



These Test Guidelines have been superseded by a later version. The latest adopted version of Test Guidelines can be found at [http://www.upov.int/test\\_guidelines/en/list.jsp](http://www.upov.int/test_guidelines/en/list.jsp)

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Ces principes directeurs d'examen ont été remplacés par une version ultérieure. La version adoptée la plus récente des principes directeurs d'examen figure à l'adresse suivante : [http://www.upov.int/test\\_guidelines/fr/list.jsp](http://www.upov.int/test_guidelines/fr/list.jsp)

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Diese Prüfungsrichtlinien wurden durch eine neuere Fassung ersetzt. Die neueste angenommene Fassung von Prüfungsrichtlinien ist unter [http://www.upov.int/test\\_guidelines/en/list.jsp](http://www.upov.int/test_guidelines/en/list.jsp) zu finden.

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Las presentes directrices de examen han sido reemplazadas por una versión posterior. La versión de las directrices de examen de más reciente aprobación está disponible en [http://www.upov.int/test\\_guidelines/es/list.jsp](http://www.upov.int/test_guidelines/es/list.jsp).

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INTERNATIONAL UNION  
FOR THE PROTECTION  
OF NEW VARIETIES OF  
PLANTS

UNION INTERNATIONALE  
POUR LA PROTECTION  
DES OBTENTIONS  
VÉGÉTALES

INTERNATIONALER  
VERBAND ZUM SCHUTZ  
VON PFLANZEN-  
ZÜCHTUNGEN

UNIÓN INTERNACIONAL  
PARA LA PROTECCIÓN  
DE LAS OBTENCIONES  
VEGETALES

**GUIDELINES**  
**FOR THE CONDUCT OF TESTS**  
**FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

**PUMPKIN**  
*(Cucurbita maxima Duch.)*

**GENEVA**  
**1996**

Copies of this document are available on request at the price of 10 Swiss francs each, including surface mail, from the Office of UPOV, 34, chemin des Colombettes, P.O. Box 18, 1211 Geneva 20, Switzerland.

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These Guidelines should be read in conjunction with document TG/1/2, which contains explanatory notes on the general principles on which the Guidelines have been established.

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## I. Subject of these Guidelines

These Test Guidelines apply to all varieties of *Cucurbita maxima* Duch.

## II. Material Required

1. The competent authorities decide when, where and in what quantity and quality the seed required for testing the variety is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must make sure that all customs formalities are complied with. The minimum quantity of seed to be supplied by the applicant in one or several samples should be:

100 g.

The seed should at least meet the minimum requirements for germination capacity, moisture content and purity for marketing seed in the country in which the application is made. The germination capacity should be as high as possible.

2. The plant material must not have undergone any treatment unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

## III. Conduct of Tests

1. The minimum duration of tests should normally be two similar growing periods.

2. The tests should normally be conducted at one place. If any important characteristics of the variety cannot be seen at that place, the variety may be tested at an additional place.

3. The tests should be carried out under conditions ensuring normal growth. The size of the plots should be such that plants or parts of plants may be removed for measurement and counting without prejudice to the observations which must be made up to the end of the growing period. Each test should include a total of 20 plants which should be divided between two or more replicates. Separate plots for observation and for measuring can only be used if they have been subject to similar environmental conditions.

4. Additional tests for special purposes may be established.

## IV. Methods and Observations

1. All observations determined by measurement or counting should be made on 10 plants or parts of 10 plants.

2. For the assessment of uniformity of hybrid varieties a population standard of 1% with an acceptance probability of at least 95% should be applied to off-types excluding clearly recognisable inbred plants. In the case of a sample size of 20 plants, the maximum number of off-types allowed would be 1. In addition, a population standard of 1% with the same acceptance probability should be applied to clearly recognizable inbred plants. In the case of a sample size of 20 plants the additional maximum number of clearly recognizable inbred plants allowed would be 1.
3. All observations on the leaf should be made on fully developed leaves when the fruit starts developing and should exclude the lower external leaves.
4. All observations on the ripe fruit should be made on the first fully ripe fruit.

#### V. Grouping of Varieties

1. The collection of varieties to be grown should 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. Their various states of expression should be fairly evenly distributed throughout the collection.
2. It is recommended that the competent authorities use the following characteristics for grouping varieties:
  - (a) Plant: growth habit (characteristic 2)
  - (b) Fruit: size (characteristic 16)
  - (c) Fruit: shape in longitudinal section (characteristic 19)
  - (d) Fruit: grooves (characteristic 22)
  - (e) Fruit: number of colors of skin (characteristic 24)
  - (f) Fruit: main color of skin (characteristic 25)
  - (g) Fruit: thickness of flesh (characteristic 31).

#### VI. Characteristics and Symbols

1. To assess distinctness, uniformity and stability, the characteristics and their states as given in the Table of Characteristics should be used.
2. Notes (numbers), for the purposes of electronic data processing, are given opposite the states of expression for each characteristic.
3. Legend:
  - (\*) Characteristics that should be used on all varieties in every growing period over which the examinations are made and always be included in the variety descriptions, except when the state of expression of a preceding characteristic or regional environmental conditions render this impossible.
  - (+) See Explanations on the Table of Characteristics in chapter VIII.

