European Union
Community Plant Variety Office

PROTOCOL FOR DISTINCTNESS, UNIFORMITY AND STABILITY TESTS

Prunus cerasus L. and *Prunus* x *gondouinii* (Poit. & Turpin) Rehder

SOUR CHERRY and DUKE CHERRY

UPOV Species Code: PRUNU_CSS, PRUNU_GON

Adopted on 15/11/2006

I SUBJECT OF THE PROTOCOL

The protocol describes the technical procedures to be followed in order to meet the Council Regulation 2100/94 on Community Plant Variety Rights. The technical procedures have been agreed by the Administrative Council and are based on general UPOV Document TG/1/3 and UPOV Guideline TG/230/1 dated 05/04/2006 for the conduct of tests for Distinctness, Uniformity and Stability. This protocol applies for all varieties of ***Prunus cerasus*** **L.** and ***Prunus*** **x** ***gondouinii*** **(Poit. & Turpin) Rehder**.

II SUBMISSION OF SEED AND OTHER PLANT MATERIAL

1. The Community Plant Variety Office (CPVO) is responsible for informing the applicant of

   - the closing date for the receipt of plant material;
   - the minimum amount and quality of plant material required;
   - the examination office to which material is to be sent.

   A sub-sample of the material submitted for test will be held in the variety collection as the definitive sample of the candidate variety.

   The applicant is responsible for ensuring compliance with any customs and plant health requirements.

2. Final dates for receipt of documentation and material by the Examination Office

   The final dates for receipt of requests, technical questionnaires and the final date or submission period for plant material will be decided by the CPVO and each Examination Office chosen.

   The Examination Office is responsible for immediately acknowledging the receipt of requests for testing, and technical questionnaires. Immediately after the closing date for the receipt of plant material the Examination Office should inform the CPVO whether acceptable plant material has been received or not. However if unsatisfactory plant material is submitted the CPVO should be informed as soon as possible.

3. Plant material requirements

   The current quality and quantity requirements as well as the final dates for submission of the plant material are available on the CPVO website (www.cpvo.europa.eu) and are published in the CPVO gazette ‘S2’.

Quality of plants: Should not be less than the standards laid down in Council 2000/29/EC and its amendments concerning quarantine organisms, and Council Directive 92/34/EEC and Commission Directive 93/48/EEC and their amendments concerning organisms impairing quality, at the date of adoption of this protocol; please refer to "Eur-Lex" for the full text and in case of any subsequent amendments to the four aforesaid Directives .

Quarantine organism (Directive 2000/29/EC). The plant material must be free from:

Insects, mites and nematodes at all stages of their development

- *Acleris* spp. (non-European)
- *Amauromyza maculosa*
- *Anomala orientalis*
- *Anoplophora chinensis*
- *Anoplophora malasiaca*
- *Arrhenodes minutus*
- *Bemisia tabaci* (non-European populations)
- *Carposina niponensis*
- *Choristoneura* spp. (non-European)
- *Cicadellidae* (non-European)
- *Conotrachelus nenuphar*
- *Enarmonia prunivora*
- *Enarmonia packardi*
- *Globodera pallida*
- *Globodera rostochiensis*
- *Grapholita inopinata*
- *Heliothis armigera*
- *Heliothis zea*
- *Liriomyza bryoniae*
- *Liriomyza huidobrensis*
- *Liriomyza trifolii*
- *Liriomyza sativae*
- *Longidorus diadecturus*
- *Monochamus* spp. (non-European)
- *Myndus crudus*
- *Nacobbus aberrans*
- *Opogona sacchari*
- *Popilia japonica*
- *Premnotrypes* spp. (non-European)
- *Pseudopityophthorus minutissimus*
- *Pseudopityophthorus pruinosus*
- *Scaphoideus luteolus*
- *Spodoptera eridania*
- *Spodoptera frugiperda*
- *Spodoptera littoralis*
- *Spodoptera litura*

- *Tephritidae* (non-European)
- *Trachypterellus quadrigibbus*
- *Thrips palmi*
- *Xiphinema americanum* (non-European populations)
- *Xiphinema californicum*

Bacteria
- *Clavibacter michiganensis*
- *Erwinia amylovora*
- *Pseudonomas solanacearum*
- *Xylella fastidiosa*

Fungi
- *Alternaria alternata*
- *Ceratocystis fagacearum*
- *Chrysomixa arctostaphyli*
- *Cronartium* spp. (non-European)
- *Endocronartium* spp. (non-European)
- *Guignardia laricina*
- *Guignardia piricola*
- *Gymnosporangium* spp. (non-European)
- *Inonotus weirii*
- *Melampsora medusae*
- *Melampsora farlowii*
- *Monilinia fructicola*
- *Mycosphaerella larici-leptolepis*
- *Mycosphaerella populorum*
- *Phoma andina*
- *Phyllosticta solitaria*
- *Septoria lycopersici*
- *Synchytrium endobioticum*
- *Thecaphora solani*
- *Trechispora brinkmannii*

Viruses and virus-like organisms

1. Elm phlöem mycoplasm
2. Potato viruses and virus-like organisms such as:
   - Andean potato latent virus
   - Andean potato mottle virus
   - Arracha virus B, oca strain
   - Potato black ringspot virus
   - Potato spindle tuber viroid
   - Potato virus T
   - Non-European isolates of potato viruses A, M, S, V, X and Y (including Yo, Yn and Yc) and Potato leafroll virus
3. Tobacco ringspot virus
4. Tomato ringspot virus

5. Viruses and virus-like organisms of *Cydonia* Mill., *Fragaria* L., *Malus* Mill., *Prunus* L., *Pyrus* L., *Ribes* L., *Rubus* L., and *Vitis* L., such as:

- Apple proliferation mycoplasm
- Apricot chlorotic leafroll mycoplasm
- Blueberry leaf mottle virus
- Cherry rasp leaf mottle virus (American)
- Peach mosaic virus (American)
- Peach phony rickettsia
- Peach rosette mosaic virus
- Peach rosette mycoplasm
- Peach-X disease mycoplasm
- Peach yellows mycoplasm
- Pear decline mycoplasm
- Plum line pattern virus (American)
- Raspberry leaf curl virus (American)
- Strawberry latent "C" virus
- Strawberry vein banding virus
- Strawberry witches' broom mycoplasm
- Non-European viruses and virus-like organisms of *Cydonia* Mill., *Fragaria* L., *Malus* Mill., *Prunus* L., *Pyrus* L., *Ribes* L., *Rubus* L., and *Vitis* L.,

6. Viruses transmitted by *Bemisia tabaci* Genn, such as:

- Bean golden mosaic virus
- Cowpea mild mottle virus
- Lettuce infectious yellows virus
- Pepper mild tigré virus
- Squash leaf curl virus
- Euphorbia mosaic virus
- Florida tomato virus

Parasitic plants

- *Arceuthobium* spp. (non-European)

Organisms impairing quality (Directive 92/34/EEC and 93/48/EEC. The plant material must, at least on visual inspection, be substantially free from any harmful organisms and diseases impairing quality or any signs or symptoms thereof and in particular be free from:

Insects, mites and nematodes at all stages of their development

- *Capnodis tenebrionis*
- *Meloidogyne* spp.
- Scale insects, in particular:
  Epidiaspis leperii, Pseudaulacaspis pentagona, Quadraspidiotus perniciosus

Bacteria
- *Agrobacterium tumefaciens*
- *Pseudomonas syringae* pv. *mors prunorum*
- *Pseudomonas syringae* pv. *syringae*

Fungi
- *Armillariella mellea*
- *Chondrostereum purpureum*
- *Nectria galligena*
- *Rosellinia necatrix*
- *Verticillium* spp.

Viruses and virus-like organisms
- Prune dwarf virus
- Prunus necrotic ringspot virus

Chemical treatment: The plant material must not have undergone any treatment unless the CPVO and the examination office allow or request such treatment. If it has been treated, full details of the treatment must be given.

Labelling of individual plants in sample:
- Species
- File number of the application allocated by the CPVO
- Breeder's reference
- Examination office's reference (if known)
- Name of applicant
- The phrase "On request of the CPVO"

III CONDUCT OF TESTS

1. Variety collection

A variety collection will be maintained for the purpose of establishing distinctness of the candidate varieties in test. A variety collection may contain both living material and descriptive information. A variety will be included in a variety collection only if plant material is available to make a technical examination.

Pursuant to Article 7 of Council Regulation No. 2100/94, the basis for a collection should be the following:

- varieties listed or protected at the EU level or at least in one of the EEA Member States;
- varieties protected in other UPOV Member States;
- any other variety in common knowledge.

The composition of the variety collection in each Examination Office depends on the environmental conditions in which the Examination Office is located.

Variety collections will be held under conditions which ensure the long term maintenance of each accession. It is the responsibility of Examination Offices to replace reference material which has deteriorated or become depleted. Replacement material can only be introduced if appropriate tests confirm conformity with the existing reference material. If any difficulties arise for the replacement of reference material, Examination Offices must inform the CPVO. If authentic plant material of a variety cannot be supplied to an Examination Office the variety will be removed from the variety collection.

2. Material to be examined

Candidate varieties will be directly compared with other candidates for Community plant variety rights tested at the same Examination Office, and with appropriate varieties in the variety collection. When necessary an Examination Office may also include other candidates and varieties. Examination Offices should therefore make efforts to co-ordinate the work with other Offices involved in DUS testing of sour cherry. There should be at least an exchange of technical questionnaires for each candidate variety, and during the test period, Examination Offices should notify each other and the CPVO of candidate varieties which are likely to present problems in establishing distinctness. In order to solve particular problems Examination Offices may exchange plant material.

3. Characteristics to be used

The characteristics to be used in DUS tests and preparation of descriptions shall be those referred to in the Annex 1. 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. In the latter case, the CPVO should be informed. In addition the existence of some other regulation e.g. plant health, may make the observation of the characteristic impossible.

The Administrative Council empowers the President, in accordance with Article 23 of Commission Regulation N° 1239/95, to insert additional characteristics and their expression in respect of a variety.

4. Grouping of varieties

The varieties and candidates to be compared will be divided into groups to facilitate the assessment of distinctness. Characteristics which are suitable for grouping purposes are those which are known from experience not to vary, or to vary only slightly, within a variety and which in their various states of expression are fairly evenly distributed throughout the collection. In the case of continuous grouping characteristics overlapping states of expression between adjacent groups is required to reduce the risks of incorrect allocation of candidates to groups. The characters used for grouping could be the following:

a) Fruit: size (characteristic 27)

b) Fruit: colour of skin (characteristic 36)

c) Fruit: colour of flesh (characteristic 37)

d) Fruit: colour of juice (characteristic 38)

e) Time of beginning of flowering (characteristic 46)

f) Time of beginning of fruit ripening (characteristic 47)

5. Trial designs and growing conditions

The minimum duration of tests (independent growing cycles) will normally include at least two satisfactory crops of fruit. Tests will be carried out under conditions ensuring normal growth. The size of the plots will be such that plants or parts of plants may be removed for measuring and counting without prejudice to the observations which must be made up to the end of the growing period.

The test design is as follows

Each test should include 5 plants.

Unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 plants. In the case of parts of plants, the number to be taken from each of the plants should be 2. In particular, in the case of fruit and stone characteristics, observations should be made on 15 fruits, three taken from each of five trees.

