

UPOV

TG/ANUBI(proj.4)

ORIGINAL: English

DATE: 2008-10-15

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

ANUBIAS *

UPOV Code: ANUBI_HET;
ANUBI_BAR_BAR; ANUBI_BAR_NAN

Anubias heterophylla Engl.;
Anubias barteri Schott var. *barteri*;
Anubias barteri Schott var. *nana* (Engl.) Crusio

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from Singapore

*to be considered by the Enlarged Editorial Committee at its meeting
to be held in Geneva, Switzerland, on January 8, 2009*

Alternative Names: *

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Anubias heterophylla</i> Engl.; <i>Anubias barteri</i> Schott var. <i>barteri</i> ; <i>Anubias barteri</i> Schott var. <i>nana</i> (Engl.) Crusio	Anubias			

The purpose of these guidelines ("Test Guidelines") is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

ASSOCIATED DOCUMENTS

These Test Guidelines should be read in conjunction with the General Introduction and its associated TGP documents.

* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Anubias heterophylla* Engl., *Anubias barteri* Schott var. *barteri* and *Anubias barteri* Schott var. *nana* (Engl.) Crusio, of the family *Araceae*, and their hybrids.

2. Material Required

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of three-month-old rooted cuttings.

2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

30 rooted cuttings.

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

3. Method of Examination

3.1 *Number of Growing Cycles*

The minimum duration of tests should normally be a single growing cycle.

3.2 *Testing Place*

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 "Examining Distinctness".

3.3 *Conditions for Conducting the Examination*

The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination. Unless otherwise indicated, the optimum stage of development for the observation of characteristics is when the plants are approximately 4 months old.

3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 30 plants, which should be divided between at least 2 replicates.

3.4.2 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

3.5 *Number of Plants / Parts of Plants to be Examined*

Unless otherwise indicated, all observations determined by measurement or counting should be made on 10 plants or parts taken from each of 10 plants. In the case of parts of plants, the number to be taken from each of the plants should be 3.

3.6 *Additional Tests*

Additional tests, for examining relevant characteristics, may be established.

4. Assessment of Distinctness, Uniformity and Stability

4.1 *Distinctness*

4.1.1 General Recommendations

It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in these Test Guidelines.

4.1.2 Consistent Differences

The differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner. Therefore, it is important that users of these Test Guidelines are familiar with the recommendations contained in the General Introduction prior to making decisions regarding distinctness.

4.2 *Uniformity*

4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity.

4.2.2 For assessment of vegetatively propagated varieties, a population standard of 1% with an acceptance probability of at least 95% should be applied. In the case of a sample size of 30 plants, 1 off-type is allowed.

4.3 *Stability*

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.

4.3.2 Where appropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing a new seed or plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

- (a) Leaf: length of blade (characteristic 2)
- (b) Leaf: length of petiole (characteristic 3)
- (c) Leaf blade: width (characteristic 5)
- (d) Leaf blade: shape of apex (characteristic 7)
- (e) Leaf blade: shape of base (characteristic 8)
- (f) Leaf blade: rippling (characteristic 10)
- (g) Young leaf: color of blade (characteristic 12)
- (h) Inflorescence: curvature of spathe on maturity (characteristic 19)

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction.

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by *) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

6.2 *States of Expression and Corresponding Notes*

States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.3 *Types of Expression*

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction.

6.4 *Example Varieties*

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

6.5 *Legend*

(*) Asterisked characteristic – see Chapter 6.1.2

QL: Qualitative characteristic – see Chapter 6.3

QN: Quantitative characteristic – see Chapter 6.3

PQ: Pseudo-qualitative characteristic – see Chapter 6.3

(H): varieties of *Anubias heterophylla* Engl.

(B): varieties of *Anubias barteri* Schott var. *barteri*

(N): varieties of *Anubias barteri* Schott var. *nana* (Engl.) Crusio

(a)-(g) See Explanations on the Table of Characteristics in Chapter 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8.2