VII. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

| English  | français  | deutsch  | español  | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|--|---|--|--|--|---------------|
| <b>1. Plant: shape of cotyledon</b>                          | <b>Plante: forme du cotylédon</b>                                 | <b>Pflanze: Form des Keimblatts</b>                            | <b>Planta: forma del cotiledón</b>               |  |               |
| elliptic   | elliptique  | elliptisch   | elíptica   | Uchiki Kuri  | 1             |
| broad elliptic   | elliptique large  | breit elliptisch   | elíptica ancha                                   | Jaune Gros de Paris  | 2             |
| obovate  | obovale   | verkehrt eiförmig  | oboval   | Big Max  | 3             |
| <b>2. (*) Plant: growth habit</b>                            | <b>Plante: type de croissance</b>                                 | <b>Pflanze: Wuchsform</b>                                      | <b>Planta: hábito de crecimiento</b>             |  |               |
| bushy  | buissonnante  | buschig  | arbustivo  |  | 1             |
| semibushy  | semi-buissonnante   | halbbuschig  | semiarbustivo                                    | Ambar, Aura  | 2             |
| trailing   | coureuse  | Ausläufer bildend  | rastrero   | Jaune Gros de Paris  | 3             |
| <b>3. (*) Stem: color</b>                                    | <b>Tige: couleur</b>  | <b>Trieb: Farbe</b>  | <b>Tallo: color</b>                              |  |               |
| yellow   | jaune   | gelb   | amarillo   |  | 1             |
| green  | verte   | grün   | verde  | Jaune Gros de Paris  | 2             |
| <b>4. (*) Leaf blade: size</b>                               | <b>Limbe: taille</b>  | <b>Blattspreite: Größe</b>                                     | <b>Limbo: tamaño</b>                             |  |               |
| small  | petit   | klein  | pequeño  | Baby Blue  | 3             |
| medium   | moyen   | mittel   | medio  | Delica   | 5             |
| large  | grand   | groß   | grande   | Jaune Gros de Paris  | 7             |
| <b>5. Leaf blade: intensity of green color of upper side</b> | <b>Limbe: intensité de la couleur verte de la face supérieure</b> | <b>Blattspreite: Intensität der Grünfärbung der Oberfläche</b> | <b>Limbo: intensidad del color verde del haz</b> |  |               |
| light  | claire  | hell   | claro  | Elza   | 3             |
| medium   | moyenne   | mittel   | medio  | Delica   | 5             |
| dark   | foncée  | dunkel   | oscuro   | Japan Cup  | 7             |

| English   | français   | deutsch  | español   | Example Varieties<br>Exemples<br>Beispielsorten<br>Variedades ejemplo | Note/<br>Nota |
|---|--|--|---|---|---------------|
| <b>6. Petiole: length<br/>(* )</b>  | <b>Pétiolo: longueur</b>   | <b>Blattstiel: Länge</b>   | <b>Peciolo: longitud</b>  |   |               |
| short   | court  | kurz   | corto   | Doux d'Okaido   | 3             |
| medium  | moyen  | mittel   | medio   | Sweet Mama  | 5             |
| long  | long   | lang   | largo   | Uchiki Kuri   | 7             |
| <b>7. Petiole: thickness<br/>(at base)</b>  | <b>Pétiolo: grosseur (à la base)</b>   | <b>Blattstiel: Dicke<br/>(an der Basis)</b>  | <b>Peciolo: grosor (en la base)</b>   |   |               |
| thin  | fin  | dünn   | delgado   | Uchiki Kuri   | 3             |
| medium  | moyen  | mittel   | medio   | Delica  | 5             |
| thick   | gros   | dick   | grueso  | Gladiator   | 7             |
| <b>8. Female flower:<br/>(* ) length of sepal</b>   | <b>Fleur femelle:<br/>longueur du sépale</b>   | <b>Weibliche Blüte:<br/>Länge des<br/>Kelchblatts</b>  | <b>Flor femenina:<br/>longitud del sépalo</b>   |   |               |
| short   | court  | kurz   | corto   | Potimarron  | 3             |
| medium  | moyen  | mittel   | medio   | Jaune Gros de Paris   | 5             |
| long  | long   | lang   | largo   | Elza  | 7             |
| <b>9. Female flower:<br/>intensity of orange<br/>color of pistil<br/>(before opening)</b> | <b>Fleur femelle:<br/>intensité de la<br/>couleur jaune du<br/>style (avant<br/>ouverture)</b> | <b>Weibliche Blüte:<br/>Intensität der<br/>Gelbfärbung des<br/>Griffels (vor dem<br/>Öffnen)</b> | <b>Flor femenina:<br/>intensidad del color<br/>naranja del pistilo<br/>(antes de la<br/>apertura)</b> |   |               |
| light   | claire   | hell   | claro   |   | 3             |
| medium  | moyenne  | mittel   | medio   |   | 5             |
| dark  | foncée   | dunkel   | oscuro  |   | 7             |
| <b>10. Male flower: length<br/>(* ) of pedicel</b>  | <b>Fleur mâle:<br/>longueur du<br/>pédicelle</b>   | <b>Männliche Blüte:<br/>Länge des<br/>Blütenstiels</b>   | <b>Flor masculina:<br/>longitud del<br/>pedicelo</b>  |   |               |
| short   | court  | kurz   | corto   | Elza  | 3             |
| medium  | moyen  | mittel   | medio   | Gladiator   | 5             |
| long  | long   | lang   | largo   | Doux d'Okaido   | 7             |

