuille: panachure	Blatt: Panaschierung	Hoja: variegación		
QL (b)	absent	absente	fehlend	ausente		1
	present	présente	vorhanden	presente	Dancing Flame	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
10. (*)	<u>Only varieties with leaf variegation absent:</u> Leaf: intensity of green color of upper side	<u>Variétés sans panachure de la feuille seulement:</u> Feuille: intensité de la couleur verte de la face supérieure	<u>Nur Sorten mit fehlender Blattpanachierung:</u> Blatt: Intensität der Grünfärbung der Oberseite	<u>Sólo variedades sin variegación de hoja:</u> Hoja: intensidad del color verde del haz		
QN	(b) light	claire	hell	claro		3
	medium	moyenne	mittel	medio	Lared	5
	dark	foncée	dunkel	oscuro	Yapear	7
11.	Leaf: anthocyanin coloration on lower side	Feuille: pigmentation anthocyanique sur la face inférieure	Blatt: Anthocyanfärbung der Unterseite	Hoja: pigmentación antociánica del envés		
QL	(b) absent	absente	fehlend	ausente		1
	present	présente	vorhanden	presente		9
12.	Leaf: pubescence	Feuille: pilosité	Blatt: Behaarung	Hoja: pubescencia		
QN	(b) absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	Yacan	1
	weak	faible	gering	débil	Balumwhite	3
	medium	moyenne	mittel	media	Apple Blossom	5
	strong	forte	stark	fuerte		7
13.	<u>Only varieties with single stem plant growth habit:</u> Inflorescence: length	<u>Variétés à type de croissance avec une tige unique seulement:</u> Inflorescence: longueur	<u>Nur Sorten mit eintriebiger Wuchsform:</u> Blütenstand: Länge	<u>Sólo variedades con porte de planta de tallo único:</u> Inflorescencia: longitud		
QN	short	courte	kurz	corta	Sankisupink	3
	medium	moyenne	mittel	media	Iyonokurenai	5
	long	longue	lang	larga	Napolean Red	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
14. (+)	<u>Only varieties with single stem habit:</u> Inflorescence: density	<u>Variétés à type de croissance avec une tige unique seulement:</u> Inflorescence: densité	<u>Nur Sorten mit eintriebiger Wuchsform:</u> Blütenstand: Dichte	<u>Sólo variedades con porte de tallo único:</u> Inflorescencia: densidad		
QN	sparse	faible	locker	laxa		3
	medium	moyenne	mittel	media	Bridal Pink	5
	dense	forte	dicht	densa	Bridal White	7
15. (*) (+)	Flower: form	Fleur: forme	Blüte: Form	Flor: forma		
QL	(c) zygomorph	zygomorphe	zygomorph	zigomorfa		1
	actinomorph	actinomorphe	aktinomorph	actinomorfa		2
16. (*)	Flower: type	Fleur: type	Blüte: Typ	Flor: tipo		
QL	(c) single	simple	einfach	sencilla		1
	double	double	gefüllt	doble		2
17. (*) (+)	Flower: length	Fleur: longueur	Blüte: Länge	Flor: longitud		
QN	(c) short	courte	kurz	corta	Lared	3
	medium	moyenne	mittel	media	Bridal Pink	5
	long	longue	lang	larga	Napoleon Red	7
18. (*) (+)	Flower: width	Fleur: largeur	Blüte: Breite	Flor: anchura		
QN	(c) narrow	étroite	schmal	estrecha	Lared	3
	medium	moyenne	mittel	media	Bridal Pink	5
	broad	large	breit	ancha		7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
19. (+)	Corolla tube: length	Tube de la corolle: longueur	Kronenröhre: Länge	Tubo de la corola: longitud		
QN	(c) short	court	kurz	corta		3
	medium	moyen	mittel	media		5
	long	long	lang	larga		7
20. (+)	Upper lip: width	Labelle supérieur: largeur	Oberlippe: Breite	Labio superior: anchura		
QN	(c) narrow	étroit	schmal	estrecha	Lared	3
	medium	moyen	mittel	media	Bridal Pink	5
	broad	large	breit	ancha		7
21.	Upper lip: conspicuousness of veins	Labelle supérieur: netteté des nervures	Oberlippe: Ausprägung der Adern	Labio superior: visibilidad de la nervadura		
QN	(c) absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil		3
	medium	moyenne	mittel	media		5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte		9
22. (*)	Upper lip: main color of <u>upper</u> side	Labelle supérieur: couleur principale de la face <u>supérieure</u>	Oberlippe: Hauptfarbe der <u>Oberseite</u>	Labio superior: color principal de la cara <u>superior</u>		
PQ	(c) RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indíquese número de referencia)		

