|    | Plant                | Rhododendron |                   | 93(0        | 09006)               | Primary essential character   |   |
|----|----------------------|--------------|-------------------|-------------|----------------------|---|---|
| No | Cha                  | racters      | No. of samples    | Methods     |                      | Rank or measurement unit  | Remarks   |
| 1  | Number of flower clu | flowers per  | 5 flower clusters | Measurement | (round               | to the 1st decimal place)   | Measure at flowering stage                                |
| 2  | Leaf lengt           | ch of spring | 5 leaves          | Measurement | mm (integ            | er)   | Measure in summer   |
| 3  | Hairiness<br>leaf    | of spring    | 5 leaves          | Observation |                      | arce 3:Sparce 5:Intermediate<br>9:Very dense                        | Amount of pubescence and glandular hair of dorsal surface |
| 4  | Glossiness           | s of spring  | 5 leaves          | Observation | 0:Absent<br>7:Strong | 1:Very weak 3:Weak 5:Intermediate                                   | Glossiness of abaxial surface of spring leaves in summer  |
| 5  | Time of fl           | owering      | Block             | Observation | _                    | rly 3:Early 4:Slightly early<br>diate 6:Slightly late 7:Late 8:Very | Time when 80% of all plants have flowered                 |
| 6  | Corolla tu           | abe length   | 5 flowers         | Measurement | mm (integ            | er)   | Measure at flowering stage                                |
| 7  | Corolla lo           | bbe width    | 5 flowers         | Measurement | mm (integ            | er)   | Measure at flowering stage                                |
| 8  | Color of f           | flower       | 5 flowers         | Measurement |                      |   | Refer to the RHS color chart at flowering stage           |
| 9  | Amount of            | blotches     | 5 flowers         | Observation | 0:Absent<br>7:High   | 1:Very low 3:Low 5:Intermediate                                     | Observe at flowering stage                                |
| 10 | Color of h           | olotches     | 5 flowers         | Measurement |                      |   | Refer to the RHS color chart at flowering stage           |
| 11 | Hairiness            | of ovary     | 5 flowers         | Observation |                      | 1:Very sparse 3:Sparse<br>diate 7:Dense                             | Observed at flowering stage                               |
| 12 | Type of fl           | ower         | 5 flowers         | Observation |                      | 3:Semi-double 5:Single, hose in hose ouble, hose in hose 9:Double   | Observed at flowering stage                               |

|    | Plant               | Rhododendron  |                | 93          | (09006)            | Primary optional character    |   |
|----|---------------------|---------------|----------------|-------------|--------------------|-------------------------------|---|
| No | Cha                 | racters       | No. of samples | Methods     |                    | Rank or measurement unit      | Remarks   |
| 1  | Tree form           |               | 5 plants       | Observation | 3:Spreadi          | ng 5:Intermediate 7:Erect     | Time of growth cessation in autumn              |
| 2  | Tree heigh          | nt            | 5 plants       | Observation | 3:Dwarf            | 5:Intermediate 7:High         | Plant age is at least 5 years.                  |
| 3  | Circumfere          |               | 5 branches     | Observation | 3:Small            | 5:Intermediate 7:Large        | Time of cessation of outward growth in autumn   |
| 4  | Color of 3          | oung shoot    | 5 shoots       | Observation | 1:White<br>9:Brown | 3:Green 5:Red 7:Reddish brown | Time of bud break in spring                     |
| 5  | Density of          |               | 5 plants       | Observation | 3:Sparse           | 5:Intermediate 7:Dense        | Time of growth cessation in autumn              |
| 6  | Density of          | twigs         | 5 plants       | Observation | 3:Sparse           | 5:Intermediate 7:Dense        | Time of growth cessation in autumn              |
| 7  | Pubescence          | e of young    | 5 shoots       | Observation | 3:Sparse           | 5:Intermediate 7:Dense        | Observe in spring                               |
| 8  | Serration<br>leaves | of spring     | 5 leaves       | Observation | 3:Little           | 5:Intermediate 7:Much         | Observe in spring                               |