| English   | français  | deutsch   | español  | Example Varieties<br>Exemples<br>Beispielsorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---|--|---|---------------|
| <b>11. Male flower:<br/>diameter of pedicel</b>                     | <b>Fleur mâle:<br/>diamètre du<br/>pédicelle</b>                          | <b>Männliche Blüte:<br/>Durchmesser des<br/>Blütenstiels</b>                    | <b>Flor masculina:<br/>diámetro del<br/>pedicelo</b>                   |   |               |
| small   | petit   | klein   | pequeño  | Doux d'Okaido   | 3             |
| medium  | moyen   | mittel  | medio  | Delica  | 5             |
| large   | grand   | groß  | grande   | Gladiator   | 7             |
| <b>12. Male flower:<br/>intensity of green<br/>color of pedicel</b> | <b>Fleur mâle:<br/>intensité de la<br/>couleur verte du<br/>pédicelle</b> | <b>Männliche Blüte:<br/>Intensität der<br/>Grünfärbung des<br/>Blütenstiels</b> | <b>Flor masculina:<br/>intensidad del color<br/>verde del pedicelo</b> |   |               |
| light   | claire  | hell  | claro  | Jaune Gros de Paris,<br>Gladiator                                     | 3             |
| medium  | moyenne   | mittel  | medio  | Elza  | 5             |
| dark  | foncée  | dunkel  | oscuro   |   | 7             |
| <b>13. Male flower:<br/>hairiness of pedicel</b>                    | <b>Fleur mâle: pilosité<br/>du pédicelle</b>                              | <b>Männliche Blüte:<br/>Behaarung des<br/>Blütenstiels</b>                      | <b>Flor masculina:<br/>vellosidad del<br/>pedicelo</b>                 |   |               |
| weak  | faible  | gering  | débil  | Red Kuri  | 3             |
| medium  | moyenne   | mittel  | media  | Gladiator   | 5             |
| strong  | forte   | stark   | fuerte   | Hubbard Blue  | 7             |
| <b>14. Male flower: length<br/>(*<br/>of sepal</b>                  | <b>Fleur mâle:<br/>longueur du sépale</b>                                 | <b>Männliche Blüte:<br/>Länge des<br/>Kelchblatts</b>                           | <b>Flor masculina:<br/>longitud del sépalo</b>                         |   |               |
| short   | court   | kurz  | corta  | Delica, Turks Turban  | 3             |
| medium  | moyen   | mittel  | media  | Hubbard Blue  | 5             |
| long  | long  | lang  | larga  | Big Moon  | 7             |



| English                                     | français                                      | deutsch                               | español                                    | Example Varieties<br>Exemples<br>Beispielsorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|---------------------------------------|--|---|---------------|
| <b>15. Fruit: main color of pedicel (*)</b> | <b>Fruit: couleur principale du pédicelle</b> | <b>Frucht: Hauptfarbe des Stieles</b> | <b>Fruto: color principal del pedicelo</b> |   |               |
| yellow                                      | jaune   | gelb                                  | amarillo                                   |   | 1             |
| green                                       | vert  | grün                                  | verde                                      | Doux d'Okaido, Red Kuri   | 2             |
| <b>16. Fruit: size (*)</b>                  | <b>Fruit: taille</b>                          | <b>Frucht: Größe</b>                  | <b>Fruto: tamaño</b>                       |   |               |
| small                                       | petit   | klein                                 | pequeño                                    | Regal Early   | 3             |
| medium                                      | moyen   | mittel                                | medio                                      | Giraumon Turban   | 5             |
| large                                       | gros  | groß                                  | grande                                     | Big Max, Gladiator  | 7             |
| <b>17. Fruit: length (*)</b>                | <b>Fruit: longueur</b>                        | <b>Frucht: Länge</b>                  | <b>Fruto: longitud</b>                     |   |               |
| very short                                  | très court                                    | sehr kurz                             | muy corto                                  | Betty   | 1             |
| short                                       | court   | kurz                                  | corto                                      | Red Kuri  | 3             |
| medium                                      | moyen   | mittel                                | medio                                      | Uchiki Kuri   | 5             |
| long  | long  | lang                                  | largo                                      | Big Moon  | 7             |
| very long                                   | très long                                     | sehr lang                             | muy largo                                  | Banana Pink Jumbo   | 9             |
| <b>18. Fruit: diameter (*)</b>              | <b>Fruit: diamètre</b>                        | <b>Frucht: Durchmesser</b>            | <b>Fruto: diámetro</b>                     |   |               |
| small                                       | petit   | klein                                 | pequeño                                    | Uchiki Kuri   | 3             |
| medium                                      | moyen   | mittel                                | medio                                      | Rouge Vif d'Etampes   | 5             |
| large                                       | grand   | groß                                  | grande                                     | Big Max   | 7             |