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
23.	Upper lip: main color of <u>lower</u> side	Labelle supérieur: couleur principale de la face <u>inférieure</u>	Oberlippe: Hauptfarbe der <u>Unterseite</u>	Labio superior: color principal de la cara <u>inferior</u>		
PQ	(c) RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indíquese número de referencia)		
24.	Lower lip: attitude of middle cusp lobe (relative to corolla tube)	Labelle inférieur: port du lobe de la pointe médiane (par rapport au tube de la corolle)	Unterlippe: Haltung des mittleren Zipfellappens (im Verhältnis zur Kronenröhre)	Labio inferior: porte del lóbulo central de la cúspide (en relación con el tubo de la corola)		
(+)						
QN	(c) erect	dressé	aufrecht	erecto	Diana Pink	1
	semi erect	demi-dressé	halbaufrecht	semierecto		3
	horizontal	horizontal	waagerecht	horizontal	Sulte Redyel	5
	semi drooping	demi-retombant	halbüberhängend	semicolgante		7
	drooping	retombant	überhängend	colgante	Diana Dark Red	9
25.	Lower lip: width of middle cusp lobe	Labelle inférieur: largeur du lobe de la pointe médiane	Unterlippe: Breite des mittleren Zipfellappens	Labio inferior: anchura del lóbulo central de la cúspide		
(+)						
QN	(c) narrow	étroit	schmal	estrecha	Lared	3
	medium	moyen	mittel	media	Chihaya Yellow lgo	5
	broad	large	breit	ancha	Bridal Pink	7
26.	Lower lip: main color of <u>upper</u> side of cusp	Labelle inférieur: couleur principale de la face <u>supérieure</u> de la pointe	Unterlippe: Hauptfarbe der <u>Oberseite</u> des Zipfels	Labio inferior: color principal de la cara <u>superior</u> de la cúspide		
(*)						
(+)						
PQ	(c) RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indíquese número de referencia)		

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
27.	Lower lip: main color of <u>lower</u> side of cusp	Labelle inférieur: couleur principale de la face <u>inférieure</u> de la pointe	Unterlippe: Hauptfarbe der <u>Unterseite</u> des Zipfels	Labio inferior: color principal de la cara <u>inferior</u> de la cúspide		
PQ	(c) RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indíquese número de referencia)		
28. (*) (+)	Lower lip: main color of upper side of base	Labelle inférieur: couleur principale de la face <u>supérieure</u> de la base	Unterlippe Hauptfarbe der <u>Oberseite</u> der Basis	Labio inferior: color principal de la cara superior de la base		
PQ	(c) RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indíquese número de referencia)		
29. (*) (+)	Lower lip: spot	Labelle inférieur: tache	Unterlippe: Fleck	Labio inferior: mancha		
QL	(c) absent	absente	fehlend	ausente		1
	present	présente	vorhanden	presente		9
30.	Lower lip: size of spot	Labelle inférieur: taille de la tache	Unterlippe: Größe des Flecks	Labio inferior: tamaño de la mancha		
QN	(c) very small	très petite	sehr klein	muy pequeña		1
	small	petite	klein	pequeña		3
	medium	moyenne	mittel	media		5
	large	grande	groß	grande		7
	very large	très grande	sehr groß	muy grande		9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
31.	Lower lip: color of spot	Labelle inférieur: couleur de la tache	Unterlippe: Farbe des Flecks	Labio inferior: color de la mancha		
PQ	(c) RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indíquese número de referencia)		
32.	Corolla tube: color of outer side	Tube de la corolle: couleur de la face externe	Kronenröhre: Farbe der Außenseite	Tubo de la corola: color de la cara externa		
PQ	(c) RHS Colour Chart (indicate reference number)	Code de couleurs RHS (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de Colores RHS (indíquese número de referencia)		
33.	<u>Only seed-propagated varieties:</u> Time of beginning of flowering	<u>Variétés reproduites par voie sexuée seulement:</u> époque de début de la floraison	<u>Nur samen-vermehrte Sorten:</u> Zeitpunkt des Blühbeginns	<u>Sólo variedades de reproducción sexual:</u> Período de comienzo de la floración		
(+)						
QN	(c) very early	très précoce	sehr früh	muy precoz		1
	early	précoce	früh	precoz		3
	medium	intermédiaire	mittel	media		5
	late	tardive	spät	tardía		7
	very late	très tardive	sehr spät	muy tardía		9

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

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

- (a) Observations on the stem to be made on the middle part of main stem
- (b) Observations on the leaf to be made on leaves on the middle part of main stem
- (c) Observations on the flower to be made on the second flower to open