Tree/One-year-old shoot: Unless otherwise stated, all observations on the tree and on the one-year-old shoot should be made during winter, on trees that have fruited at least once.

Leaf: Unless otherwise stated, all observations on the leaf should be made on the fully developed leaves from the middle part of a spur in summer.

Flower: Unless otherwise stated, all observations on the flower should be made on fully developed flowers at the beginning of anther dehiscence.

Fruit/Stone: Unless otherwise stated, all observations on the fruit and stone should be made at full maturity.

6. Special tests

In accordance with Article 83(3) of Council Regulation No. 2100/94 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 characters listed in the protocol.

7. Standards for decisions

a) **Distinctness**

A candidate variety will be considered to be distinct if it meets the requirements of Article 7 of Council Regulation No. 2100/94.

b) **Uniformity**

A candidate will be considered to be sufficiently uniform if the number of off-types does not exceed the number of plants as indicated in the table below. A population standard of 1% and an acceptance probability of 95% should be applied.

Table of maximum numbers of off-types allowed for uniformity standards.

Number of plants	off-types allowed
≤ 5	0

c) **Stability**

A candidate will be considered to be sufficiently stable when there is no evidence to indicate that it lacks uniformity.

IV REPORTING OF RESULTS

After each recording season the results will be summarised and reported to the CPVO in the form of a UPOV model interim report in which any problems will be indicated under the headings distinctness, uniformity and stability. Candidates may meet the DUS standards after two fruiting periods but in some cases three fruiting periods may be required. When tests are completed the results will be sent by the Examination Office to the CPVO in the form of a UPOV model final report.

If it is considered that the candidate complies with the DUS standards, the final report will be accompanied by a variety description in the format recommended by UPOV. If not the reasons for failure and a summary of the test results will be included with the final report.

The CPVO must receive interim reports and final reports by the date agreed between the CPVO and the examination office.

Interim reports and final examination reports shall be signed by the responsible member of the staff of the Examination Office and shall expressly acknowledge the exclusive rights of disposal of CPVO.

V LIAISON WITH THE APPLICANT

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 agreement, the applicant may be directly informed at the same time as the CPVO particularly if a visit to the trial is advisable.

The interim report as well as the final report shall be sent by the Examination Office to the CPVO.

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ANNEXES TO FOLLOW

ANNEX I

PAGE

Legend:

(+) See explanations on the Table of characteristics
QL Qualitative characteristic
QN Quantitative characteristic
PQ Pseudo-qualitative characteristic

ANNEX II

Technical Questionnaire

ANNEX I

TABLE OF CHARACTERISTICS TO BE USED IN DUS-TEST AND PREPARATION OF DESCRIPTIONS

CPVO N°	UPOV N°	Characteristics		Examples	Note
1.	**1.**	**Tree: vigour**			
(+)	**(+)**		very weak	Demesova, Kelleriis 14, Samor	1
QN	**QN**		weak	Gerema, Nana	3
			medium	Karneol, Montmorency	5
			strong	Kántorjánosi 3, Pándy Bb. 119	7
			very strong	Érdi Nagygyümölcsű, Piramis	9
2.	**2.**	**Tree: habit**			
(+)	**(+)**		upright	Oblachinska, Piramis, Ţarina	1
	(*)		semi-upright	Safir, Újfehértói Fürtös	2
PQ	**PQ**		spreading	Karneol, Montmorency, Samor	3
			drooping	Cigánymeggy 7	4
3.	**3.**	**Tree: branching**			
(+)	**(+)**		weak	Meteor Korai, Piramis, Samor	3
	(*)		medium	Morsam, Pándy Bb. 119	5
QN	**QN**		strong	Cigánymeggy 7, Montmorency, Safir	7
4.	**4.**	**Tree: bud distribution**			
(+)	**(+)**		along entire branch	Maliga Emléke, Piramis	1
PQ	**PQ**		only on middle and distal part of branch	Érdi Jubileum, Meteor, Morava	2
			only on distal part of branch	Cigánymeggy 7, Samor, Schattenmorelle	3

CPVO N°	UPOV N°	Characteristics		Examples	Note
5.	**5.**	**Young shoot: anthocyanin coloration of apex (during rapid growth)**	absent or very weak	Cigánymeggy 59, Meteor	1
QN	**QN**		weak	Kelleriis 16, Montmorency	3
			medium	Érdi Bőtermő, Meteor korai, Schattenmorelle	5
			strong	Érdi Jubileum, Fanal	7
			very strong	Érdi Nagygyümölcsű, Topas	9
6.	**6.**	**Young shoot: pubescence of apex (during rapid growth)**	weak	Cigánymeggy 7, Csengődi, Karneol	3
QN	**QN**		medium	Favorit, Morava	5
			strong	Cigánymeggy 59	7
7. **(+)**	**7.** **(+)** **(*)**	**One-year-old shoot: length of internode**	normal	Fanal, Montmorency, Pándy 279	1
QL	**QL**		short		2
8.	**8.**	**One-year-old shoot: number of lenticels**	few	Gerema, Kelleriis 16	3
QN	**QN**		medium	Meteor, Pándy Bb. 119	5
			many	Maliga Emléke, Meteor Korai, Piramis	7
9.	**9.**	**Leaf blade: length**	short	Cigánymeggy C. 404, Meteor, Oblachinska	3
QN	**QN**		medium	Karneol, Kántorjánosi 3, Kelleriis 16	5
			long	Érdi Bőtermő, Favorit, Maliga Emléke	7
10.	**10.**	**Leaf blade: width**	narrow	Montmorency, Schattenmorelle	3
QN	**QN**		medium	Karneol, Kelleriis 16, Pándy Bb. 119	5
			broad	Érdi Bőtermő, Maliga Emléke	7

