



European Union
Community Plant Variety Office

PROTOCOL FOR DISTINCTNESS, UNIFORMITY AND STABILITY TESTS

Hypericum hircinum L.

Hypericum androsaemum L.

Hypericum x inodorum Mill.

**UPOV Species Codes: HYPER
HYPER_AND
HYPER_INO**

Adopted on 18th November 2004

I - SUBJECT OF THE PROTOCOL

The protocol describes the technical procedures to be followed in order to meet the requirement of 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 UPVO Guideline TG/216/1 dated 31/03/2004 for the conduct of tests for Distinctness, Uniformity and Stability. This protocol applies to all varieties of *Hypericum hircinum* L., *Hypericum androsaemum* L. and *Hypericum x inodorum* Mill., of the family *Clusiaceae* including hybrids of the species concerned.

II - SUBMISSION OF 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.

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. If no or unsatisfactory plant material is submitted the CPVO should be informed as soon as possible.

3. Plant material requirements

Information with respect to closing dates and submission requirements of plant material for the technical examination of varieties can be found on the CPVO website (www.cpvo.europa.eu) and in the special Issue S2 of the Official Gazette of the Office published yearly in the month of September.

Quality:..... The plant material supplied should be visibly healthy, not lacking in vigour or affected by any important pest or disease, especially virus.

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 sample: - Species
- File number of the application allocated by the CPVO
- Breeder's reference
- Examination 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 reference 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.

It is the responsibility of Examination Office to keep the variety collection up to date.

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.

3. Characteristics to be used

The characteristics to be used in DUS tests and preparation of descriptions shall be those referred to in 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 later 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 expressions 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 are the following:

- (a) Plant: habit (characteristic 1)
- (b) Berry: maximum diameter (characteristic 29)
- (c) Berry: shape in longitudinal section (characteristic 30)
- (d) Berry: colour group (characteristic 34)

5. Trial designs and growing conditions

The minimum duration of tests will normally be two growing cycles if the results on distinctness and uniformity are conclusive. 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:

As a minimum, each test should include a total of 10 plants. Separate plots for observation and for measuring can only be used if they have been subject to similar environmental conditions.

All observations determined by measurement or counting should be made on 10 plants or parts taken from each of 10 plants during flowering time.

The test should normally be conducted at one place.

The test should be carried out in the open, under conditions ensuring normal growth.

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

For the assessment of uniformity of vegetatively propagated varieties, a population standard of 1% with an acceptance probability of at least 95% should be applied.

For a sample size between 6 and 35 plants for vegetatively propagated varieties, only 1 off-type is allowed.

For the assessment of uniformity of seed propagated open pollinated and hybrid varieties, relative uniformity standards should be applied.

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 growing cycle 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 one growing cycle but in some cases two or more growing cycles 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 and final report shall be sent by the Examination Office to the CPVO.

ANNEXES TO FOLLOW

ANNEX I	<u>PAGE</u>
Table of characteristics	8
Legend:	
(a) – (b) See explanations on the Table of characteristics	
(+) See explanations on the Table of characteristics	
QL Qualitative characteristic	
QN Quantitative characteristic	
PQ Pseudo-qualitative characteristic	
Explanations on the table of characteristics	16
Literature	19

ANNEX II

Technical questionnaire

ANNEX I

TABLE OF CHARACTERISTICS

CPVO N°	UPOV N°	Characteristics	Examples	Note
1.	1.	Plant: habit		
		upright	Excellent Flair	1
		moderately spreading	Apricot Beauty	2
		strongly spreading	Flamingo Fantasy	3
2. QN	2. QN	(a) Plant: height		
		short	Bosajol	3
		medium	Excellent Flair	5
		tall	Kolmfa	7
3. QN	3. QN	(a) Plant: width		
		narrow	Bosajol	3
		medium	Early Fruit	5
		broad	Kolmfa	7
4. QL	4. QL	(a) Plant: reddish or brownish coloration of branches of current year's growth		
		absent		1
		present		9
5. QN	5. QN	(a) Plant: intensity of coloration of branches of current year's growth		
		weak	Bosaney	3
		medium	Kolmgia	5
		strong	Excellent Flair	7

