**European Union**
**Community Plant Variety Office**

# PROTOCOL FOR DISTINCTNESS, UNIFORMITY AND STABILITY TESTS

***Rhododendron simsii* Planch.**

**POT AZALEA**

**UPOV Species Code: RHODD_SIM**

**Adopted on 14th November 2007**

## I - SUBJECT OF THE PROTOCOL

The protocol describes the technical procedures to be followed in order to meet the requirement of Council Regulation (EC) No. 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/140/4 dated 28th March 2007 for the conduct of tests for Distinctness, Uniformity and Stability and conclusions of the ornamental experts' meeting of 19th and 20th September 2007. This protocol applies to all varieties of ***Rhododendron simsii* Planch**. of the family *Ericaceae* which are normally grown as pot plants, as well as to hybrids between that species and other species of *Rhododendron* L.

## 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, as laid down in Council Directive 2000/29/EC and its amendments, or organisms impairing quality as indicated in Council Directive 98/56/EEC and Commission Directive 93/49/EEC and their amendments.

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 (EC) No. 2100/94, the basis for a collection should be the following:

- varieties listed or protected at the EU level;
- 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 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 (EC) No. 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) Flower: type (characteristic 13)
(b) Corolla lobe: number of colours of inner side (markings excluded) (characteristic 16)
(c) Corolla lobe: colour of middle of inner side (characteristic 18) with the following groups:
    - Gr. 1: white
    - Gr. 2: light pink
    - Gr. 3: medium pink
    - Gr. 4: dark pink
    - Gr. 5: orange red
    - Gr. 6: light red
    - Gr. 7: medium red
    - Gr. 8: purple
    - Gr. 9: violet

## 5. Trial designs and growing conditions

The minimum duration of tests will normally be one growing cycle 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 20 plants. Separate plots for observation and for measuring can only be used if they have been subject to similar environmental conditions.

All observations on single plants for vegetatively propagated varieties determined by measurement or counting should be made on 10 plants or parts taken from each of 10 plants.

Any other observations should be made on all plants in the test.

The test should normally be conducted at one place.

6. Special tests

In accordance with Article 83(3) of Council Regulation (EC) No. 2100/94 an applicant may claim either in the Technical Questionnaire or during the examination that a candidate variety 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 (EC) No. 2100/94.

b) **Uniformity**

For the assessment of uniformity 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.

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 from the Examination Office 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.

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# ANNEXES TO FOLLOW

**ANNEX I** PAGE



Legend:

(a) – (c) See explanations on the Table of characteristics

(+) See explanations on the Table of characteristics

(*): Important characteristic to be included in the UPOV variety description

QL Qualitative characteristic

QN Quantitative characteristic

PQ Pseudo-qualitative characteristic



**ANNEX II**

Technical questionnaire

# ANNEX I

## TABLE OF CHARACTERISTICS

| CPVO N° | UPOV N° | | Characteristics | | Examples | Note |
|---|---|---|---|---|---|---|
| **1.** | **1.** | | **Plant: growth habit** | | | |
| **PQ** | **PQ** | | | upright | Kirin, Rokoko | 1 |
| | | | | broad bushy | Party Favour, Sayonara | 2 |
| | | | | flat bushy | Coco, Taggi | 3 |
| **2.** **(+)** | **2.** **(+)** | | **Young leaf: colour of upper side** | | | |
| **PQ** | **PQ** | | | yellow green | | 1 |
| | | | | light green | Bertina | 2 |
| | | | | medium green | Friedhelm Scherrer | 3 |
| | | | | dark green | Ostali, Rena | 4 |
| | | | | red green | | 5 |
| | | | | blue green | | 6 |
| **3.** | **3.** **(*)** | | **Mature leaf: length (including petiole)** | | | |
| **QN** | **QN** | **(a)** | | short | Ostali, Rosa Perle | 3 |
| | | | | medium | Super Sachsenstern | 5 |
| | | | | long | Aline, Poetry | 7 |
| **4.** | **4.** **(*)** | | **Mature leaf: width** | | | |
| **QN** | **QN** | **(a)** | | narrow | Barbara, Rosa Perle | 3 |
| | | | | medium | Desta 302 | 5 |
| | | | | broad | Coco, Luci | 7 |