CPVO N°	UPOV N°	Characteristics		Examples	Note
11.	**11. (*)**	**Leaf blade: ratio length/width**	small	Cigánymeggy 7, Kelleriis 16	3
QN	**QN**		medium	Karneol, Maliga Emléke	5
			large	Favorit, Meteor Korai, Oblachinska	7
12.	**12.**	**Leaf blade: intensity of green colour of upper side**	light	Cigánymeggy 59, Pipacs 1	3
QN	**QN**		medium	Karneol, Morina, Schattenmorelle	5
			dark	Pándy Bb. 119	7
13.	**13.**	**Leaf blade: glossiness**	absent or weak	Csengődi, Schattenmorelle	1
QN	**QN**		medium	Debreceni Bőtermő, Nana	2
			strong	Karneol, Montmorency	3
14.	**14. (*)**	**Leaf: length of petiole**	short	Karneol, Kelleriis 16, Oblachinska	3
QN	**QN**		medium	Maliga Emléke, Montmorency, Újfehértói Fürtös	5
			long	Favorit, Piramis	7
15.	**15.**	**Leaf: anthocyanin coloration of petiole (upper side)**	weak	Gerema, Oblachinska	3
QN	**QN**		medium	Favorit	5
			strong	Fanal, Montmorency, Safir	7
16.	**16.**	**Leaf: ratio length of blade/ length of petiole**	small	Favorit, Pipacs 1	3
QN	**QN**		medium	Montmorency, Schattenmorelle	5
			large	Karneol, Kelleriis 16, Meteor	7
17. (+)	**17. (+) (*)**	**Leaf: presence of nectaries**	absent	North Star, Oblachinska	1
QL	**QL**		present	Favorit, Piramis	9

CPVO N°	UPOV N°	Characteristics		Examples	Note
18. (+)	**18. (+)**	**Nectaries: position**	at base of leaf blade only	Karneol, Meteor	1
PQ	**PQ**		both at base of leaf blade and on petiole	Favorit, Montmorency	2
			on petiole only	Kántorjánosi 3, Pipacs 1, Ţarina	3
19. (+)	**19. (+)**	**Nectaries: colour**	greenish yellow	Samor	1
QN	**QN**		orange yellow	Kántorjánosi 3, Safir, Topas	2
			light red	Cigánymeggy 7, Érdi Bőtermő, Oblachinska	3
			dark red	Meteor, Nana	4
			brownish	Karneol, Morina	5
20. (+)	**20. (+)**	**Stipule: attitude**	leaning away from shoot	Kelleriis 16, Meteor, Samor	1
QN	**QN**		adpressed to shoot	Favorit, Pándy 279	2
			leaning across shoot	Csengődi, Pipacs 1, Piramis	3
21. (+)	**21. (+)**	**Stipule: size**	small	Favorit, Schattenmorelle, Újfehértói Fürtös	3
QN	**QN**		medium	Debreceni Bőtermő, Maliga Emléke, Samor	5
			large	Meteor Korai, Morsam	7
22. (+)	**22. (+)**	**Stipule: extensions of margins**	absent or weak	Oblachinska, Schattenmorelle, Újfehértói Fürtös	1
QN	**QN**		medium	Piramis, Samor	2
			strong	Csengődi, Kelleriis 16, Meteor Korai	3
23. (+)	**23. (+)**	**Flower: diameter**	small	Oblachinska, Samor	3
QN	**QN**		medium	Kelleriis 16, Montmorency, Újfehértói Fürtös	5
			large	Érdi Bőtermő, Kántorjánosi 3, Pándy Bb. 119	7

CPVO N°	UPOV N°	Characteristics		Examples	Note
24. (+)	**24. (+)**	**Flower: arrangement of petals**	free	Kelleriis 16, Újfehértói Fürtös	1
QN	**QN**		intermediate	Érdi Jubileum, Montmorency, Schattenmorelle	2
			overlapping	Favorit, Meteor Korai, Oblachinska	3
25. (+)	**25. (+)**	**Flower: shape of petals**	circular	Favorit, Meteor, Oblachinska	1
PQ	**PQ**		medium obovate	Kelleriis 16, Pipacs 1, Safir	2
			broad obovate	Érdi Bőtermő, Korai Pipacs, Schattenmorelle	3
26. (+)	**26. (+)**	**Flower: arrangement**	solitary	Cerella, Nabella	1
PQ	**PQ**		double	Safir	2
			in clusters	Stevnsbear, Újfehértói Fürtös	3
			irregular	Schattenmorelle	4
27.	**27.**	**Fruit: size**	very small	Oblachinska, Stevnsbaer	1
	(*)		small	Cigánymeggy 7, Cigánymeggy C. 404	3
QN	**QN**		medium	Érdi Bőtermő, Schattenmorelle	5
			large	Favorit, Karneol, Pándy Bb. 119	7
G			very large	Érdi Nagygyümölcsű, Piramis, Safir	9
28. (+)	**28. (+)**	**Fruit: shape in ventral view**	reniform	Érdi Jubileum, Pándy Bb. 119	1
	(*)		oblate	Montmorency, Morina	2
PQ	**PQ**		circular	Maliga Emléke, Nana	3
			elliptic	Csengődi, Karneol, Morsam	4
29. (+)	**29. (+)**	**Fruit: pistil end**	pointed	Favorit, Morsam	1
QN	**QN**		flat	Korai Pipacs, Samor	2
			depressed	Cigánymeggy C. 404, Montmorency, Schattenmorelle	3