| English  | français                                     | deutsch                                | español                                     | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|--|--|--|---|--|---------------|
| <b>19. Fruit: shape in longitudinal section</b><br>(*<br>(+) | <b>Fruit: forme en section longitudinale</b> | <b>Frucht: Form im Längsschnitt</b>    | <b>Fruto: forma en sección longitudinal</b> |  |               |
| capped   | en turban                                    | turbanartig                            | en turbante                                 | Giraumon Turban,<br>Turks Turban                                       | 1             |
| transverse elliptic  | elliptique transversale                      | quer elliptisch                        | elíptico transverso                         | Sweet Mama   | 2             |
| circular   | circulaire                                   | rund                                   | circular                                    | Mammoth, Jaune Gros de Paris   | 3             |
| quadrangular   | quadrangulaire                               | quadratisch                            | cuadrangular                                |  | 4             |
| obovate  | obovale                                      | verkehrt eiförmig                      | oboval                                      | Doux d'Okkaïdo,<br>Green Baby  | 5             |
| ovate  | ovale  | eiförmig                               | oval  | Hubbard Blue,<br>Hubbard Golden  | 6             |
| narrow elliptic  | elliptique étroite                           | schmal elliptisch                      | elíptico estrecho                           | Banana Pink Jumbo  | 7             |
| rectangular  | rectangulaire                                | rechteckig                             | rectangular                                 | Evergreen  | 8             |
| <b>20. Fruit: shape of stalk end</b><br>(*<br>(+)            | <b>Fruit: forme de la zone pédonculaire</b>  | <b>Frucht: Form des Stielendes</b>     | <b>Fruto: forma del extremo peduncular</b>  |  |               |
| depressed  | déprimée                                     | ingesenkt                              | deprimida                                   | Rouge Vif d'Etampes  | 1             |
| flat   | plane  | flach                                  | plana                                       |  | 2             |
| raised   | protubérante                                 | vorgewölbt                             | protuberante                                | Doux d'Okaido  | 3             |
| <b>21. Fruit: shape of apical end</b><br>(*<br>(+)           | <b>Fruit: forme du point apical</b>          | <b>Frucht: Form des apikalen Endes</b> | <b>Fruto: forma del extremo apical</b>      |  |               |
| depressed  | déprimé                                      | ingesenkt                              | deprimida                                   | Rouge Vif d'Etampes  | 1             |
| flat   | plan   | flach                                  | plana                                       |  | 2             |
| raised   | protubérant                                  | vorgewölbt                             | protuberante                                | Hubbard Blue   | 3             |

| English   | français                                       | deutsch                                     | español                                    | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|--|---|--|--|---------------|
| <b>22. Fruit: grooves</b><br>(*<br>(+)            | <b>Fruit: cannelures</b>                       | <b>Frucht: Furchen</b>                      | <b>Fruto: surcos</b>                       |  |               |
| absent  | absentes                                       | fehlend                                     | ausentes                                   | Jaune Gros de Paris  | 1             |
| present   | présentes                                      | vorhanden                                   | presentes                                  | Big Moon, Rouge Vif d'Etampes  | 9             |
| <b>23. Fruit: distance between grooves</b><br>(+) | <b>Fruit: distance entre les cannelures</b>    | <b>Frucht: Abstand zwischen den Furchen</b> | <b>Fruto: distancia entre surcos</b>       |  |               |
| short   | faible   | kurz  | corta                                      |  | 3             |
| medium  | moyenne  | mittel                                      | media                                      | Regal Early  | 5             |
| long  | grande   | lang  | larga                                      | Big Moon   | 7             |
| <b>24. Fruit: number of colors of skin</b><br>(*  | <b>Fruit: nombre de couleurs de l'épiderme</b> | <b>Frucht: Anzahl Farben der Schale</b>     | <b>Fruto: número de colores de la piel</b> |  |               |
| one   | une  | eine  | uno  | Gladiator  | 1             |
| two   | deux   | zwei  | dos  | Potimarron   | 2             |
| more than two                                     | plus de deux                                   | mehr als zwei                               | tres                                       | Turks Turban   | 3             |
| <b>25. Fruit: main color of skin</b><br>(*        | <b>Fruit: couleur principale de l'épiderme</b> | <b>Frucht: Hauptfarbe der Schale</b>        | <b>Fruto: color principal de la piel</b>   |  |               |
| cream   | crème  | cremefarben                                 | crema                                      |  | 1             |
| yellow  | jaune  | gelb  | amarillo                                   | Jaune Gros de Paris  | 2             |
| orange  | orange   | orange                                      | naranja                                    | Regal Early  | 3             |
| pink  | rose   | rosa  | rosa                                       | Giraumon Turban  | 4             |
| red   | rouge  | rot   | rojo                                       | Rouge Vif d'Etampes  | 5             |
| green   | verte  | grün  | verde                                      | Delica   | 6             |
| grey green  | vert gris                                      | graugrün                                    | verde gris                                 | Japan Cup  | 7             |
| grey  | grise  | grau  | gris                                       | Baby Blue, Hubbard Blue  | 8             |

