



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 | | | |
| | | | | white | | 1 |
| | | | | 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 |

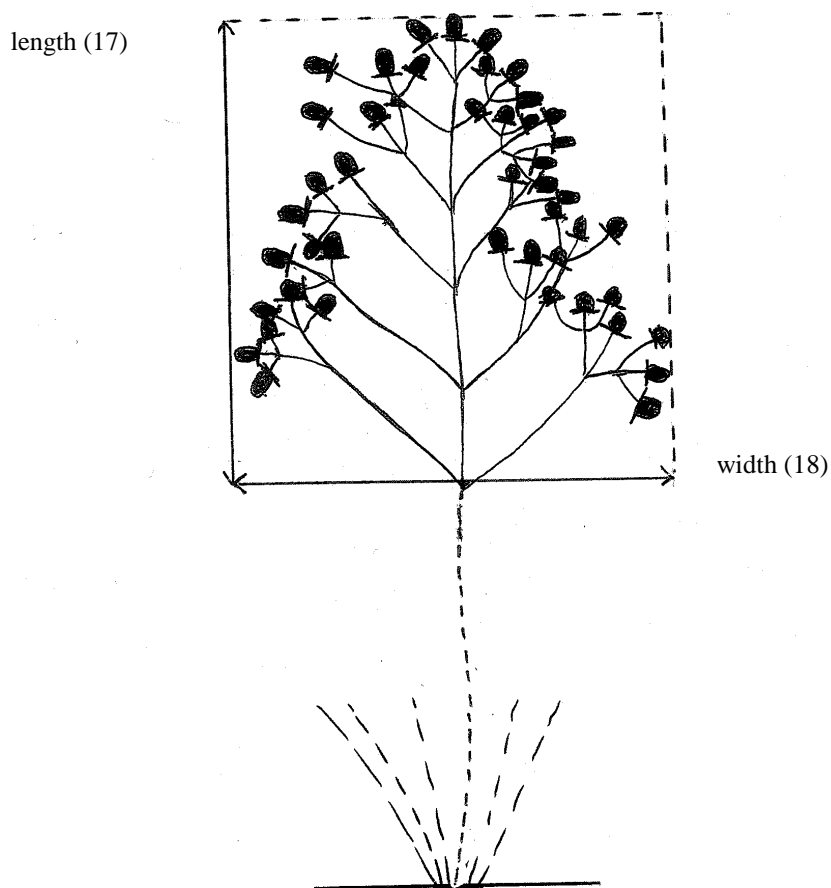
EXPLANATIONS AND METHODS

Explanations covering several characteristics

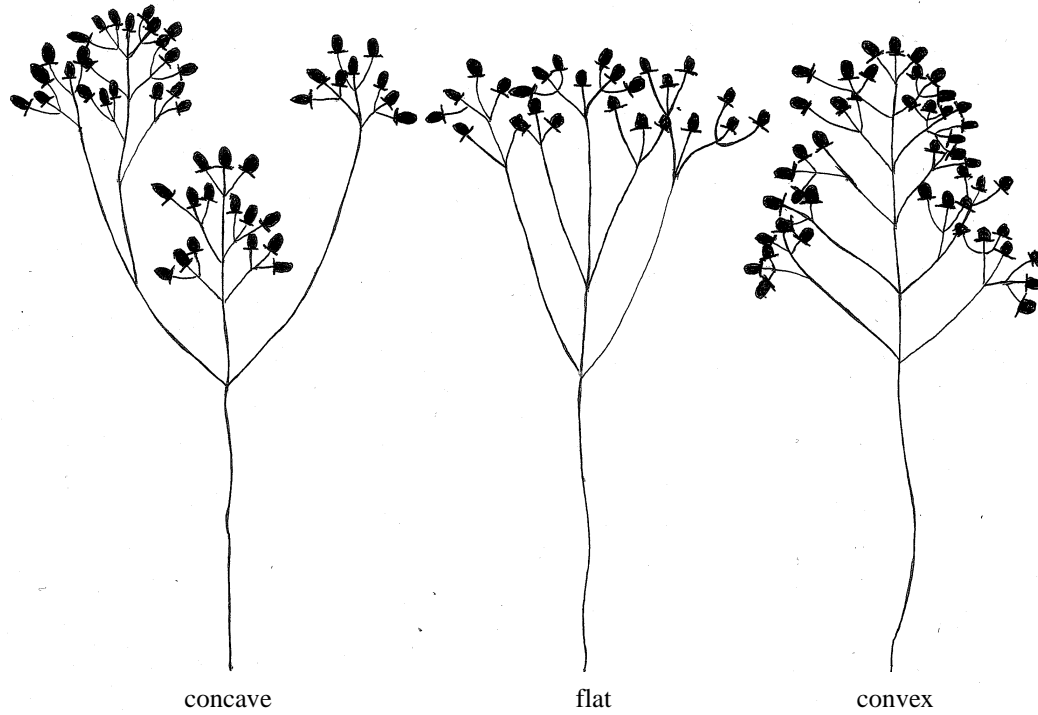
- (a) characteristics which should be observed at full flowering
- (b) characteristics which should be observed when the berries are at their full colour (harvest time)

Explanations for individual characteristics

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



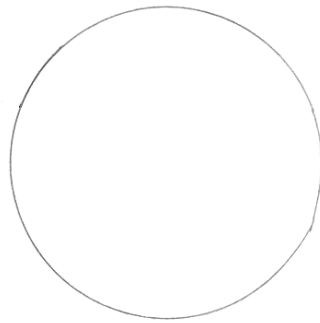
Ad. 19: Inflorescence: profile of distal part



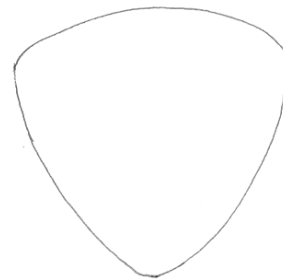
Ads. 21 and 22: Sepal: length (21) and width (22)

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

The Technical Questionnaire is available on the CPVO website under the following reference:
CPVO-TQ/216/1