CPVO N°	UPOV N°	Characteristics		Examples	Note
30.	**30.**	**Fruit: length of stalk**	very short	Maliga Emléke, Montmorency	1
	(*)		short	Nana, Piramis	3
QN	**QN**		medium	Morina, Pándy Bb. 119	5
			long	Favorit	7
			very long	Csengődi, Pipacs	9
31.	**31.**	**Fruit: thickness of stalk**	thin	Morsam, Schattenmorelle	3
QN	**QN**		medium	Karneol, Pándy 279	5
			thick	Maliga Emléke, Piramis	7
32.	**32. (*)**	**Fruit: anthocyanin coloration of stalk**	absent	Meteor Korai	1
QL	**QL**		present	Újfehértói Fürtös	9
33.	**33.**	**Fruit: number of bracts on stalk**	absent or few	Piramis, Ţarina	1
QN	**QN**		medium	Érdi Bőtermő, Morina	2
			many	Gerema, Kántorjánosi 3, Kelleriis 16	3
34.	**34. (*)**	**Fruit: size of bracts on stalk**	small	Érdi Bőtermő, Maliga Emléke	3
QN	**QN**		medium	Cigánymeggy C. 404, Favorit	5
			large	Kántorjánosi 3, Újfehértói Fürtös	7
35.	**35.**	**Fruit: abscission layer between stalk and fruit**	absent	Csengődi, Meteor Korai	1
QL	**QL**		present	Karneol, Újfehértói Fürtös	9
36.	**36. (*)**	**Fruit: colour of skin**	orange red	Meteor, Pipacs 1	1
PQ	**PQ**		light red	Favorit, Montmorency	2
			medium red	Pándy Bb. 119	3
			dark red	Cigánymeggy 7, Gerema, Nana	4
			brown red	Karneol, Kelleriis 16, Schattenmorelle	5
G			blackish	Érdi Jubileum, North Star	6

CPVO N°	UPOV N°	Characteristics		Examples	Note
37.	**37.**	**Fruit: colour of flesh**	yellowish	Montmorency, Pipacs 1	1
	(*)		pink	Meteor, Pándy 279	2
PQ	**PQ**		medium red	Kántorjánosi 3, Karneol	3
G			dark red	Cigánymeggy 7, Fanal	4
38.	**38. (*)**	**Fruit: colour of juice**	colourless	Montmorency	1
PQ	**PQ**		light yellow	Pipacs 1	2
			pink	Meteor, Pándy	3
			medium red	Kántorjánosi 3, Karneol	4
G			dark red	Cigánymeggy 7, Érdi Jubileum, Fanal	5
39.	**39. (*)**	**Fruit: firmness**	soft	Csengődi, Samor	3
QN	**QN**		medium	Karneol, Pándy 279	5
			firm	Érdi Jubileum	7
40.	**40.**	**Fruit: acidity**	very low	Érdi Nagygyümölcsű, Meteor Korai	1
QN	**QN**		low	Érdi Bötermö	3
			medium	Impératrice Eugénie, Pándy 279	5
			high	Meteor, Montmorency	7
			very high	Cigánymeggy 7, Schattenmorelle	9
41.	**41.**	**Fruit: sweetness**	low	Montmorency	3
QN	**QN**		medium	Pándy 279	5
			high	Érdi Jubileum, Favorit, Korai Pipacs	7
42.	**42.**	**Fruit: juiciness**	weak	Érdi Jubileum, Korai Pipacs	3
QN	**QN**		medium	Maliga Emléke, Pándy 279	5
			strong	Csengődi, Favorit, Montmorency	7

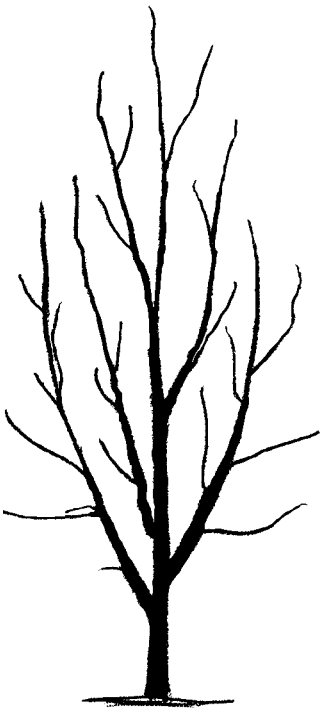
CPVO N°	UPOV N°	Characteristics		Examples	Note
43.	**43. (*)**	**Stone: size**			
			small	Oblachinska, Stevensbaer	3
QN	**QN**		medium	Érdi Bőtermő, Schattenmorelle	5
			large	Maliga Emléke, Pándy Bb 119	7
44. (+)	**44. (+)**	**Stone: shape in ventral view**	narrow elliptic	Csengődi, Meteor	1
	(*)		broad elliptic	Fanal, Maliga Emléke	2
QN	**QN**		circular	Érdi Jubileum, Kelleriis 16	3
45	**45. (*)**	**Fruit: ratio weight of fruit/ weight of stone**	small	Cigánymeggy 7, Érdi Jubileum, Karneol	3
QN	**QN**		medium	Érdi Bőtermő, Schattenmorelle	5
			large	Érdi Nagygyümölcsű, Meteor, Piramis	7
46. (+)	**46. (+)**	**Time of beginning of flowering**	very early	Érdi Bőtermő	1
	(*)		early	Favorit, Meteor Korai	3
QN	**QN**		medium	Cigánymeggy 7, Vowi	5
			late	Gerema, Kelleriis 16	7
G			very late	Schattenmorelle	9
47. (+)	**47. (+)**	**Time of beginning of fruit ripening**	very early	Ţarina	1
	(*)		early	Meteor Korai	3
QN	**QN**		medium	Érdi Bőtermő, Favorit	5
			late	Pándy 279, Kántorjánosi 3	7
G			very late	Gerema, Vowi	9

