



PROTOCOL FOR TESTS ON DISTINCTNESS, UNIFORMITY AND STABILITY

***Lagerstroemia* L.**

LAGERSTROEMIA

UPOV Code: LAGER

Adopted on 30/12/2022

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CPVO-TP/095/1

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1. SUBJECT OF THE PROTOCOL AND REPORTING

1.1 Scope of the technical protocol

This Technical Protocol applies to all varieties of *Lagerstroemia* L.

The protocol describes the technical procedures to be followed in order to meet the requirements of Council Regulation 2100/94 on Community Plant Variety Rights. The technical procedures have been agreed by the Administrative Council and are based on documents agreed by the International Union for the Protection of New Varieties of Plants (UPOV), such as the General Introduction to DUS (UPOV Document TG/1/3 http://www.upov.int/export/sites/upov/resource/en/tg_1_3.pdf), its associated TGP documents (<http://www.upov.int/tgp/en/>) and the relevant UPOV Test Guideline TG/95/4 dated 26/10/2021 (<https://www.upov.int/edocs/tgdocs/en/tg095.pdf>) for the conduct of tests for Distinctness, Uniformity and Stability.

1.2 Entry into Force

The present protocol enters into force on **30.12.2022**. Any ongoing DUS examination of candidate varieties started before the aforesaid date will not be affected by the approval of the Technical Protocol. Technical examinations of candidate varieties are carried out according to the TP in force when the DUS test starts. The starting date of a DUS examination is considered to be the due date for submitting of plant material for the first test period.

In cases where the Office requests to take-over a DUS report for which the technical examination has either been finalized or which is in the process to be carried out at the moment of this request, such report can only be accepted if the technical examination has been carried out according to the CPVO TP which was in force at the moment when the technical examination started.

1.3 Reporting between Examination Office and CPVO and Liaison with Applicant

1.3.1 Reporting between Examination Office and CPVO

The Examination Office shall deliver to the CPVO a preliminary report ("the preliminary report") no later than two weeks after the date of the request for technical examination by the CPVO.

The Examination Office shall also deliver to the CPVO a report relating to each growing period ("the interim report") and, when the Examination Office considers the results of the technical examination to be adequate to evaluate the variety or the CPVO so requests, a report relating to the examination ("the final report").

The final report shall state the opinion of the Examination Office on the distinctness, uniformity and stability of the variety. Where it considers those criteria to be satisfied, or where the CPVO so requests, a description of the variety shall be added to the report.

If a report is negative the Examination Office shall set out the detailed reasons for its findings.

The interim and the final reports shall be delivered to the CPVO as soon as possible and no later than on the deadlines as laid down in the designation agreement.

1.3.2 Informing on problems in the DUS test

If problems arise during the course of the test the CPVO should be informed immediately so that the information can be passed on to the applicant. Subject to prior pertinent agreement, on matters of particular urgency, the applicant may be directly informed at the same time as the CPVO particularly if a visit to the trial is advisable.

1.3.3 Sample keeping in case of problems

If the technical examination has resulted in a negative report, the CPVO shall inform the Examination Office as soon as possible in case that a representative sample of any relevant testing material shall be kept.

2. MATERIAL REQUIRED

2.1 Plant material requirements

Information with respect to the agreed closing dates and submission requirements of plant material for the technical examination of varieties can be found on <https://public.plantvarieties.eu/publication> in the special issue S2/S3 of the Official Gazette of the Office. General requirements on submission of samples are also to be found following the same link.

2.2 Informing the applicant of plant material requirements

The CPVO informs the applicant that

- he is responsible for ensuring compliance with any customs and plant health requirements.
- the plant material supplied should be visibly healthy, not lacking in vigour, nor affected by any important pest or disease.
- 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.

2.3 Informing about problems on the submission of material

The Examination Office shall report to the CPVO immediately in cases where the test material of the candidate variety has not arrived in time or in cases where the material submitted does not fulfil the conditions laid down in the request for material issued by the CPVO.

In cases where the examination office encounters difficulties to obtain plant material of reference varieties the CPVO should be informed.