| 9  | Curvature           | of leaf       | 5 leaves       | Observation | 3:Incurvi          | ing 5:Straight 7:Reflexing    | Observe in summer                               |
| 10 | Undulation          | n of margin   | 5 leaves       | Observation | _                  | ly undulate 5:Intermediate    | Observe in summer                               |
| 11 | Shape of r          | midrib cross- | 5 leaves       | Observation | 3:Concave          | e 5:Flat 7:Convex             | Observe in summer                               |
| 12 | Twisting (          | of leaf       | 5 leaves       | Observation | 3:Weak 5           | 5:Intermediate 7:Strong       | Observe in summer                               |
| 13 | Shape of I          | leaf apex     | 5 leaves       | Observation | 3:Obtuse           | 5:Intermediate 7:Apiculate    | Observe in summer                               |
| 14 | Color of s          | spring leaves | 5 leaves       | Measurement |                    |                               | Refer to the RHS color chart. Measure in summer |
| 15 | Color of a          | autumn leaves | 5 leaves       | Measurement |                    |                               | Refer to the RHS color chart. Measure in winter |

|    | Plant                               | Rhododendron                |                | 9           | 3(09006)  | Primary optional character  |                   |
|----|-------------------------------------|-----------------------------|----------------|-------------|-----------|-----------------------------|-------------------|
| No | Cha                                 | aracters                    | No. of samples | Methods     |           | Rank or measurement unit    | Remarks           |
| 16 | Thickness<br>leaves                 | of spring                   | 5 leaves       | Measurement | mm (round | to the 1st decimal place)   | Measure in summer |
| 17 | Pubescenc<br>abaxial s<br>spring le | urface of                   | 5 leaves       | Observation | 3:Flat 5  | Simple 7:Wavy               | Observe in summer |
| 18 | Glandular<br>dorsal su<br>spring le | rface of                    | 5 leaves       | Observation | 0:Absent  | 9:Present                   | Observe in summer |
| 19 | Amount of dorsal su spring le       |                             | 5 leaves       | Observation | 3:Sparse  | 5:Intermediate 7:Dense      | Observe in summer |
| 20 | Pubescenc<br>dorsal su<br>spring le | rface of                    | 5 leaves       | Observation | 3:Flat 5  | S:Simple 7:Wavy             | Observe in summer |
| 21 | Thickness<br>leaf                   | of summer                   | 5 leaves       | Measurement | mm (round | l to the 1st decimal place) | Measure in winter |
| 22 | Pubescenc<br>abaxial s<br>summer le | urface of                   | 5 leaves       | Observation | 3:Flat 5  | Simple 7:Wavy               | Observe in winter |
| 23 | Pubescenc<br>dosal sur<br>leaf      | e type of<br>face of summer | 5 leaves       | Observation | 3:Flat 5  | :Simple 7:Wavy              | Observe in winter |
| 24 | Amount of dorsal su summer le       |                             | 5 leaves       | Observation | 3:Sparse  | 5:Intermediate 7:Dense      | Observe in winter |

|    | Plant                               | Rhododendron                |                   | !          | 93(09006)    | Primary optional character         |                   |
|----|-------------------------------------|-----------------------------|-------------------|------------|--------------|------------------------------------|-------------------|
| No | Cha                                 | aracters                    | No. of samples    | Methods    | 5            | Rank or measurement unit           | Remarks           |
| 25 | Pubescenc<br>abaxial s<br>spring le | urface of                   | 5 leaves          | Observatio | on 3:White   | 5:Brown 7:Black                    | Observe in summer |
| 26 | Pubescenc<br>dorsal su<br>spring le | rface of                    | 5 leaves          | Observatio | on 3:White   | 5:Brown 7:Black                    | Observe in summer |
| 27 | Pubescenc abaxial summer le         |                             | 5 leaves          | Observatio | on 3:White   | 5:Brown 7:Black                    | Observe in winter |
| 28 | Glandular<br>dorsal su<br>summer le | rface of                    | 5 leaves          | Observatio | on 0:Absent  | 9:Present                          | Observe in winter |