EXPLANATIONS AND METHODS

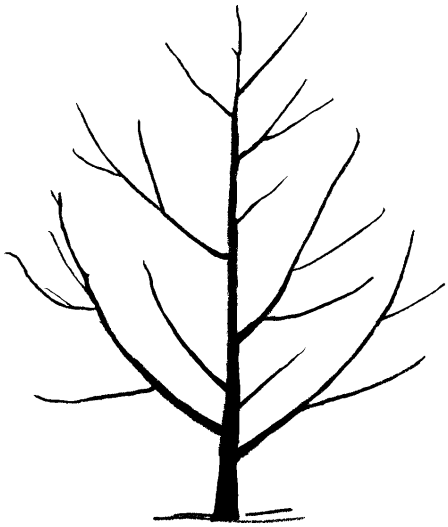
Ad. 1: Tree: vigour

The tree vigour should be considered as the overall abundance of vegetative growth.

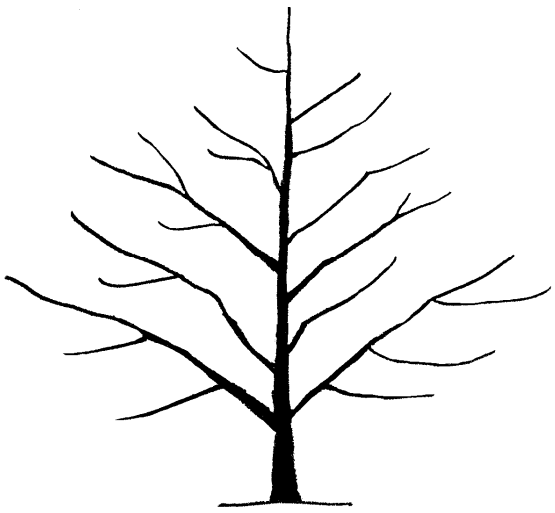
Ad. 2: Tree: habit



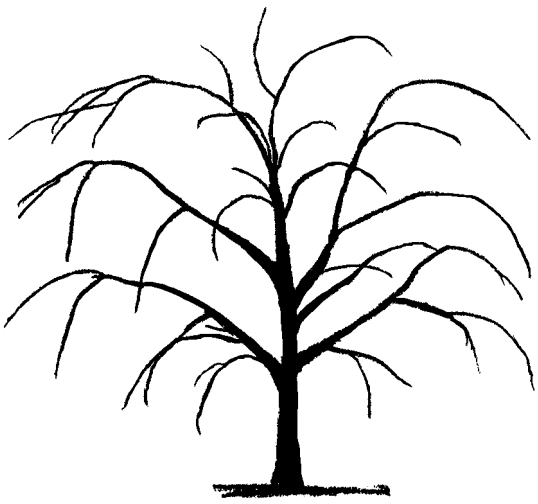
1
upright



2
semi-upright



3
spreading



4
drooping

Ad. 3: Tree: branching

Observations should be carried out on scaffold branches with the degree of branching being indicated by the density of lateral branches and shoots, excluding fruiting shoots.

Ad. 4: Tree: bud distribution

Observations should be carried out before picking time.

Ad. 7: One-year-old shoot: length of internode

1
normal

2
short

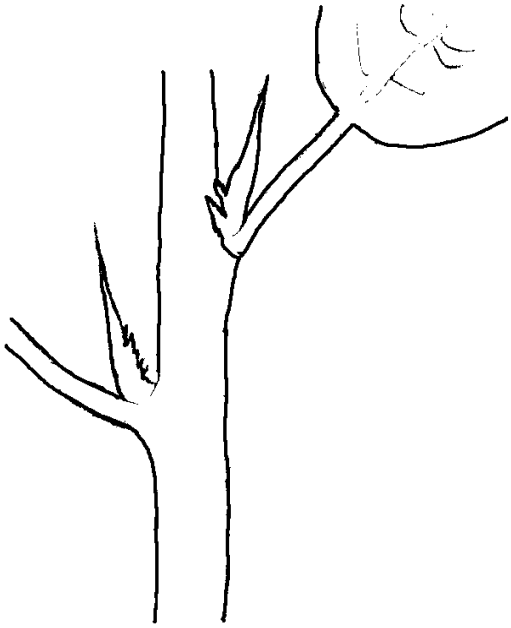
Ad. 17: Leaf: presence of nectaries
Ad. 18: Nectaries: position
Ad. 19: Nectaries: colour

Observations of these characteristics should be made in summer on fully developed leaves from the middle third of a well developed current season's shoot.

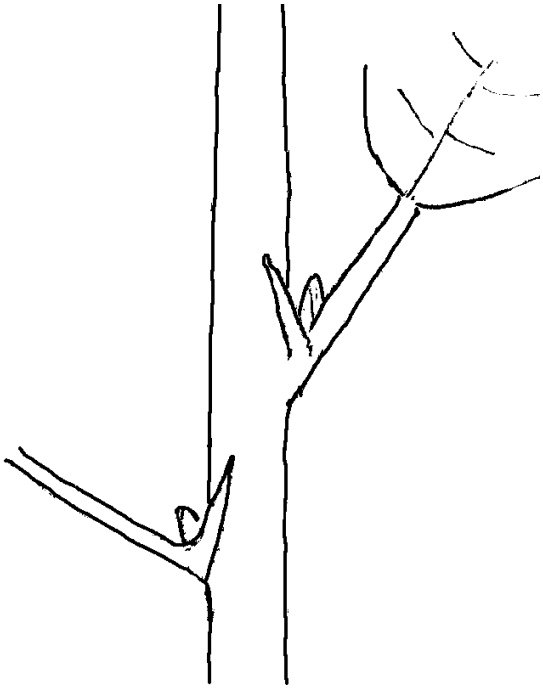
Ad. 20: Stipule: attitude
Ad. 21: Stipule: size
Ad. 22: Stipule: extensions of margins

All observations of stipule should be made on the fifth or sixth fully developed leaf of a long shoot, during rapid growth.