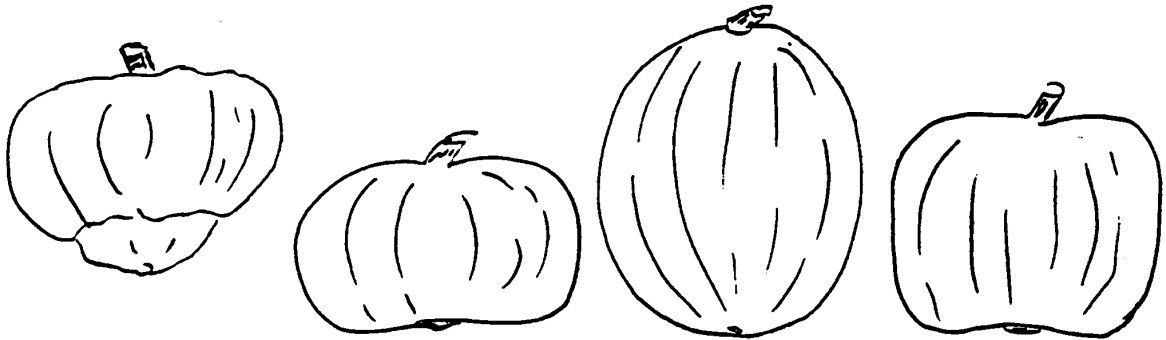
| English   | français   | deutsch   | español   | Example Varieties<br>Exemples<br>Beispielsorten<br>Variedades ejemplo | Note/<br>Nota |
|---|--|---|---|---|---------------|
| <b>26. Fruit: intensity of main color of skin</b>     | <b>Fruit: intensité de la couleur principale de l'épiderme</b> | <b>Frucht: Intensität der Hauptfarbe der Schale</b> | <b>Fruto: intensidad del color principal de la piel</b> |   |               |
| light   | claire   | hell  | claro   | Elza  | 3             |
| medium  | moyenne  | mittel  | medio   | Big Moon  | 5             |
| dark  | foncée   | dunkel  | oscuro  | Rouge Vif d'Etampes   | 7             |
| <b>27. Fruit: secondary color of skin (*)</b>         | <b>Fruit: couleur secondaire de l'épiderme</b>                 | <b>Frucht: Sekundärfarbe der Schale</b>             | <b>Fruto: color secundario de la piel</b>               |   |               |
| cream   | crème  | cremefarben   | crema   |   | 1             |
| yellow  | jaune  | gelb  | amarillo  |   | 2             |
| orange  | orange   | orange  | naranja   |   | 3             |
| pink  | rose   | rosa  | rosa  |   | 4             |
| red   | rouge  | rot   | rojo  |   | 5             |
| green   | verte  | grün  | verde   |   | 6             |
| grey  | grise  | grau  | gris  | Delica  | 7             |
| <b>28. Fruit: distribution of secondary color (*)</b> | <b>Fruit: répartition de la couleur secondaire</b>             | <b>Frucht: Verteilung der Sekundärfarbe</b>         | <b>Fruto: distribución del color secundario</b>         |   |               |
| spots   | en taches  | Punkte  | en manchas  | Delica  | 1             |
| stripes   | en bandes  | Striche   | en franjas  |   | 2             |
| marbled   | en marbrures   | Marmorierung  | amarmolado  |   | 3             |
| <b>29. Fruit: texture of surface (*)</b>              | <b>Fruit: texture de la surface</b>                            | <b>Frucht: Textur der Oberfläche</b>                | <b>Fruto: textura de la superficie</b>                  |   |               |
| smooth  | lisse  | glatt   | lisa  | Uchiki Kuri   | 1             |
| rough   | rugueuse   | rauh  | rugosa  | Jaune Gros de Paris,<br>Giraumon Turban                               | 2             |