| CPVO N° | UPOV N° | | Characteristics | Examples | Note |
|---|---|---|---|---|---|
| **5. (+)** | **5. (*) (+)** | | **Mature leaf: shape** | | |
| **PQ** | **PQ** | **(a)** | elliptic | Poetry | 1 |
| | | | elliptic to obovate | Classic Rouge | 2 |
| | | | obovate | Friedhelm Scherrer | 3 |
| **6.** | **6. (*)** | | **Mature leaf: colour of <u>upper</u> side** | | |
| **PQ** | **PQ** | **(a)** | light green | Kirin, St. Valentin | 1 |
| | | | medium green | Bertina, Rosa Perle | 2 |
| | | | dark green | Désirée, Neapolis | 3 |
| | | | reddish green | | 4 |
| | | | blue green | Birka, Ostalett | 5 |
| **7.** | **7. (*)** | | **Mature leaf: colour of <u>lower</u> side** | | |
| **PQ** | **PQ** | **(a)** | light green | Timo | 1 |
| | | | medium green | Coco, Luci | 2 |
| | | | dark green | Ostaro | 3 |
| | | | blue green | | 4 |
| **8.** | **8.** | | **Mature leaf: hairiness of <u>upper</u> side** | | |
| **QN** | **QN** | **(a)** | absent or very weak | | 1 |
| | | | medium | | 3 |
| | | | strong | | 5 |
| **9.** | **9. (*)** | | **Inflorescence: number of flowers** | | |
| **QN** | **QN** | | few | Ballerina, Tapestry | 3 |
| | | | medium | Friedhelm Scherrer | 5 |
| | | | many | Anastasia | 7 |

| CPVO N° | UPOV N° | | Characteristics | | Examples | Note |
|---|---|---|---|---|---|---|
| **10.** | **10.** | | **Pedicel: length** | | | |
| **QN** | **QN** | | | short | Promise | 3 |
| | | | | medium | Désirée, Friedhelm Scherrer | 5 |
| | | | | long | Luci | 7 |
| **11.** | **11. (*)** | | **Calyx: presence** | | | |
| **QL** | **QL** | | | absent | Timeless, Violajana | 1 |
| | | | | present | Anne, Friedhelm Scherrer | 9 |
| **12.** | **12. (*)** | | **Flower: diameter** | | | |
| **QN** | **QN** | **(b)** | | small | Neapolis, Rosa Perle | 3 |
| | | | | medium | Friedhelm Scherrer, Sansibar | 5 |
| | | | | large | Knut Erwen, Spreeperle | 7 |
| **13. (+)** | **13. (*) (+)** | | **Flower: type** | | | |
| **QN** | **QN** | **(b)** | | single | Ostali, Polarstern | 1 |
| | | | | semi-double | Judith, Luci | 2 |
| | | | | double | Ballerina, Ospo | 3 |
| **14. (+)** | **14. (*) (+)** | | **Flower: shape** | | | |
| **PQ** | **PQ** | **(b)** | | wide funnel-shaped | Luci, Meggy | 1 |
| | | | | open funnel-shaped | Aline, Friedhelm Scherrer | 2 |
| | | | | medium funnel-shaped | Maryke, Moard | 3 |
| | | | | narrow funnel-campanulate | Kirin | 4 |
| | | | | wide funnel-campanulate | Prize | 5 |
| | | | | medium campanulate | Direkteur van Slyken | 6 |