CPVO N°	UPOV N°		Characteristics	Examples	Note	
6. QN	6. QN	(a)	Leaf: length	short	Magical Green	3
				medium	Kolmgia	5
				long	Bosajum	7
7. QN	7. QN	(a)	Leaf: width	narrow	Kolmfa	3
				medium	Bosaenv	5
				broad	Kolmbeau	7
8. QN	8. QN	(a)	Leaf: intensity of green colour	light	Pamala	3
				medium	Red Condor	5
				dark	Bosaenv	7
9. QL	9. QL	(a)	Leaf: variegation	absent		1
				present		9
10. QL	10. QL	(a)	Young leaf: reddish or brownish coloration	absent		1
				present		9
11. QN	11. QN	(a)	Young leaf: intensity of reddish or brownish coloration	weak	Esmgrape	3
				medium	Bosaswe	5
				strong	Albury Purple, Esmmayor	7

CPVO N°	UPOV N°		Characteristics	Examples	Note	
12. QN	12.	(a)	Leaf: cross section			
				convex		3
				flat		5
			concave		7	
13. QN	13. QN	(a)	Leaf: angle in relation to branch			
				very acute		1
				moderately acute		2
			weakly acute to right- angle		3	
14. PQ	14. PQ	(a)	Leaf: shape of base			
				cordate		1
				truncate		2
			rounded		3	
15. PQ	15. PQ	(a)	Leaf: shape of apex			
				acute	Kolmbeau	1
				obtuse	Early Fruit	2
			rounded	Bosaelec	3	
16. QL	16. QL	(a)	Leaf: odor			
				absent		1
			present		9	
17. (+) QN	17. (+) QN	(b)	Inflorescence: length			
				short	Esmfashion	3
				medium	Bright Blossom	5
			long	Bosabel	7	

CPVO N°	UPOV N°		Characteristics	Examples	Note
18. (+)	18. (+)	(b)	Inflorescence: width		
QN	QN		narrow	Bosasu	3
			medium	Excellent Flair	5
			broad	Kolmgia	7
19. (+)	19. (+)	(b)	Inflorescence: profile of distal part		
QN	QN		concave	Bosafan	1
			flat	Excellent Flair	2
			convex	Kolmfa	3
20. QN	20. QN	(a)	Flower: size		
			small	Bosaswe	3
			medium	Excellent Flair	5
			large	Belmount	7
21. (+)	21. (+)	(b)	Sepal: length		
QN	QN		short		3
			medium		5
			long		7
22. (+)	22. (+)	(b)	Sepal: width		
QN	QN		narrow		3
			medium		5
			broad		7
23. QL	23. QL	(b)	Sepal: presence of reddish or brownish coloration		
			absent		1
			present		9

CPVO N°	UPOV N°		Characteristics	Examples	Note	
24. QN	24. QN	(b)	Sepal: intensity of reddish or brownish coloration			
				weak	3	
				medium	5	
			strong	7		
25. QN	25. QN	(b)	Sepal: recurvature			
				absent or weak	1	
				moderate	2	
			strong	3		
26. PQ	26. PQ	(a)	Anther: colour	yellow	Red Condor	1
				orange	Early Fruit	2
27. QN	27. QN	(a)	Style: length			
				short		3
				medium		5
			long		7	
28. QN	28. QN		Inflorescence: number of berries	few	Rosemary	3
				medium	Bosajum	5
				many	Excellent Flair	7
29. QN	29. QN	(b)	Berry: maximum diameter	small	Opalo	3
				medium	Bosajol	5
				large	Kolmgia	7

CPVO N°	UPOV N°		Characteristics	Examples	Note	
30. PQ	30. PQ	(b)	Berry: shape in longitudinal section	narrow elliptic	Magical Green	1
				elliptic	Bright Blossom	2
				broad elliptic	Kolmbeau	3
				round	Kolmsweet	4
				narrow ovate	Rosemary	5
				ovate	Bosafan	6
				broad ovate	Kolmgia	7
31. (+) QL	31. (+) QL	(b)	Berry: shape in cross section	rounded		1
				triangular		2
32. QL	32. QL	(b)	Berry: indentation of apex	absent		1
				present		9
33. PQ	33. PQ	(b)	Berry: surface (apex excluded)	smooth	Bosaelec	1
				grooved	Rosemary	2
				indented		3