3. METHOD OF EXAMINATION

3.1 Number of growing cycles

3.1.1 The minimum duration of tests should normally be two independent growing cycles.

3.1.2 The two independent growing cycles may be observed from a single planting, examined in two separate growing cycles.

3.1.3 The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test.

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" http://www.upov.int/edocs/tgpdocs/en/tgp_9.pdf.

3.3 Conditions for Conducting the Examination

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.

Because daylight varies, colour determinations made against a colour 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. The colour chart and version used should be specified in the variety description.

3.4 Test design

3.4.1 Each test should be designed to result in a total of at least 6 plants.

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

3.5 Special tests for additional characteristics

In accordance with Article 23 of Implementing Rules N° 874/2009 an applicant may claim either in the Technical Questionnaire or during the test that a candidate has a characteristic which would be helpful in establishing distinctness. If such a claim is made and is supported by reliable technical data, a special test may be undertaken providing that a technically acceptable test procedure can be devised.

Special tests will be undertaken, with the agreement of the President of CPVO, where distinctness is unlikely to be shown using the characteristics listed in the protocol.

3.6 Constitution and maintenance of a variety collection

The process for the constitution and the maintenance of a variety collection can be summarized as follows:

Step 1: Making an inventory of the varieties of common knowledge

Step 2: Establishing a collection ("variety collection") of varieties of common knowledge which are relevant for the examination of distinctness of candidate varieties

Step 3: Selecting the varieties from the variety collection which need to be included in the growing trial or other tests for the examination of distinctness of a particular candidate variety.

3.6.1 Forms of variety collection

The variety collection shall comprise variety descriptions and may comprise living plant material. The variety description shall be produced by the EO unless special cooperation exists between EOs and the CPVO. The variety collection shall comprise images (e.g. photographs, illustrations or digitalized images) of representative parts of the plants of each variety, produced by the respective EO. The descriptive and pictorial information produced by the EO shall be held and maintained in a form of a database.

3.6.2 Living Plant Material

The EO shall obtain living plant material of reference varieties as and when those varieties need to be included in growing trials or other tests.

3.6.3 Making an inventory of varieties of common knowledge for inclusion in the variety collection

The inventory shall include varieties protected under National and Community PBR, varieties in trade or in commercial registers.

In addition to the above, the inventory shall be extended to the appropriate to

- any commercial document in which varieties are marketed as propagating or harvested material, especially when there is no official registration system;
- any list including varieties which are publicly available within plant collections (varieties included in genetic resource collections, collection of old varieties, etc.);
- information provided by relevant plant experts;
- relevant example varieties referred to in the technical protocols

3.6.5 Maintenance and renewal/update of a living variety collection

The EO shall maintain the variety collection under appropriate growing conditions (e.g. greenhouse, orchard, in vitro), where it shall be ensured that the plants are adequately irrigated, fertilised, pruned and protected from harmful pests and diseases. For the renewal of existing living material the identity of replacement living plant material shall be verified by conducting side-by-side plot comparisons between the material in the collection and the new material or by checking the identity of the new material against the variety description.

4. **ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY**

The prescribed procedure is to assess distinctness, uniformity and stability in a growing trial.

4.1 **Distinctness**

4.1.1 General recommendations

It is of particular importance for users of this Technical Protocol to consult the UPOV-General Introduction to DUS (link in chapter 1 of this document) and TGP 9 'Examining Distinctness' (http://www.upov.int/edocs/tgpdocs/en/tgp_9.pdf) prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in this Technical Protocol.

Further guidance is provided in documents TGP/9 "Examining Distinctness" and TGP/8 "Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability".

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 Technical Protocols are familiar with the recommendations contained in the UPOV-General Introduction to DUS prior to making decisions regarding distinctness.

4.1.4 Number of plants/parts of plants to be examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 5 plants or parts taken from each of 5 plants and any other observations made on all plants in the test, disregarding any off-type plants.