| CPVO N° | UPOV N° | | Characteristics | | Examples | Note |
|---|---|---|---|---|---|---|
| **15.** | **15.** | | **Flower: fragrance** | | | |
| **QN** | **QN** | **(b)** | | absent or weak | Miss Lulu | 1 |
| | | | | medium | Cherish, Prinses Mathilde | 2 |
| | | | | strong | Lara, Mistral | 3 |
| **16.** | **16. (*)** | | **Corolla lobe: number of colours of <u>inner</u> side (markings excluded)** | | | |
| **QL** | **QL** | **(c)** | | one | | 1 |
| | | | | two | | 2 |
| **17.** | **17. (*)** | | **Corolla lobe: colour of <u>margin</u> of <u>inner</u> side** | | | |
| **PQ** | **PQ** | **(c)** | | RHS Colour Chart (indicate reference number) | | |
| **18.** | **18. (*)** | | **Corolla lobe: colour of <u>middle</u> of <u>inner</u> side** | | | |
| **PQ** | **PQ** | **(c)** | | RHS Colour Chart (indicate reference number) | | |
| **19.** | **19.** | | **Corolla lobe: colour of <u>margin</u> of <u>outer</u> side** | | | |
| **PQ** | **PQ** | **(c)** | | RHS Colour Chart (indicate reference number) | | |
| **20.** | **20.** | | **Corolla lobe: colour of <u>middle</u> of <u>outer</u> side** | | | |
| **PQ** | **PQ** | **(c)** | | RHS Colour Chart (indicate reference number) | | |
| **21.** | **21. (*)** | | **Corolla lobe: undulation of margin** | | | |
| **QN** | **QN** | **(c)** | | absent or very weak | Désirée, Jory | 1 |
| | | | | weak | Dinos, Luci | 3 |
| | | | | medium | Schneekönigin, Sylt | 5 |
| | | | | strong | Eleonore, Sister Jo | 7 |
| | | | | very strong | Meggy | 9 |

| CPVO N° | UPOV N° | Characteristics | | Examples | Note |
|---|---|---|---|---|---|
| **22.** | **22. (*)** | **Flower throat: conspicuousness of markings** | | | |
| **QN** | **QN** | | absent or very weak | Charly, Georgentor, Janique | 1 |
| | | | weak | Otto, Paul Schultz | 3 |
| | | | medium | Friedhelm Scherrer, Jura | 5 |
| | | | strong | Kassandra, Ostali | 7 |
| | | | very strong | Gloria, Kolibri | 9 |
| **23. (+)** | **23. (*) (+)** | **Flower throat: type of markings** | | | |
| **PQ** | **PQ** | | spots not touching each other | Anna Luka, Otto, Sayonara | 1 |
| | | | spots touching each other | Friedhelm Scherrer, Ostali, Prinses Mathilde | 2 |
| | | | blotches surrounded by spots | Rena | 3 |
| **24.** | **24.** | **Flower throat: colour of markings** | | | |
| **PQ** | **PQ** | | yellow green | Irish Lace | 1 |
| | | | red | Miss Lulu | 2 |
| | | | brown red | Anne, Royalty | 3 |
| | | | violet | Lavender Lace | 4 |
| **25.** | **25. (*)** | **Flower throat: colour compared to colour of middle of inner side of corolla lobe (excluding markings)** | | | |
| **QN** | **QN** | | lighter | Pharao, Ronja | 1 |
| | | | same colour | Paradiso, Robijn | 2 |
| | | | darker | Rika, Schumann | 3 |

| CPVO N° | UPOV N° | Characteristics | | Examples | Note |
|---|---|---|---|---|---|
| **26.** | **26.** | **Anther: colour** | | | |
| **PQ** | **PQ** | | yellow | Mont Blanc, Reinhild | 1 |
| | | | light brown | | 2 |
| | | | dark brown | Miss Lulu | 3 |
| | | | purple | | 4 |
| | | | violet | Mont Ventoux, Ronja | 5 |
| **27.** **(+)** | **27.** **(*)** **(+)** | **Time of beginning of flowering** | | | |
| **QN** | **QN** | | very early | Helmut Vogel, Rena | 1 |
| | | | early | Ambrosiana, Otto | 3 |
| | | | medium | Friedhelm Scherrer, Spreeperle | 5 |
| | | | late | Sachsenstern, Tamira | 7 |
| | | | very late | van Straelen | 9 |

# EXPLANATIONS ON THE TABLE OF CHARACTERISTICS

## Explanations covering several characteristics

The optimum stage of development for the assessment of the characteristics is when half of the flowers on each plant are fully open.