CPVO N°	UPOV N°	Characteristics	Examples	Note	
34. PQ	34. PQ	(b) Berry: colour group		1	
			white		
			cream	Bonaire	2
			green	SJK 100	3
			brownish green	Kolmgreen	4
			yellow	Bosaarc	5
			orange		6
			light pink	Esmamber	7
			pink	Kolmsweet	8
			dark pink		9
			red pink	SJK 93	10
			orange red	Esmmayor	11
			light red	Bright Blossom	12
			red	Bosapin	13
			dark red		14
			red purple	Pamela	15
			red brown	Esmmarron	16
			purple brown	Autum Blaze, Excellent Flair	17
			brown		18
grey brown		19			
35. (+) PQ	35. (+) PQ	(b) Berry: main colour			
		RHS Colour Chart (indicate reference number)			

CPVO N°	UPOV N°		Characteristics	Examples	Note	
36. QN	36. QN	(b)	Berry: width of whitish or greenish band at base	absent or narrow	Kolmred	1
				medium	Belmount	2
				broad	Bosaapol, Kolmblac	3
37. QN	37. QN	(b)	Berry: glossiness	weak	<i>H. hircinum</i> , SJK 94	1
				medium	Kolmfa	2
				strong	Bosaapol	3

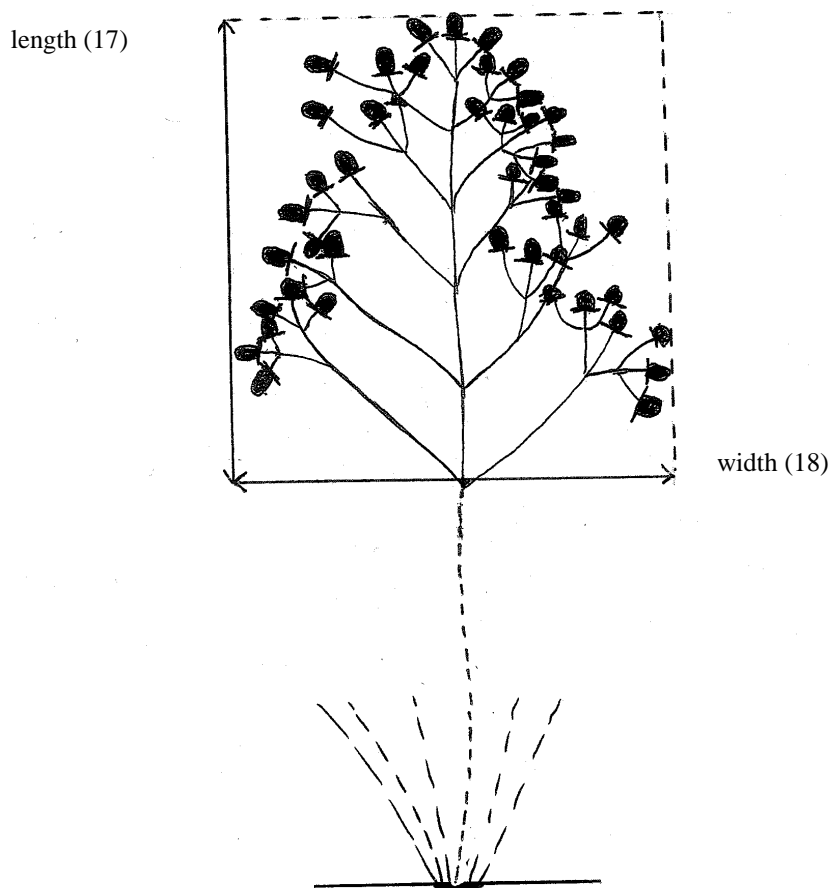
EXPLANATIONS AND METHODS

Explanations covering several characteristics

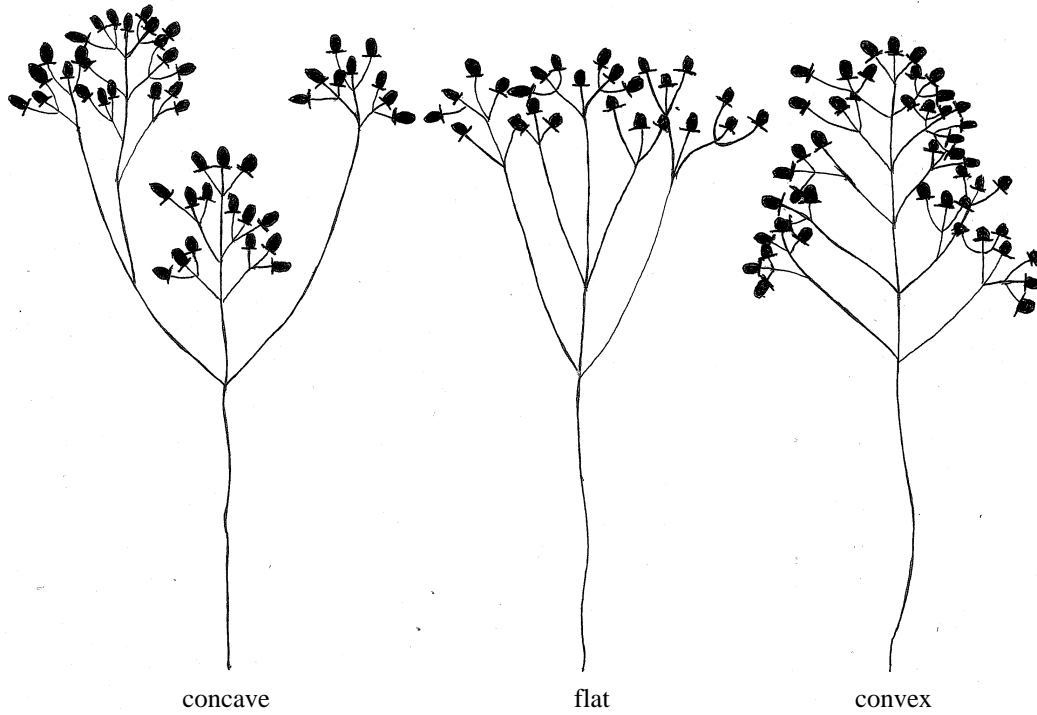
- (a) characteristics which should be observed at full flowering
- (b) characteristics which should be observed when the berries are at their full colour (harvest time)