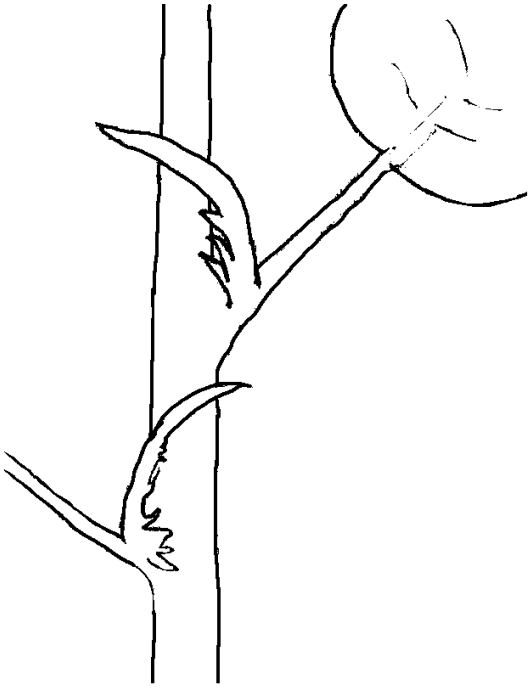
Ad. 20: Stipule: attitude



1
leaning away from shoot

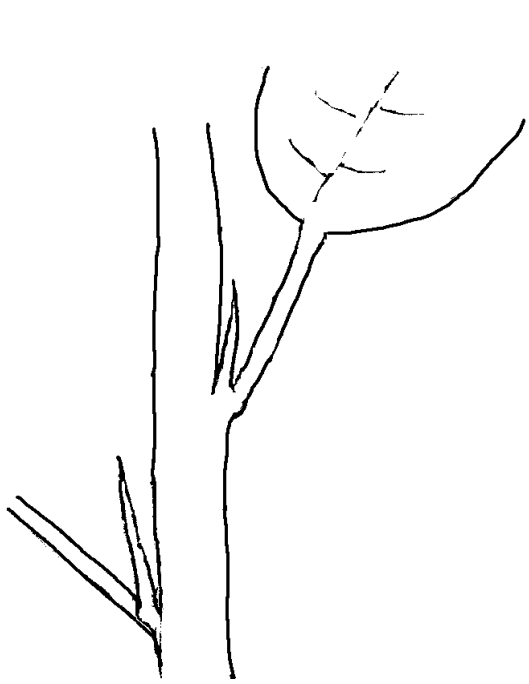


2
adpressed to shoot



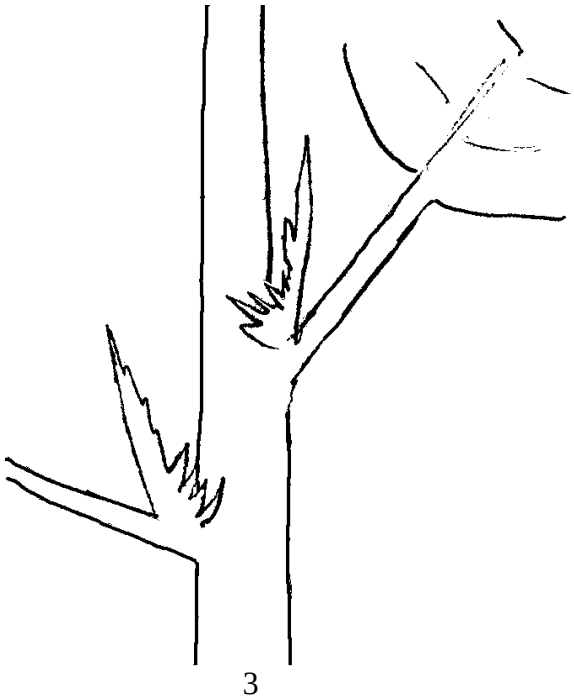
3
leaning across shoot

Ad. 22: Stipule: extensions of margins



1
absent or weak

2
medium

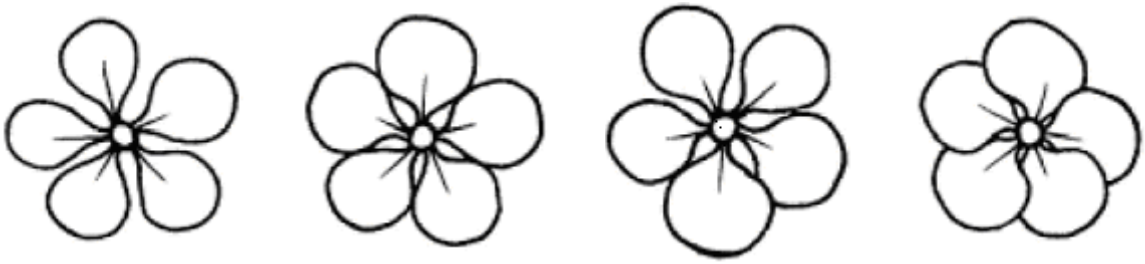


3
strong

Ad. 23: Flower: diameter

Observations or measurements should be carried out on completely opened flowers with petals pressed into horizontal position.