In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 5

4.1.5 Method of observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the third column of the Table of Characteristics (see document TGP/9 "Examining Distinctness", Section 4 "Observation of characteristics"):

MG: single measurement of a group of plants or parts of plants
MS: measurement of a number of individual plants or parts of plants
VG: visual assessment by a single observation of a group of plants or parts of plants
VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

"Visual" observation (V) is an observation made on the basis of the expert's judgment. For the purposes of this document, "visual" observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. colour charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, "G" provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

4.2 **Uniformity**

4.2.1 It is of particular importance for users of this Technical Protocol to consult the UPOV-General Introduction to DUS (link in chapter 1 of this document) and TGP 10 'Examining Uniformity' (http://www.upov.int/edocs/tgpdocs/en/tgp_10.pdf) prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in this Technical Protocol:

4.2.2 This Technical Protocol has been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation the recommendations in the UPOV-General Introduction to DUS and document TGP/13 "Guidance for new types and species", Section 4.5 "Testing Uniformity" should be followed.

For the assessment of uniformity of vegetatively propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 6 plants, 1 off-type is allowed.

4.3 **Stability**

4.3.1 It is of particular importance for users of this Technical Protocol to consult the UPOV-General Introduction to DUS (link in chapter 1 of this document) and TGP 11 'Examining Stability' (http://www.upov.int/edocs/tgpdocs/en/tgp_11.pdf)

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 further examined by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.

5. GROUPING OF VARIETIES AND ORGANISATION 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 organise the growing trial so that similar varieties are grouped together.
- 5.3** The following have been agreed as useful grouping characteristics:
- a) Plant: height (characteristic 1)
 - b) Leaf blade: distribution of anthocyanin coloration (characteristic 7)
 - c) Leaf blade: intensity of anthocyanin coloration (characteristic 8)
 - d) Petal: main colour of inner side (characteristic 24) with the following groups:
 - Gr. 1: white
 - Gr. 2: light pink
 - Gr. 3: dark pink
 - Gr. 4: red
 - Gr. 5: purple
 - e) Time of beginning of flowering (characteristic 37)
- 5.4** If other characteristics than those from the Technical Protocol are used for the selection of varieties to be included into the growing trial, the EO shall inform the CPVO and seek the prior consent of the CPVO before using these characteristics.
- 5.5** Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the UPOV-General Introduction to DUS and document TGP/9 "Examining Distinctness".

6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS

6.1 Characteristics to be used

The characteristics to be used in DUS tests and preparation of descriptions shall be those referred to in the table of characteristics. All the characteristics shall be used, providing that observation of a characteristic is not rendered impossible by the expression of any other characteristic, or the expression of a characteristic is prevented by the environmental conditions under which the test is conducted or by specific legislation on plant health. In the latter case, the CPVO should be informed.

The Administrative Council empowers the President, in accordance with Article 23 of Commission Regulation N°874/2009, to insert additional characteristics and their expressions in respect of a variety.

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. All relevant states of expression are presented in the characteristic.

Further explanation of the presentation of states of expression and notes is provided in UPOV document TGP/7 "Development of Test Guidelines".

6.3 Example Varieties

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

6.4 Legend

For column 'CPVO N°':

G	Grouping characteristic	-see Chapter 5
QL	Qualitative characteristic	
QN	Quantitative characteristic	
PQ	Pseudo-qualitative characteristic	
(+)	Explanations for individual characteristics	-see Chapter 8.2

For column 'UPOV N°':

The numbering of the characteristics is provided as a reference to the UPOV guideline.