| English  | français   | deutsch  | español  | Example Varieties<br>Exemples<br>Beispielsorten<br>Variedades ejemplo | Note/<br>Nota |
|--|--|--|--|---|---------------|
| <b>30. Fruit: warts<br/>(* )</b>                       | <b>Fruit: verrues</b>  | <b>Frucht: Warzen</b>  | <b>Fruto: verrugas</b>   |   |               |
| absent   | absentes   | fehlend  | ausentes   | Giraumon Turban   | 1             |
| present  | présentes  | vorhanden  | presentes  | Brodée Galeuse  |               |
| <b>31. Fruit: thickness of<br/>(* )<br/>(+)</b>        | <b>Fruit: épaisseur de<br/>la chair</b>                                  | <b>Frucht: Dicke des<br/>Fleisches</b>                         | <b>Fruto: espesor de la<br/>carne</b>                            |   |               |
| thin   | fine   | dünn   | delgado  | Uchiki Kuri   | 3             |
| medium   | moyenne  | mittel   | medio  | Sweet Mama  | 5             |
| thick  | épaisse  | dick   | grueso   | Jaune Gros de Paris   | 7             |
| <b>32. Fruit: main color of<br/>(* )<br/>flesh</b>     | <b>Fruit: couleur<br/>principale de la<br/>chair</b>                     | <b>Frucht: Hauptfarbe<br/>des Fleisches</b>                    | <b>Fruto: color<br/>principal de la<br/>carne</b>                |   |               |
| cream  | crème  | cremefarben  | crema  |   | 1             |
| yellow   | jaune  | gelb   | amarillo   | Giraumon Turban   | 2             |
| orange   | orange   | orange   | naranja  | Uchiki Kuri   | 3             |
| reddish orange   | orange rougeâtre   | rötlichorange  | naranja rojizo   | Rouge Vif<br>d'Etampes,<br>Potimarron                                 | 4             |
| <b>33. Fruit: intensity of<br/>main color of flesh</b> | <b>Fruit: intensité de<br/>la couleur<br/>principale de la<br/>chair</b> | <b>Frucht: Intensität<br/>der Hauptfarbe des<br/>Fleisches</b> | <b>Fruto: intensidad<br/>del color principal<br/>de la carne</b> |   |               |
| light  | claire   | hell   | claro  | Big Moon, Delica  | 3             |
| medium   | moyenne  | mittel   | medio  | Red Kuri  | 5             |
| dark   | foncée   | dunkel   | oscuro   | Potimarron  | 7             |
| <b>34. Seed: size<br/>(* )</b>                         | <b>Semence: taille</b>   | <b>Samen: Größe</b>  | <b>Semilla: tamaño</b>   |   |               |
| small  | petite   | klein  | pequeña  | Sweet Mama  | 3             |
| medium   | moyenne  | mittel   | media  | Uchiki Kuri   | 5             |
| large  | grosse   | groß   | grande   | Rouge Vif<br>d'Etampes  | 7             |

| English                                   | français                                  | deutsch  | español                                     | Example Varieties<br>Exemples<br>Beispielssorten<br>Variedades ejemplo | Note/<br>Nota |
|---|---|--|---|--|---------------|
| <b>35. Seed: shape</b><br>(*<br>(+)       | <b>Semence: forme</b>                     | <b>Samen: Form</b>                             | <b>Semilla: forma</b>                       |  |               |
| very narrow elliptic                      | elliptique très étroite                   | sehr schmal<br>elliptisch                      | elíptica muy estrecha                       | Sweet Mama   | 1             |
| narrow elliptic                           | elliptique étroite                        | schmal elliptisch                              | elíptica estrecha                           | Uchiki Kuri  | 3             |
| elliptic                                  | elliptique                                | elliptisch                                     | elíptica                                    | Jaune Gros de Paris  | 5             |
| <b>36. Seed: surface</b><br>(*            | <b>Semence: surface</b>                   | <b>Samen: Oberfläche</b>                       | <b>Semilla: superficie</b>                  |  |               |
| smooth                                    | lisse                                     | glatt  | lisa  | Delica, Sweet Mama   | 1             |
| rough                                     | rugueuse                                  | rauh   | rugosa                                      | Nutty Delica, Blue Kuri  | 2             |
| <b>37. Seed: color</b><br>(*              | <b>Semence: couleur</b>                   | <b>Samen: Farbe</b>                            | <b>Semilla: color</b>                       |  |               |
| whitish                                   | blanchâtre                                | weißlich                                       | blancuzco                                   | Jaune Gros de Paris  | 1             |
| yellowish                                 | jaunâtre                                  | gelblich                                       | amarillento                                 |  | 2             |
| brownish                                  | brunâtre                                  | bräunlich                                      | marronáceo                                  | Uchiki Kuri  | 3             |
| <b>38. Seed: color of the margin</b>      | <b>Semence: couleur de l'ourlet</b>       | <b>Samen: Farbe des Randes</b>                 | <b>Semilla: color del margen</b>            |  |               |
| whitish                                   | blanchâtre                                | weißlich                                       | blancuzco                                   | Jaune Gros de Paris  | 1             |
| yellowish                                 | jaunâtre                                  | gelblich                                       | amarillento                                 |  | 2             |
| brownish                                  | brunâtre                                  | bräunlich                                      | marronáceo                                  | Sweet Mama   | 3             |
| <b>39. Seed: weight of 1000 dry seeds</b> | <b>Semence: poids de 1000 grains secs</b> | <b>Samen: Gewicht von 1000 trockenen Samen</b> | <b>Semilla: peso de 1000 semillas secas</b> |  |               |
| low                                       | faible                                    | niedrig  | bajo  | Baby Green   | 3             |
| medium                                    | moyen                                     | mittel   | medio                                       | Regal Early  | 5             |
| high                                      | élevé                                     | hoch   | alto  | Jaune Gros de Paris  | 7             |