8.2 *Explanations for individual characteristics*

Ad. 1: Plant: growth habit



1
single stem



2
bushy

Ad. 2: Plant: attitude of shoots



1
upright



3
semi upright



5
horizontal

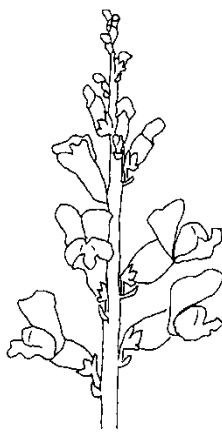


7
semi drooping

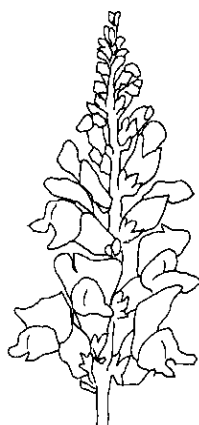


9
drooping

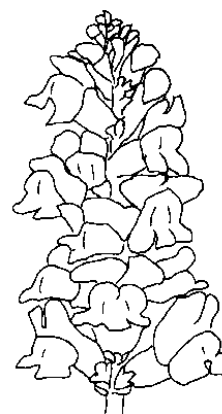
Ad. 14: Inflorescence: density



3
sparse

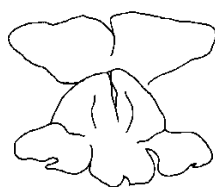


5
medium



7
dense

Ad. 15: Flower: form



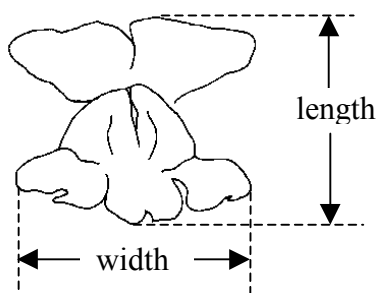
1
zygomorph



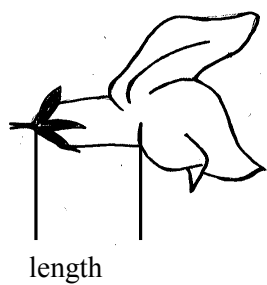
2
actinomorph

Ad. 17: Flower: length

Ad. 18: Flower: width



Ad. 19: Corolla tube: length

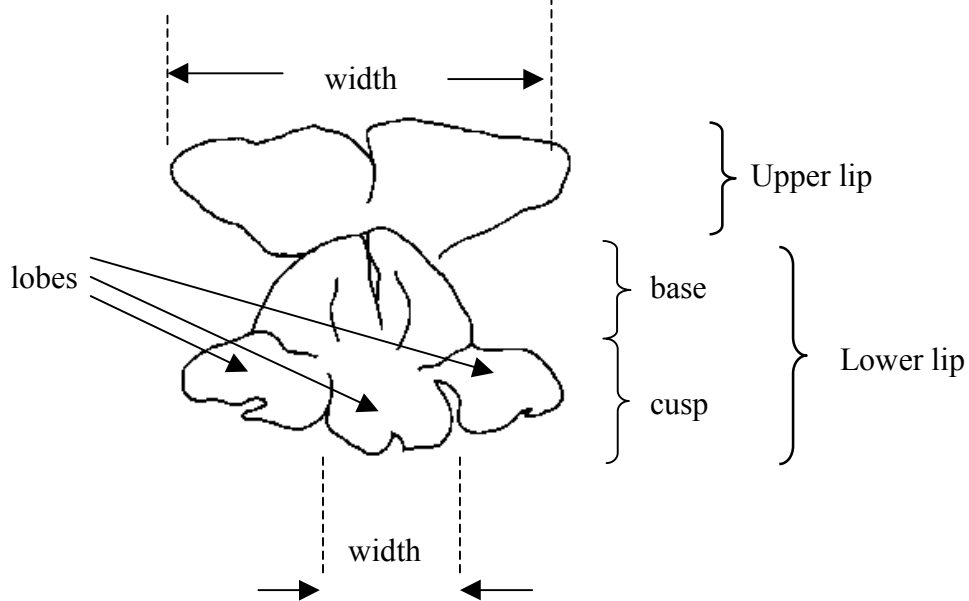


Ad. 20: Upper lip: width

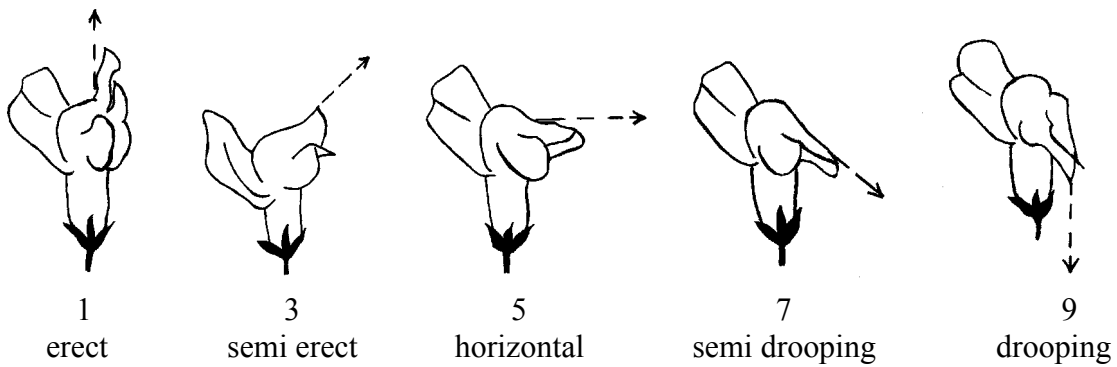
Ad. 25: Lower lip: width of middle cusp lobe