(*)	UPOV Asterisked characteristic	- Characteristics that are important for the international harmonization of variety descriptions.
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For column 'Stage, method':

MG, MS, VG, VS		-see Chapter 4.1.5
(a)-(g)	Explanations covering several Characteristics	-see Chapter 8.1

7. TABLE OF CHARACTERISTICS

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note	
1. (*) QN	1.	MS/VG (a)	Plant: height			
			short	DABLAGE01	1	
			short to medium		2	
			medium	Desal 173	3	
			medium to tall		4	
G			tall	Watermelon	5	
2. (*) PQ	2. (+)	VG (a)	Plant: growth habit			
			upright	Lucas Red, Whit II	1	
			semi-upright	Desber 102	2	
			spreading	Houston, Petit' Canaille Blanc	3	
3. (*) QN	3. (+)	VG	Stem: anthocyanin coloration			
			very weak		1	
			very weak to weak		2	
			weak	Deskim, Grand Cru	3	
			weak to medium		4	
			medium	Coral Filli, INDYFUS, MILAPERL	5	
			medium to strong		6	
			strong	Lucas Red	7	
			strong to very strong		8	
very strong		9				

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
4. (*) QN	4.	MS/VG (b)	Leaf blade: length		
			very short		1
			very short to short		2
			short	Coral Filli	3
			short to medium		4
			medium	Desper	5
			medium to long		6
			long	Burgundy Cotton	7
			long to very long		8
		very long		9	
5. (*) QN	5.	MS/VG (b)	Leaf blade: width		
			very narrow		1
			very narrow to narrow		2
			narrow	Petit' Canaille Blanc	3
			narrow to medium		4
			medium	INDYBRA	5
			medium to broad		6
			broad	Hopi	7
			broad to very broad		8
		very broad		9	
6. (*) PQ	6.	VG (b)	Leaf blade: shape		
			only elliptic	Whit IV	1
			mainly elliptic	Royal Velvet, Violet Filli	2
			mainly obovate	INDYCAM, Red Filli	3
			only obovate	CAP11	4

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
7. (*)	7. (+)	VG	Leaf blade: distribution of anthocyanin coloration		
PQ		(b)	absent	Petit' Canaille Blanc	1
			on margin	Main Little Chief, Whit IV	2
			irregular	Burgundy Cotton	3
G			throughout	Lucas Red	4
8. (*)	8.	VG	Leaf blade: intensity of anthocyanin coloration		
QN		(b)	absent or very weak		1
			very weak to weak		2
			weak	Coral Filli	3
			weak to medium		4
			medium	Royal Velvet	5
			medium to strong		6
			strong	Whit II	7
			strong to very strong		8
G			very strong		9
9. (*)	9.	VG	Leaf blade: intensity of green colour		
QN		(b)	very light	CAP18	1
			very light to light		2
			light	Desyan, Nana Lavender	3
			light to medium		4
			medium	Tonto	5
			medium to dark		6
			dark	Desemi 103	7
			dark to very dark		8
			very dark		9

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
10. (*)	10. (+)	VG	Leaf blade: undulation of margin		
		(b)	absent or very weak	Deschin, Petit' Canaille Blanc	1
			weak	INDYFUS	2
			medium	Superviolacea	3
			strong	Descha	4
			very strong		5
11. (*)	11. (+)	VG	Leaf blade: glossiness of upper side		
		(b)	absent or very weak	Desper	1
			weak	Petit' Canaille Blanc	2
			medium	INDYVIO	3
			strong	INDYBRA	4
			very strong		5
12. (*)	12. (+)	VG	Leaf blade: variegation		
		(b)	absent	Whit II	1
			white and grey green	Shirohakekomifu	2
			yellow	Kibotafu	3
13. (*)	13. (+)	MG/VG	Flower bud: length		
		(c)	very short		1
			very short to short		2
			short	Coral Filli	3
			short to medium		4
			medium	Deschin	5
			medium to long		6
			long	Desmou 083	7
			long to very long		8
very long			9		

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
14. QN	14.	MG/VG (c)	Flower bud: width		
			very narrow		1
			very narrow to narrow		2
			narrow	Petite Red	3
			narrow to medium		4
			medium	Dessoï 062, Petit' Canaille Rouge	5
			medium to broad		6
			broad	Desemi 103, Watermelon	7
			broad to very broad		8
			very broad		9
15. (*) PQ	15. (+)	VG (c)	Flower bud: shape		
			circular	Desemi 103, Despan 001	1
			broad oblong	Dessoï 062, Petite Orchid	2
			narrow oblong	Red Emperor	3
			narrow obovate	Desber 102, Seminole	4
			broad obovate	Potomac	5
16. QN	16. (+)	VG (c)	Flower bud: prominence of ridges		
			absent or weak	Deskim	1
			weak to medium		2
			medium	Desyan	3
			medium to strong		4
			strong	Majestic Orchid, Petit' Canaille Blanc	5