| 29 | Pubescenc<br>dorsal su<br>summer le | rface of                    | 5 leaves          | Observatio | on 3:White   | 5:Brown 7:Black                    | Observe in winter |
| 30 |                                     | of abaxial<br>f summer leaf | 5 leaves          | Observatio | on 0:Absent  | 9:Present                          | Observe in winter |
| 31 | Waxiness surface o                  | of dorsal<br>f summer leaf  | 5 leaves          | Observatio | on 0:Absent  | 9:Present                          | Observe in winter |
| 32 | Waxiness summer le                  | of petiole of               | 5 leaves          | Observatio | on 0:Absent  | 9:Present                          | Observe in winter |
| 33 | Attitude                            | of spring leaf              | 5 leaves          | Observatio | on 3:Semi-up | wards 5:Horizontal 7:Drooping      | Observe in summer |
| 34 | Attitude                            | of summer leaf              | 5 leaves          | Observatio | on 3:Semi-up | wards 5:Horizontal 7:Drooping      | Observe in winter |
| 35 | Type of f                           | lower cluster               | 5 flower clusters | Observatio | on 2:Termina | l 5:Terminal and lateral 8:Lateral | Observe in autumn |

|    | Plant              | Rhododendron                   |                |             | 93(0 | )9006)                 | Primary optional character   |  |
|----|--------------------|--------------------------------|----------------|-------------|------|------------------------|--|--|
| No | Cha                | racters                        | No. of samples | Method      | ls   |                        | Rank or measurement unit   | Remarks  |
| 36 | Attitude (         | of flower                      | 5 flowers      | Observation | on   | 3:Erect                | 5:Horizontal 7:Drooping  | Observe from horizontal level at flowering stage     |
| 37 | Shape of           | flower bud                     | 5 buds         | Observation | on   | 3:Acute                | 5:Elliptic 7:Round   | Observe just before flowering in spring              |
| 38 | Incision (         | of corolla                     | 5 flowers      | Observation | on   | 3:Weak 5               | 5:Intermediate 7:Strong  | Rate of incision for corolla tube                    |
| 39 | Symmetry o         | of corolla                     | 5 flowers      | Observatio  | on   | 1:Asymmet              | cric 8:Symmetric   | Observe at flowering stage                           |
| 40 | Shape of a         | upper half of                  | 5 flowers      | Observation | on   |                        | 2:Lanceolate 3:Ovate 4:Oblanceolate<br>te 6:Semi-elliptic 7:Semi-orbicular | Observe at flowering stage                           |
| 41 | Shape of I         | lower half of                  | 5 flowers      | Observation | on   |                        | 2:Lanceolate 3:Ovate 4:Oblanceolate<br>te 6:Semi-elliptic 7:Semi-orbicular | Observe at flowering stage                           |
| 42 | Shape of a         | -                              | 5 flowers      | Observation | on   | 3:Concave              | e 5:Flat 7:Convex  | Observe at flowering stage                           |
| 43 | Overlappin         | ng of corolla                  | 5 flowers      | Observation | on   | 1:Not ove<br>7:Overlag | erlapping 3:Touching 5:Intermediate  | Observe from side of corolla tube at flowering stage |
| 44 | Incision (         |                                | 5 flowers      | Observation | on   | 0:Absent               | 9:Present  | Observe at flowering stage                           |
| 45 | Undulation<br>lobe | n of corolla                   | 5 flowers      | Observation | on   | 0:Absent               | 3:Weak 5:Intermediate 7:Strong   | Observe at flowering stage                           |
| 46 |                    | e of dorsal<br>f corolla lobe  | 5 flowers      | Observation | on   | 0:Absent               | 9:Present  | Observe at flowering stage                           |
| 47 |                    | e of abaxial<br>f corolla lobe | 5 flowers      | Observation | on   | 0:Absent               | 9:Present  | Observe at flowering stage                           |
| 48 | Scaly hair         | r of corolla                   | 5 flowers      | Observation | on   | 0:Absent               | 9:Present  | Observe at flowering stage                           |

|    | Plant               | Rhododendron  |                | 9          | 93(09006)   | Primary optional character        |  |