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

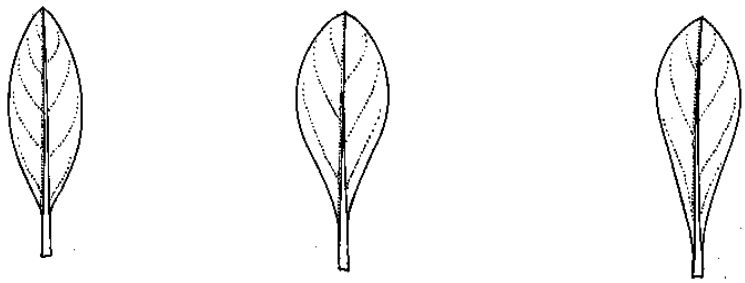
(a) All observations on the mature leaf should be made on the second leaf below the flower bud at the time of opening of the flower bud.
(b) All observations on the flower should be made on a fully developed flower from a plant on which half of the flowers are fully open. The first fully developed flower should not be observed.
(c) All observations on the corolla lobes of varieties with semi-double or double flowers should be made on the outer whirl of the corolla lobes.

## Explanations for individual characteristics

Ad. 2: Young leaf: colour of upper side

Observations should be made on the fully developed leaf of the shoot grown after the last pinching.

Ad. 5: Mature leaf: shape



1 elliptic | 2 elliptic to obovate | 3 obovate

Ad. 13: Flower: type

A single flower has 5 corolla lobes only.
A semi-double flower has between 6 and 10 corolla lobes.
A double flower has more than 10 corolla lobes.

Ad. 14: Flower: shape

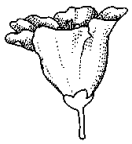
1
wide funnel-shaped

2
open funnel-shaped

3
medium funnel-shaped

4
narrow funnel-campanulate

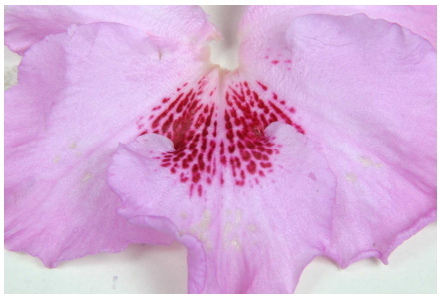
5
wide funnel-campanulate



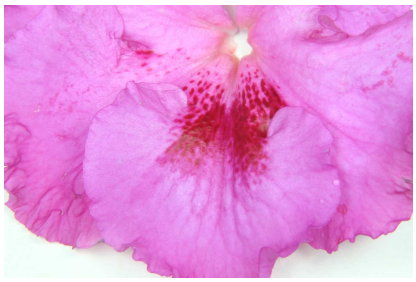
6
medium campanulate

Ad. 23: Flower throat: type of markings

1
spots not touching each other



2
spots touching each other



3
blotches surrounded by spots

Ad. 27: Time of beginning of flowering

The time of beginning of flowering is when 50% of the plants have at least one fully open flower.

# LITERATURE

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Struppek, G., 1983: Treibfibel, Wegweiser für die Treiberei von Topfazaleen. Lehr- und Versuchsanstalt Bad Zwischenahn.

Vogel, H., 1982: Azaleen, Eriken, Kamelien. Verlag Paul Parey, Berlin und Hamburg.

# ANNEX II

The Technical Questionnaire is available on the CPVO website under the following reference: CPVO-TQ/140/1