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note		
17. (*)	17. (+)	VG	Flower bud: area of anthocyanin coloration				
			QN	(c)	absent or small	Near East	1
					small to medium		2
					medium	INDYVIO	3
					medium to large		4
					large	Lucas Red	5
18. (*)	18. (+)	VG	Flower bud: glossiness				
			QN	(c)	weak	La Valette	1
					medium	Margaux	2
					strong	INDYBRA	3
19. (*)	19. (+)	VG	Plant: number of thyrses				
			QN	(d)	very few		1
					very few to few		2
					few	Lucas Red, Nivea	3
					few to medium		4
					medium	INDYFUS, Orlando	5
					medium to many		6
					many	Desal 173, Petite Orchid	7
					many to very many		8
very many		9					
20. (*)	20. (+)	VG	Thyrse: shape				
			PQ	(d)	globose	Nivea	1
					conic	Desmon	2
					sagittate	Royal Velvet	3
					irregular	Desjac 124	4

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
21. (* QN	21. (+)	VG (d)	Thyrse: length		
			very short		1
			very short to short		2
			short	Provence, Tonto	3
			short to medium		4
			medium	Desper	5
			medium to long		6
			long	Seminole	7
			long to very long		8
		very long		9	
22. (* QN	22.	VG (d)	Thyrse: number of flowers		
			very few		1
			very few to few		2
			few	Despan 001, Pink Blush	3
			few to medium		4
			medium	Deskim	5
			medium to many		6
			many	Deschin, Desjac 124	7
			many to very many		8
		very many		9	

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
23. (*) QN	23.	VG (e)	Flower: diameter		
			very small		1
			very small to small		2
			small	Petit' Canaille Rouge, Superviolacea	3
			small to medium		4
			medium	Desal 173, Seminole	5
			medium to large		6
			large	Deskim, Desmou 083	7
			large to very large		8
very large		9			
24. (*) PQG	24.	VG (e), (f)	Petal: main colour of inner side		
			RHS Colour Chart (indicate reference number)		
25. (*) PQ	25.	VG (e), (f)	Petal: secondary colour of inner side		
			RHS Colour Chart (indicate reference number)		
26. (*) QN	26. (+)	VG (e)	Petal: undulation		
			weak	Desber 102, Orlando	1
			medium	Hopi, Houston	2
			strong	MILAVIO, Piilag VII	3
27. QN	27. (+)	VG (e)	Petal claw: length		
			short	Berlingot Menthe	1
			medium	Catawba, Descha	2
			long	Potomac	3

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
28.	28.	VG	Petal claw: colour		
PQ		(e), (f)	white	Enduring Summer White	1
			light pink	Near East	2
			medium pink	Catawba, Deskim, MILAPERL	3
			dark pink	La Valette, Lucas Red	4
			red	Watermelon	5
29. (*)	29. (+)	VG	Stamen: conspicuousness		
QL		(e)	inconspicuous	Red Emperor, Rocamadour	1
			conspicuous	Desber 102, Grand Cru	2
30.	30.	VG	Plant: number of fruits		
QN		(g)	very few		1
			very few to few		2
			few	Petite Red, Rocamadour	3
			few to medium		4
			medium	Orlando, Potomac	5
			medium to many		6
			many	Violet Filli	7
			many to very many		8
			very many		9
31. (*)	31.	VG	Fruit: length		
QN		(g)	short	Coral Filli	1
			medium	INDYCAM	2
			long	MILAVIO	3
32. (*)	32.	VG	Fruit: diameter		
QN		(g)	small	Margaux	1
			medium	Royal Velvet	2
			large	INDYFUS	3