Explanations for individual characteristics

Ad 17 and 18: Inflorescence : length (17), width (18)



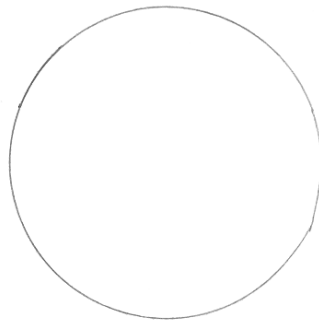
Ad. 19: Inflorescence: profile of distal part



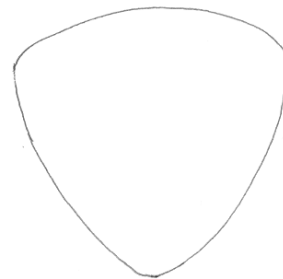
Ads. 21 and 22: Sepal: length (21) and width (22)

The largest sepal is to be observed.

Ad. 31: Berry: shape in cross section



rounded



triangular

Ad. 35: Berry: main colour

It may not be possible to complete characteristic 35 if the colour does not correspond to a reference number in the RHS Colour Chart.

Literature

H.J. van Laar. Hypericum - Hertshooi, het in Nederland gekweekte sortiment, Dendroflora Nr 33, 1996, pag. 27- 56. Printed by: Koninklijke Vereniging voor Boskoopse Culturen & Nederlandse Dendrologische Vereniging. ISSN: 0374-7247

ANNEX II



European Union
Community Plant Variety Office

TECHNICAL QUESTIONNAIRE

to be completed in connection with an application for Community Plant Variety Rights
Please answer all questions. A question without any answer will lead to a non-attribution
of an application date. In cases where a field / question is not applicable, please state so.