|----|---------------------|---------------|----------------|------------|-------------|-----------------------------------|--|
| No | Ch                  | aracters      | No. of samples | Methods    | 3           | Rank or measurement unit          | Remarks  |
| 49 | Diameter            | of flower     | 5 flowers      | Measuremen | t 3:Small   | 5:Intermediate 7:Large            | Observed at the flowering stage                                  |
| 50 | Corolla w           | ridth         | 5 flowers      | Measuremen | t 3:Narrow  | 5:Intermediate 7:Wide             | Width of corolla from side to side at flowering stage            |
| 51 | Corolla 1           | ength         | 5 flowers      | Measuremen | t 3:Short   | 5:Intermediate 7:Long             | Length of corolla from the base to top at flowering stage        |
| 52 | Type of f           | lower color   | 5 plants       | Observatio | n 1:Single- | -colored 2:Bicolored              | Observe at flowering stage                                       |
| 53 | Variegati<br>color  | on of flower  | 5 plants       | Observatio | n 0:Absent  | 3:Weak 5:Intermediate 7:Strong    | Observe at flowering stage                                       |
| 54 | Margin of           |               | 5 plants       | Observatio |             | 3:White throat 5:White jewel spot | Observe at flowering stage                                       |
| 55 | White jew           | vel-border of | 5 plants       | Observatio | n 0:Absent  | 9:Present                         | Observe at flowering stage                                       |
| 56 | Crimson f           | ingernail of  | 5 plants       | Observatio | n 0:Absent  | 9:Present                         | Observe at flowering stage                                       |
| 57 |                     | f light and   | 5 flowers      | Observatio | n 0:Absent  | 9:Present                         | Observe at flowering stage                                       |
| 58 | Change of           | flower color  | 5 flowers      | Observatio | n 0:Absent  | 9:Present                         | Change in flower color from beginning of flowering to full bloom |
| 59 | Hue of fl           | ower core     | 5 flowers      | Observatio | n 3:Bright  | 5:Same 7:Dull                     | Observe at flowering stage                                       |
| 60 | Variation<br>number | of lobe       | 5 flowers      | Observatio | n 0:Absent  | 9:Present                         | Observe at flowering stage                                       |
| 61 | Number of           | corolla lobes | 5 flowers      | Measuremen | t 0:None 3  | 8:5 5:6 7:7                       | Measure at flowering stage                                       |
| 62 | Petal sha           | pe of stamen  | 5 flowers      | Observatio | n 0:Absent  | 3:Partly 5:Incomplete 7:Complete  | Observe at flowering stage                                       |

|    | Plant                  | Rhododendron  |                |             | 93(09006)              | Primary optional character  |  |
|----|------------------------|---------------|----------------|-------------|------------------------|---|--|
| No | Cha                    | aracters      | No. of samples | Methods     | 5                      | Rank or measurement unit  | Remarks  |
| 63 | Curvature              | of stamen     | 5 flowers      | Observatio  | on 0:Absent            | 3:Slight 5:Intermediate 7:Strong  | Observe at flowering stage                     |
| 64 | Glandular<br>stamen    | hair of       | 5 flowers      | Observation | on 0:Absent            | 9:Present   | Observe at flowering stage                     |
| 65 | Pubescenc<br>stamen    | e length of   | 5 flowers      | Observatio  | on 3:Short             | 5:Intermediate 7:Long   | Observe at flowering stage                     |
| 66 | Number of              | stamens       | 5 flowers      | Measuremen  | it (intege             | er)   | Measure at flowering stage                     |
| 67 | Length of              | stamen        | 5 flowers      | Observatio  | on 3:Shorte            | er 5:Same 7:Longer  | Compare stamen with corolla at flowering stage |
| 68 | Color of               | filament      | 5 flowers      | Observation | on 0:White<br>8:Purple | 2:Yellow 4:Red 6:Reddish purple   | Observe at flowering stage                     |
| 69 | Color of               | anther        | 5 flowers      | Observation | on 0:White             | 2:Yellow 4:Brown 6:Purple 8:Red   | Observe at flowering stage                     |