VIII. Explanation on the Table of Characteristics

Ad. 19: Fruit: shape in longitudinal section



1

capped

2

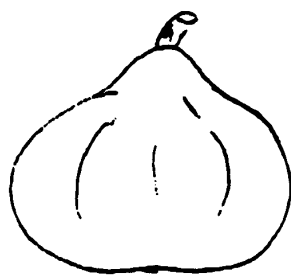
transverse elliptic

3

circular

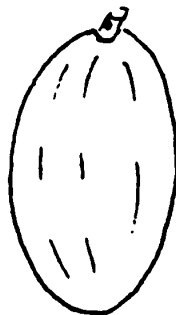
4

quadrangular



5

obovate



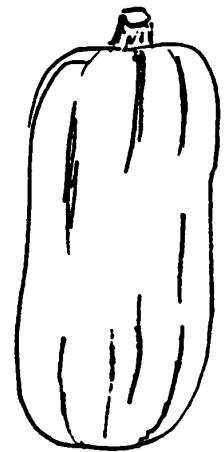
6

elliptic



7

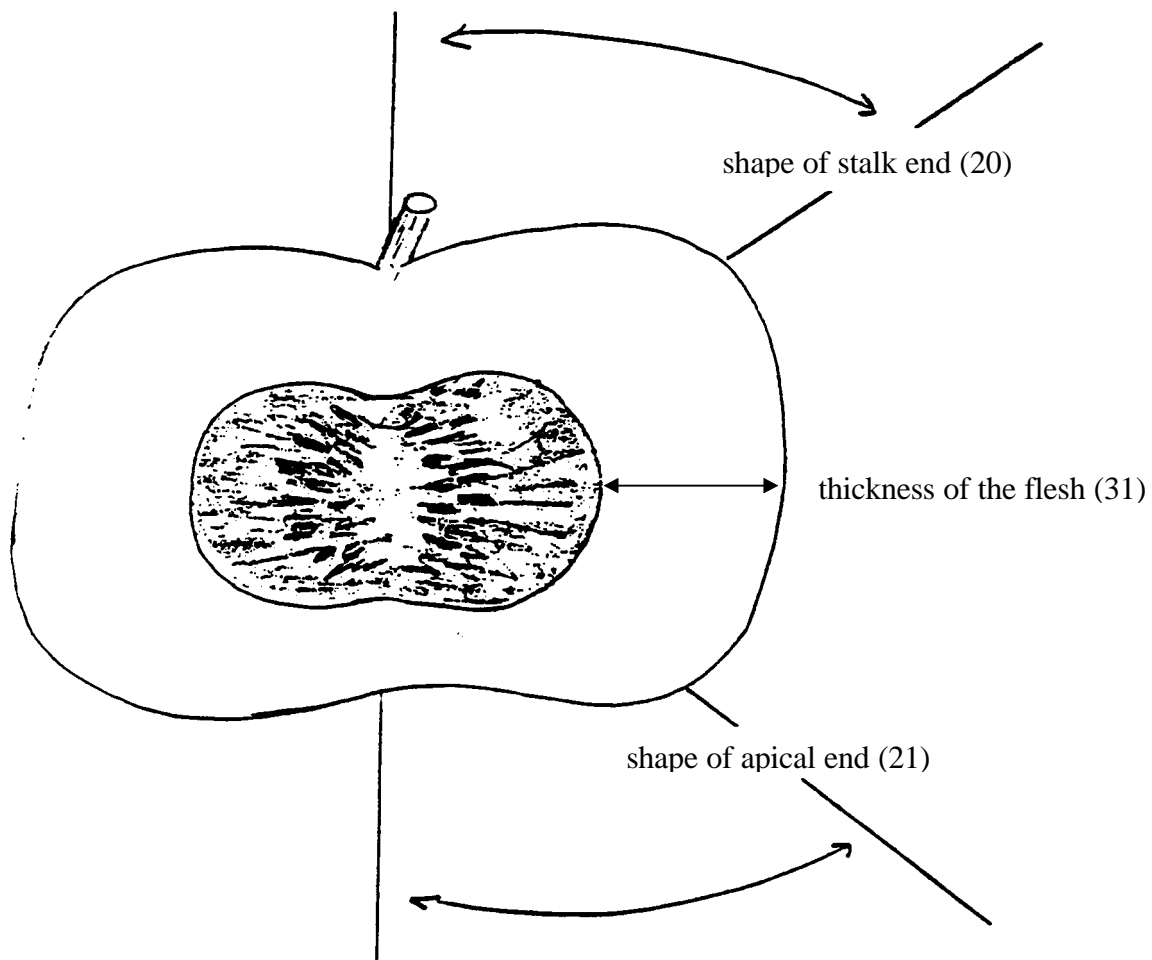
narrow elliptic



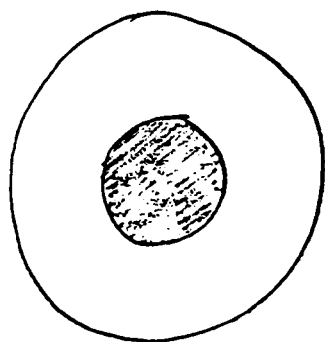
8

rectangular

Ad. 20, 21, 31: Fruit: shape of stalk end (20), shape of apical end (21) and thickness of flesh (31)