1. Botanical taxon: Name of the genus, species or sub-species to which the variety belongs and common name:

Hypericum L.

HYPERICUM

Species *Hypericum hircinum L.* []

Hypericum androsaemum L. []

Hypericum x inodorum Mill. []

Other (indicate)

2. Applicant(s): Name(s) and address(es), phone and fax number(s), e-mail address, and where appropriate name and address of the procedural representative

.....

.....

3. Variety denomination

a) Where appropriate proposal for a variety denomination:

.....

b) Provisional designation (breeder's reference):

.....

4. Information on origin, maintenance and reproduction of the variety

4.1 Origin

(a) Seedling (indicate parent varieties) []

.....
.....
.....
.....

(b) Mutation (indicate parent variety) []

.....
.....
.....
.....

(c) Discovery (indicate where, when and how the variety has been developed): []

.....
.....
.....
.....

(d) Other (please specify) []

.....
.....
.....
.....

4.2 Method of propagation

(a) Cuttings []

(b) *In vitro* propagation []

(c) Seed []

(d) Other (please specify): []

.....
.....
.....
.....
.....
.....

4.3 Other information

In the case of seed propagated varieties method of production:

(a) Self-pollinated []

(b) Cross-pollinated (please give details) []

.....
.....
.....
.....

(c) Hybrid (please give details)..... []

.....
.....
.....
.....
.....

4.4 Geographical origin of the variety: the region and the country in which the variety was bred or discovered and developed.

.....

5. Characteristics of the variety to be indicated: (the number in brackets refers to the corresponding characteristic in the CPVO Technical Protocol; please mark the state of expression which best corresponds).

Characteristics		Example varieties	Note
5.1 (1)	Plant: habit		
	upright	Excellent Flair	1 []
	moderately spreading	Apricot Beauty	2 []
	strongly spreading	Flamingo Fantasy	3 []
5.2 (29)	Berry: maximum diameter		
	small	Opalo	3 []
	medium	Bosajol	5 []
	large	Kolmgia	7 []

Characteristics		Example varieties	Note
5.3 (30)	Berry: shape in longitudinal section		
	narrow elliptic	Magical Green	1 []
	elliptic	Bright Blossom	2 []
	broad elliptic	Kolmbeau	3 []
	round	Kolmsweet	4 []
	narrow ovate	Rosemary	5 []
	ovate	Bosafan	6 []
	broad ovate	Kolmgia	7 []
5.4 (34)	Berry: colour group		
	white		1 []
	cream	Bonaire	2 []
	brownish green	Kolmgreen	3 []
	yellow	Bosaarc	4 []
	orange		5 []
	light pink	Esmamber	6 []
	pink	Kolmsweet	7 []
	dark pink		8 []
	red pink	SJK 93	9 []
	orange red	Esmmayor	10 []
	light red	Bright Blossom	11 []
	red	Bosapin	12 []
	dark red		13 []
	red purple	Pamela	14 []
	red brown	Esmmarron	15 []
	purple brown	Autum Blaze, Excellent Flair	16 []
	brown		17 []
	green	SJK 100	18 []
grey brown		19 []	

6. Similar varieties and differences from these varieties:

Denomination of similar variety	Characteristic in which the similar variety is different ¹⁾	State of expression of similar variety	State of expression of candidate variety
.....
.....
.....
.....
.....

¹⁾ In the case of identical states of expressions of both varieties, please indicate the size of the difference

7. Additional information which may help to distinguish the variety

A representative printed-out colour photo of the variety **must** be added to the technical questionnaire.

7.1 Resistance to pests and diseases

.....

7.2 Special conditions for the examination of the variety

YES, please specify

NO

7.3 Other information

YES, please specify

NO

8. GMO-information required

The variety represents a Genetically Modified Organism within the meaning of Article 2(2) of Council Directive 2001/18/EC of 12/03/2001.

YES NO

If yes, please add a copy of the written attestation of the responsible authorities stating that a technical examination of the variety under Articles 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.