Ad. 24: Flower: arrangement of petals

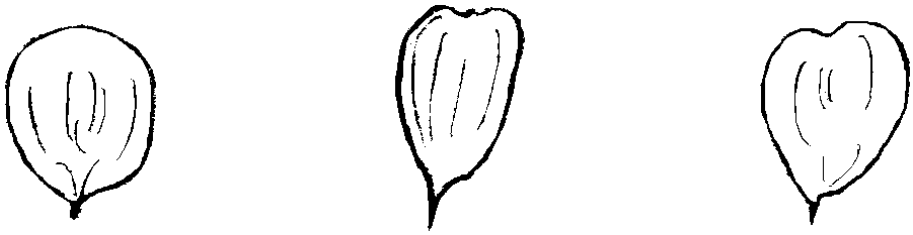


1
free

2
intermediate

3
overlapping

Ad. 25: Flower: shape of petal



1
circular

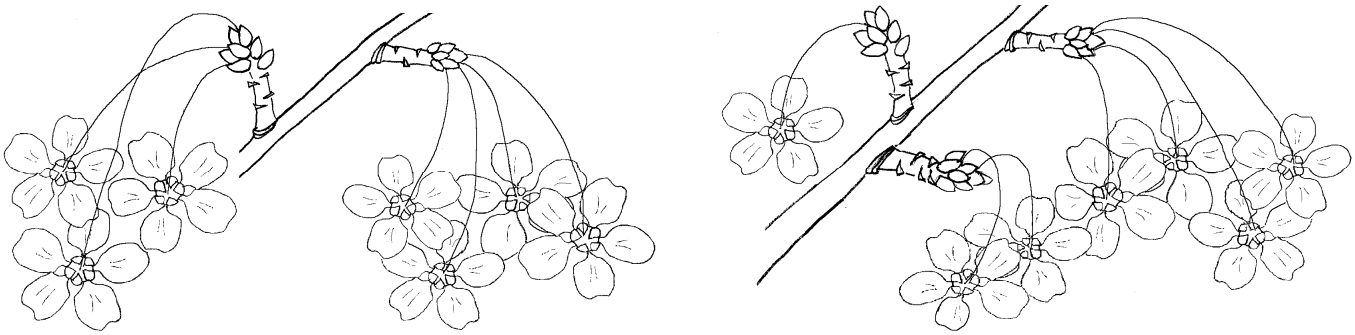
2
medium obovate

3
broad obovate

Ad. 26: Flower: arrangement

1
solitary

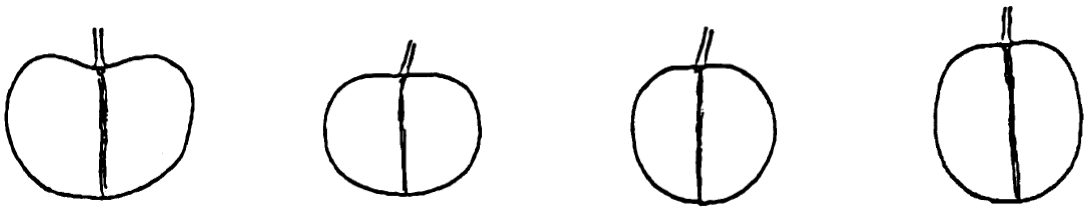
2
double



3
in clusters

4
irregular

Ad. 28: Fruit: shape in ventral view



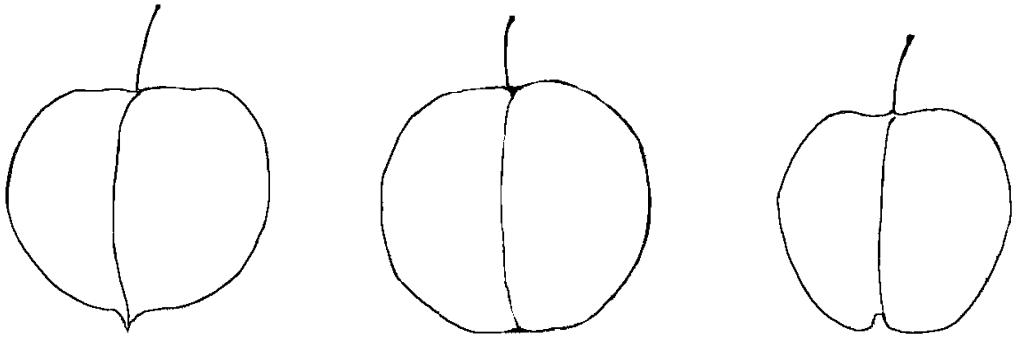
1
reniform

2
oblate

3
circular

4
elliptic

Ad 29: Fruit: pistil end

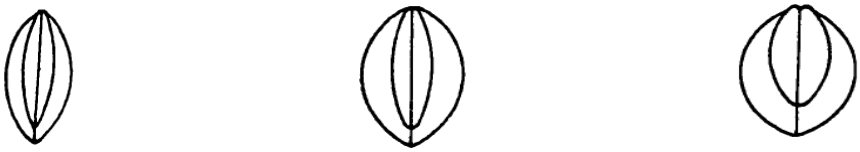


1
pointed

2
flat

3
depressed

Ad. 44: Stone: shape in ventral view



1
medium elliptic

2
broad elliptic

3
circular

Ad. 46: Time of beginning of flowering

When 5-10% open flowers can be observed.

Ad. 47: Time of beginning of fruit ripening

When 5-10% ripe fruits can be observed. Fruit ripening should be considered as the time of eating ripeness, when the fruit can be most easily removed from the stalk.

Synonym(s) of Example Varieties

Example Varieties	Synonym(s)
Cigánymeggy	Zigeunerkirsche
Fanal	Heimanns Konservenweichsel
Kelleriis 16	Morellenfeuer
Schattenmorelle	Griotte du Nord, Lotovka, Latos meggy, Łutówka, Morella pozdní

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ANNEX II

The Technical Questionnaire is available on the CPVO website under the following reference: CPVO-TQ/230/1