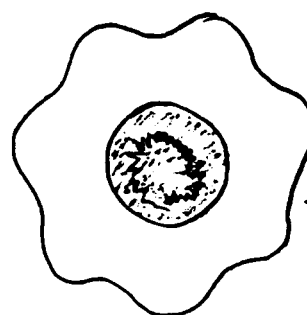


Ad. 22, 23: Fruit: grooves (22), distance between grooves (23)



1

absent



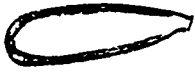
stance between grooves

9

present



Ad. 35: Seed: shape



1

very narrow elliptic



3

narrow elliptic



5

elliptic

IX. Literature

Higgins, J., 1980: "Species Identification of some *Curcubita* Cultivars," J. Natn. Inst. Agric. Bot., 15, 281-287.

Tapley, William T., Enzie, Walter D., Van Eseltine, Glen P., 1937: "The Vegetables of New York," Vol. 1, Part IV "The Cucurbits," Albany, New York.

Whitaker, T.W., Bohn, G.W., 1950: "The Taxonomy, Genetics, Production and Uses of the Cultivated Species of *Curcubita*," Econ. Bot., 4, 52-81.

Whitaker, T.W., Davis, G.N., 1962: "Curcubits, Botany, Cultivation and Utilization," World Crop Books, London, New York.

X. Technical Questionnaire

|   |  |
|---|--|
|   | Reference Number<br>(not to be filled in by the applicant) |
| <p>TECHNICAL QUESTIONNAIRE<br/>to be completed in connection with an application for plant breeders' rights</p> |  |
| 1. Species  | <p><i>Cucurbita maxima</i> Duch.<br/><br/>PUMPKIN</p>      |
| 2. Applicant (Name and address)   |  |
| 3. Proposed denomination or breeder's reference   |  |
| 4. Information on origin, maintenance and reproduction of the variety   |  |

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

| Characteristics   | Example Varieties             | Note |
|---|-------------------------------|------|
| <b>5.1 Plant: growth habit</b><br>(2)                   |                               |      |
| bushy   |                               | 1[ ] |
| semi-bushy  | Ambar, Aura,                  | 2[ ] |
| trailing  | Jaune Gros de Paris           | 3[ ] |
| <b>5.2 Fruit: size</b><br>(16)                          |                               |      |
| small   | Regal Early                   | 3[ ] |
| medium  | Giraumon Turban               | 5[ ] |
| large   | Big Max, Gladiator            | 7[ ] |
| <b>5.3 Fruit: shape in longitudinal section</b><br>(19) |                               |      |
| capped  | Giraumon Turban, Turks turban | 1[ ] |
| transverse elliptic                                     | Sweet Mama                    | 2[ ] |
| circular  | Mammoth, Jaune gris de Paris  | 3[ ] |
| quadrangular  |                               | 4[ ] |
| obovate   | Doux d'Okkaïdo, Green Baby    | 5[ ] |
| ovate   | Hubbard Blue, Hubbard Golden  | 6[ ] |
| narrow elliptic   | Banana Pink Jumbo             | 7[ ] |
| rectangular   | Evergreen                     | 8[ ] |

| Characteristics                                    | Example Varieties             | Note |
|--|-------------------------------|------|
| <b>5.4 Fruit: grooves</b><br>(22)                  |                               |      |
| absent   | Jaune Gros de Paris           | 1[ ] |
| present  | Big Moon, Gouge Vif d'Etampes | 9[ ] |
| <b>5.5 Fruit: number of colors of skin</b><br>(24) |                               |      |
| one  | Gladiator                     | 1[ ] |
| two  | Potimarron                    | 2[ ] |
| more than two                                      | Turks Turban                  | 3[ ] |
| <b>5.6 Fruit: main color of skin</b><br>(25)       |                               |      |
| cream  |                               | 1[ ] |
| yellow   | Jaune Gros de Paris           | 2[ ] |
| orange   | Regal Early                   | 3[ ] |
| pink   | Giraumon Turban               | 4[ ] |
| red  | Rouge Vif d'Etampes           | 5[ ] |
| green  | Delica                        | 6[ ] |
| grey green   | Japan Cup                     | 7[ ] |
| grey   | Baby Blue, Hubbard Blue       | 8[ ] |
| <b>5.7 Fruit: thickness of the flesh</b><br>(31)   |                               |      |
| thin   | Uchiki Kuri                   | 3[ ] |
| medium   | Sweet Mama                    | 5[ ] |
| thick  | Jaune Gros de Paris           | 7[ ] |

6. Similar varieties and differences between these varieties

| Denomination of similar variety | Characteristic in which the similar variety is different <sup>o)</sup> | State of expression of similar variety | State of expression of candidate variety |
|---------------------------------|--|--|--|
|---------------------------------|--|--|--|

<sup>o)</sup> 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

7.1 Resistance to pests and diseases

7.2 Special conditions for the examination of the variety

7.3 Other information