| 70 | Petal dev              | elopment of   | 5 flowers      | Observatio  | on 3:Absent            | 7:Developed   | Observe at flowering stage                     |
| 71 | Glandular              | hair of ovary | 5 flowers      | Observatio  | on 0:Absent            | 9:Present   | Observe at flowering stage                     |
| 72 | Length of              | pistil        | 5 flowers      | Observatio  | on 3:Shorte            | er 5:Same 7:Longer  | Compare at flowering stage                     |
| 73 | Color of               | style         | 5 flowers      | Observation |                        | 2:Yellow 3:Light green 4:Light red 5:Light purple 7:Purplish red 8:Purple | Observe at flowering stage                     |
| 74 | Color of               | stigma        | 5 flowers      | Observatio  |                        | 2:Yellow 3:Light green 4:Light red<br>V:Purplish red 8:Purple             | Observe at flowering stage                     |
| 75 | Glandular              | hair of style | 5 flowers      | Observatio  | on 0:Absent            | 9:Present   | Observe at flowering stage                     |
| 76 | Color of scale         | flower bud    | 5 flowers      | Observatio  | on 1:Green             | 5:Red 8:Brown   | Observe at flowering stage                     |
| 77 | Overlappi<br>bud scale |               | 5 flowers      | Observatio  | on 0:No ove            | erlapping 9:Overlapping   | Observe before flowering                       |

|    | Plant                 | Rhododendron  |                | 93(         | 09006)    | Primary optional character                      |                            |
|----|-----------------------|---------------|----------------|-------------|-----------|---|----------------------------|
| No | Char                  | racters       | No. of samples | Methods     |           | Rank or measurement unit                        | Remarks                    |
| 78 | Presence o            | f hose in     | 5 flowers      | Observation | 0:Absent  | 9:Present                                       | Observe at flowering stage |
| 79 | Degree of             | hose in hose  | 5 flowers      | Observation |           | 4:Slightly small 5:Intermediate y large 7:Large | Observe at flowering stage |
| 80 | Coalescence with base | -             | 5 flowers      | Observation | 0:Absent  | 9:Present                                       | Observe at flowering stage |
| 81 | Number of             | calyxes       | 5 flowers      | Measurement | 3:5 5:6   | 7:7   | Observe at flowering stage |
| 82 | Difference<br>size    | s in calyx    | 5 flowers      | Observation | 0:Absent  | 9:Present                                       | Observe at flowering stage |
| 83 | Shape of c            | alyx          | 5 flowers      | Observation | 1:Promine | ent 3:Orbicular 5:Lanceolate                    | Observe at flowering stage |
| 84 | Calyx leng            | th            | 5 flowers      | Measurement | mm (round | d to the 1st decimal place)                     | Observe at flowering stage |
| 85 | Calyx widt            | h             | 5 flowers      | Measurement | mm (round | d to the 1st decimal place)                     | Observe at flowering stage |
| 86 | Coloration<br>margin  | of calyx      | 5 flowers      | Observation | 0:Absent  | 9:Present                                       | Observe at flowering stage |
| 87 | Pubescence            | of calyx      | 5 flowers      | Observation | 0:Absent  | 9:Present                                       | Observe at flowering stage |
| 88 | Glandular :           | hair of calyx | 5 flowers      | Observation | 0:Absent  | 9:Present                                       | Observe at flowering stage |
| 89 | Pedicel le            | ngth          | 5 flowers      | Observation | 3:Short   | 5:Intermediate 7:Long                           | Observe at flowering stage |
| 90 | Pedicel wi            | dth           | 5 flowers      | Observation | 3:Narrow  | 5:Intermediate 7:Broad                          | Observe at flowering stage |

|    | Plant                    | Rhododendron                |                | 93(         | 09006)     | Secondary essential character                          |        |  |
|----|--------------------------|-----------------------------|----------------|-------------|------------|--|--------|--|
| No | Cha                      | racters                     | No. of samples | Methods     |            | Rank or measurement unit                               |        | Remarks  |