Ad. 26: Lower lip: main color of upper side of cusp

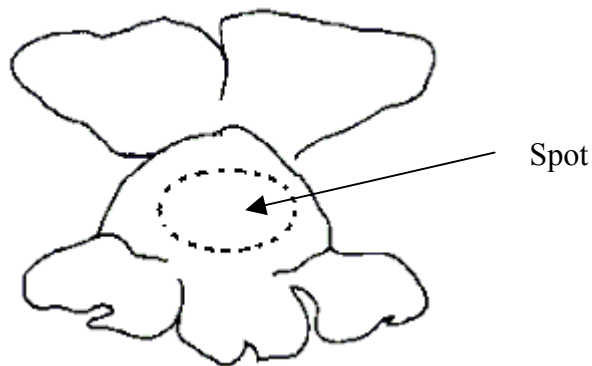
Ad. 28: Lower lip: main color of upper side of base



Ad. 24: Lower lip: attitude of middle cusp lobe (relative to corolla tube)



Ad. 29: Lower lip: spot



Ad. 33: Only seed-propagated varieties: Time of beginning of flowering

Time of beginning of flowering is when 50% of the plants have one fully open flower.

9. Literature

Encyclopedia of Horticulture, Vol. 1. pp. 193-195, Seibun-Do Shinkosha, Tokyo, Japan
(Japanese)

The Grand Dictionary of Horticulture, Vol. 1. pp. 119-122, Shougakukan, Tokyo, Japan
(Japanese)

Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1 Botanical name	Antirrhinum majus L.	
1.2 Common name	Antirrhinum, Common snapdragon	
2. Applicant		
Name		
Address		
Telephone No.		
Fax No.		
E-mail address		
Breeder (if different from applicant)		
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)		
Breeder's reference		

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

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
#4. Information on the breeding scheme and propagation of the variety 4.1 Breeding scheme Variety resulting from: 4.1.1 Crossing (a) controlled cross [] (please state parent varieties) (b) partially known cross [] (please state known parent variety(ies)) (c) unknown cross [] 4.1.2 Mutation [] (please state parent variety) 4.1.3 Discovery and development [] (please state where and when discovered and how developed) 4.1.4 Other [] (please provide details) 4.2 Method of propagating the variety 4.2.1 Vegetative propagation (a) cuttings [] (b) <i>in vitro</i> propagation [] (c) other (state method) [] 4.2.2 Seed (a) self-pollinated [] (b) hybrid [] (c) other (please provide details) [] 4.2.3 Other [] (please provide details)		

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

Characteristics	Example Varieties	Note
5.1 Plant: growth habit		
(1)		
single stem		1[]
bushy		2[]
5.2 <u>Only varieties with bushy plant growth habit</u>: Plant: attitude of shoots		
(2)		
upright		1[]
semi upright		3[]
horizontal		5[]
semi drooping		7[]
drooping		9[]
5.3 Flower: form		
(15)		
zygomorph		1[]
actinomorph		2[]
5.4(i) Upper lip: main color of <u>upper</u> side		
(22)		
RHS Colour Chart (indicate reference number)		
.....		
5.4(ii) Upper lip: main color of <u>upper</u> side		
(22)		
white		1[]
yellow		2[]
orange		3[]
red		4[]
pink		5[]
purple		6[]
other color (indicate)		7[]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
5.5(i) Lower lip: main color of <u>upper</u> side of cusp (26) RHS Colour Chart (indicate reference number)		
5.5(ii) Lower lip: main color of <u>upper</u> side of cusp (26)		
white		1[]
yellow		2[]
orange		3[]
red		4[]
pink		5[]
purple		6[]
other color (indicate)		7[]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Plant: attitude of shoots</i>	<i>semi upright</i>	<i>horizontal</i>

Comments:

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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#7. Additional information which may help in the examination of the variety

7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?

Yes [] No []

(If yes, please provide details)

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

Yes [] No []

(If yes, please provide details)

7.3 Other information

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

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [] No []

(b) Has such authorization been obtained?

Yes [] No []

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

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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9. Information on plant material to be examined or submitted for examination.

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

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

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

Please provide details of where you have indicated “yes”.

.....

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

Applicant's name

Signature

Date

[End of document]