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
33. (* QN	33. (+)	VG (g)	Fruit: ratio length/diameter		
			low	INDYFUS	1
			medium	INDYCAM	2
			high	MILAVIO	3
34. (* QN	34. (+)	VG (g)	Fruit: intensity of green colour		
			very light	CAP18	1
			very light to light		2
			light	Catawba, Powhatan	3
			light to medium		4
			medium	Desyan	5
			medium to dark		6
			dark	Desand 081	7
			dark to very dark		8
			very dark		9
35. QN	35.	VG (g)	Fruit: anthocyanin coloration		
			absent or very weak	Potomac	1
			very weak to weak		2
			weak	Milarosso	3
			weak to medium		4
			medium	Pure white	5
			medium to strong		6
			strong	CAP18	7
			strong to very strong		8
very strong	Red Hot	9			

CPVO N°	UPOV N°	Stage, Method	Characteristics	Examples	Note
36. (* QN	36. (+)	VG	Time of vegetative bud burst		
			very early	MILAVIO	1
			very early to early		2
			early	Petite Red	3
			early to medium		4
			medium	Despan 001, Dessoï 062	5
			medium to late		6
			late	Berlingot Menthe, Deskim	7
			late to very late		8
			very late		9
37. (* QN	37. (+)	MG/VG	Time of beginning of flowering		
			very early	MILAROSA	1
			very early to early		2
			early	Desper, Near East	3
			early to medium		4
			medium	Tonto	5
			medium to late		6
			late	Whit IV	7
			late to very late		8
G			very late	Crimson red	9

8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS

8.1 Explanations covering several characteristics

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

- a) Observations should be made just before flowering.
- b) Observations should be made on fully expanded leaves from the middle third of the stem.
- c) Observations should be made on the broadest flower bud from the top of the primary thyrse, just before opening of the flower bud.
- d) Observations should be made on fully developed thyrses when all flowers are open.
- e) Observations should be made on just opened flowers.
- f) The main colour is the colour with the largest surface area. The secondary colour is the colour with the second largest surface area. The tertiary colour is the colour with the third largest surface area. In cases where the areas of the main and secondary colour are too similar to reliably decide which colour has the largest area, the darker colour is considered to be the main colour. In cases where the areas of the secondary colour and tertiary colour are too similar to reliably decide which colour has the largest area, the darker colour is considered to be the secondary colour.
- g) Observations should be made on well-developed ripe fruits, from the top of the primary thyrse.