| 1  | 1 Time of leaf fall      |                             | 5 branches     | Measurement |            |  |        | Time of month when leaves developed in spring fall. First ten days=E, middle ten days=M, the last ten days=L |
| 2  | Length of                | flowering                   | 5 plants       | Measurement | days (inte | eger)  |        | Length of time from 10% to 90% of plants have flowered   |
| 3  | Cold hard:               | iness                       | 5 plants       | Observation | _          | w 3:Low 4:Slightly low<br>diate 6:Slightly high 7:High | 8:Very | Degree of browning and dying of florets in winter  |
| 4  | Resistance               | e to Earias                 | 5 plants       | Observation | 1 -        | w 3:Low 4:Slightly low<br>diate 6:Slightly high 7:High | 8:Very | Degree of damage to flower buds in autumn  |
| 5  | Resistance<br>Anthracnos |                             | 5 plants       | Observation | _          | w 3:Low 4:Slightly low<br>diate 6:Slightly high 7:High |        | Degree of occurrence in spring and summer  |
| 6  | Resistance               | e to botrytis<br>ght        | 5 plants       | Observation | _          | w 3:Low 4:Slightly low<br>diate 6:Slightly high 7:High |        | Degree of occurrence at flowering stage  |
| 7  |                          | e to disease<br>propagation | 5 plants       | Observation | _          | w 3:Low 4:Slightly low<br>diate 6:Slightly high 7:High |        | Degree of occurrence from spring to autumn   |

|    | Plant                  | Rhododendron   |                | 93((        | 09006)    | Secondary optional character  |  |
|----|------------------------|----------------|----------------|-------------|-----------|---|--|
| No | Cha                    | racters        | No. of samples | Methods     |           | Rank or measurement unit  | Remarks  |
| 1  | Time of ge             | ermination     | 5 plants       | Measurement |           |   | Time of mouth when bud break begins. E=first ten days, M=middle ten days, L=the last ten days  |
| 2  | Ever-flowe             | ering ability  | 5 plants       | Observation |           | E:Very weak 3:Weak 4:Slightly weak diate 6:Slightly strong 7:Strong | Observe flowering shoot in all seasons   |
| 3  | Heat toler             | cance          | 5 plants       | Observation | _         | ow 3:Low 4:Slightly low diate 6:Slightly high 7:High 8:Very         | Degree of growth damage under high temperature in summer   |
| 4  | Drought to             | olerance       | 5 plants       | Observation | _         | ow 3:Low 4:Slightly low diate 6:Slightly high 7:High 8:Very         | Degree of growth damage under drought condition in all season  |
| 5  | Resistance             | e to lace bug  | 5 plants       | Observation | _         | ow 3:Low 4:Slightly low diate 6:Slightly high 7:High 8:Very         | Degree of damage at the time of occurrence   |
| 6  | Resistance             | e to white fly | 5 plants       | Observation | _         | ow 3:Low 4:Slightly low diate 6:Slightly high 7:High 8:Very         | Degree of damage at the time of occurrence   |
| 7  | Resistance<br>die-back | e to phomopsis | 5 plants       | Observation | _         | ow 3:Low 4:Slightly low diate 6:Slightly high 7:High 8:Very         | Degree of damage at the time of occurrence   |
| 8  | Forcing ak             | oility         | 5 plants       | Measurement | days (int | eger)   | Length between the day when plants are put in heat room kept at the minimum night temperature of 10 centi degrees, and the day of flowering. |
| 9  | Cutting ak             | pility         | 5 plants       | Measurement | Number (i | nteger)   | Number of cuttings per biennial branch in all seasons  |
| 10 | Rooting ak             | oility         | 10 cuttings    | Measurement | Number (i | nteger)   | Plant shoots after flowering for cutting, then two months later count rootings whose length is at least 1 mm                                 |

|  | Plant | nt Rhododendron |                |           |              | Tertiary essential character |               |
|--|-------|-----------------|----------------|-----------|--------------|------------------------------|---------------|
| No Characters  1 Regenerative shoot length |       | aracters        | No. of samples | Methods   |              | Rank or measurement unit     | Remarks       |
|  |       | ive shoot       | 5 shoots       | Measureme | nt cm (integ | ger)                         | After pruning |