8.2 Explanations for individual characteristics

Ad 2: Plant: growth habit



1
upright



2
semi-upright

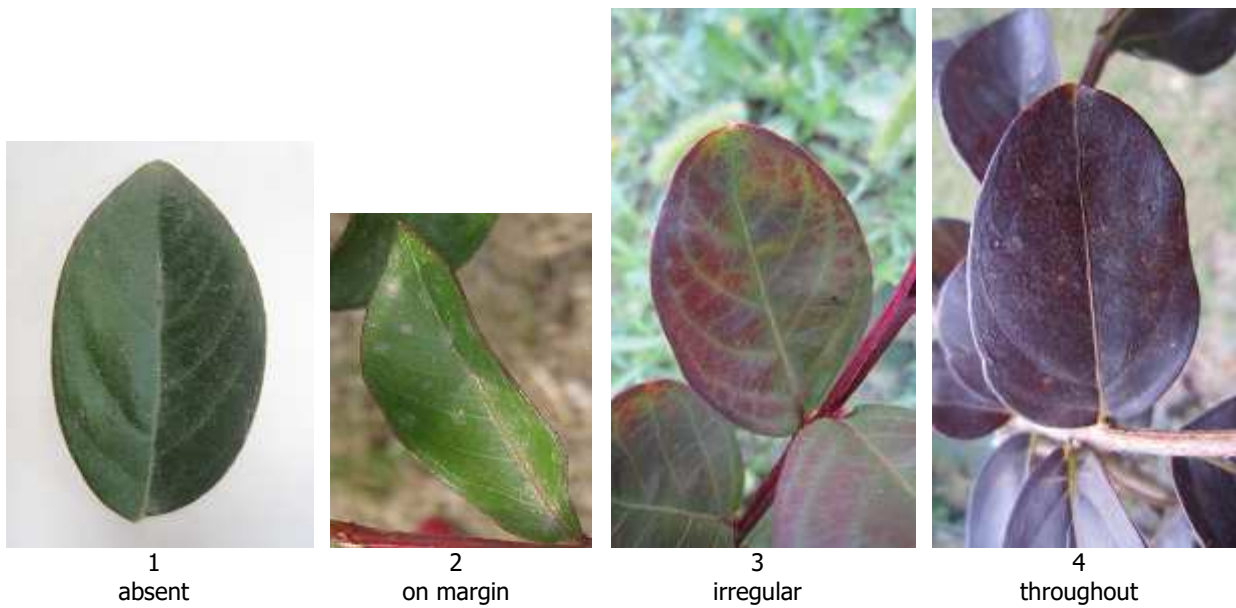


3
spreading

Ad 3: Stem: anthocyanin coloration

Observations should be made on the middle third of the stem, just before flowering.

Ad 7: Leaf blade: distribution of anthocyanin coloration



Ad 10: Leaf blade: undulation of margin



Ad 12: Leaf blade: variegation

Observations should be made excluding anthocyanin coloration.

Ad 15: Flower bud: shape



Ad 16: Flower bud: prominence of ridges



1
absent or weak



3
medium



5
strong

Ad 17: Flower bud: area of anthocyanin coloration



1
absent or small

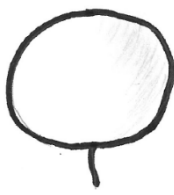


3
medium



5
large

Ad 20: Thyrses: shape



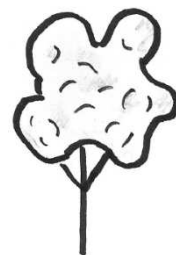
1
globose



2
conic



3
sagittate



4
irregular

Ad 21: Thyse: length



Ad 26: Petal: undulation



1
weak

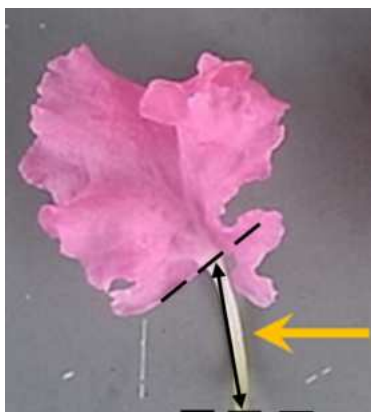


2
medium



3
strong

Ad 27: Petal claw: length



Ad 29: Stamen: conspicuousness



1
inconspicuous



2
conspicuous

Ad 33: Fruit: ratio length/diameter



1
low



3
high

Ad 34: Fruit: intensity of green colour

Not possible to be observed when fully covered by anthocyanin over colour.

Ad 36: Time of vegetative bud burst

The time of vegetative bud burst is reached when the first leaves appear on all plants.

Ad 37: Time of beginning of flowering

The time of beginning of flowering is reached when all plants have some open flowers on approximately 10% of thyrses.

9. LITERATURE

Byers, MD., 1997: Crape Myrtle. Owl Bay Pub. Cornell University, Ithaca, New York State 14850, US, 180pp.

Edwards, AD., 1994: Freezing Tolerance of Lagerstroemia Indica X Fauriei Cultivars in USDA Zones 7 and 8. Mississippi State University. Department of Plant and Soil Sciences. US, 66 pp.

10. TECHNICAL QUESTIONNAIRE

The Technical Questionnaire is available on the [CPVO website](#) under the following reference:
CPVO-TQ/095/1 – *Lagerstroemia* L. – lagerstroemia

Link to e-TQ:

<https://online.plantvarieties.eu/backOfficeFormQuestions?viewFormId=14093&viewFormType=TQ&viewFormLang=EN&speciesIds=LAG01&status=1,2&order=formName>