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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1.	Rhizome: width	Rhizome : largeur	Rhizom: Breite	Rizoma: anchura		
(+)						
QN	(a) thin	étroit	dünn	delgado	Gold (N), Marble (B)	3
	medium	moyen	mittel	medio	Broad leaf (B)	5
	thick	large	dick	grueso		7
2.	Leaf: length of blade	Feuille : longueur du limbe	Blatt: Länge der Spreite	Hoja: longitud del limbo		
(*)						
(+)						
QN	(c) short	court	kurz	corto	Petite (N), Wavy (B)	3
	medium	moyen	mittel	medio	Lanceolata (H), Oriental Green (B), Wrinkled (N)	5
	long	long	lang	largo		7
3.	Leaf: length of petiole	Feuille : longueur du pétiole	Blatt: Länge des Stiels	Hoja: longitud del pecíolo		
(*)						
(+)						
QN	(c) short	court	kurz	corto	Broad Leaf (B), Petite (N)	3
	medium	moyen	mittel	medio	Gold (N), Lanceolata (H), Marble (B)	5
	long	long	lang	largo		7
4.	Leaf: ratio length of blade / length of petiole	Feuille : rapport longueur du limbe/longueur du pétiole	Blatt: Verhältnis Länge der Spreite/Länge des Stiels	Hoja: relación longitud de limbo / longitud de pecíolo		
(+)						
QN	(c) small	petit	klein	pequeña	Gold (N)	3
	medium	moyen	mittel	media	Marble (N)	5
	large	grand	groß	grande	Broad Leaf (B), Wrinkled (N)	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
5. (* (+)	Leaf blade: width	Limbe : largeur	Blattspreite: Breite	Limbo: anchura		
QN	(c) narrow	étroit	schmal	estrecho	Petite (N), Wavy (B)	3
	medium	moyen	mittel	medio	Gold (N), Lanceolata (H), Oriental Green (B)	5
	broad	large	breit	ancho	Broad Leaf (B), Round Leaf (N)	7
6.	Leaf blade: ratio length / width	Limbe : rapport longueur/largeur	Blattspreite; Verhältnis Länge/Breite	Limbo: relación longitud / anchura		
QN	(c) moderately elongated	modérément allongé	mäßig länglich	moderadamente alargada	Marble (B)	3
	medium	moyen	mittel	media	Broad leaf (B)	5
	moderately compressed	modérément resserré	mäßig zusammengedrückt	moderadamente comprimida		7
7. (* (+)	Leaf blade: shape of apex	Limbe : forme du sommet	Blattspreite: Form der Spitze	Limbo: forma del ápice		
PQ	(c) acute	aigu	spitz	agudo	Broad Leaf (B), Lanceolata (H), Petite (N)	1
	obtuse	obtus	stumpf	obtuso	Oriental Green (B) Round Leaf (N)	2
8. (* (+)	Leaf blade: shape of base	Limbe : forme de la base	Blattspreite: Form der Basis	Limbo: forma de la base		
PQ	(c) acute	aigüe	spitz	aguda	Lanceolata (H)	1
	obtuse	obtuse	stumpf	obtusa	Gold (N), Marble (B)	2
	round	ronde	rund	redondeada	Round Leaf (N)	3
	cordate	cordiforme	herzförmig	cordiforme	Broad Leaf (B)	4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
9. (+)	Leaf blade: undulation of margin	Limbe : ondulation du bord	Blattspreite: Randwellung	Limbo: ondulación del borde		
QN	(c) absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Broad Leaf (B), Lanceolata (H), Petite (N)	1
	medium	moyenne	mittel	media	Oriental Green (B), Round Leaf (N)	2
	strong	forte	stark	fuerte	Wavy (B)	3
10. (* (+)	Leaf blade: rippling	Limbe : ondulation	Blattspreite: Riffelung	Limbo: grado de ondulación		
QL	(c) absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Lanceolata (H), Oriental (B), Petite (N)	1
	medium	moyenne	mittel	medio	Broad Leaf (B), Variegated (N)	2
	strong	forte	stark	fuerte	Wavy (B)	3
11. (+)	Leaf blade: depressions	Limbe : dépressions	Blattspreite: Einsenkungen	Limbo: depresiones		
QL	(a) absent	absentes	fehlend	ausentes	Broad Leaf (B), Lanceolata (H)	1
	present	présentes	vorhanden	presentes	Wrikled (N)	9
12. (*	Young leaf: color of blade	Feuille jeune : couleur du limbe	Junges Blatt: Farbe der Spreite	Hoja joven: color del limbo		
PQ	(b) yellowish green	vert jaunâtre	gelblichgrün	verde amarillento	Gold (N)	1
	(d) green	vert	grün	verde	Lanceolata (H), Petite (N)	2
	brownish green	vert brunâtre	bräunlichgrün	verde amarronado	Round Leaf (N), Wavy (B)	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
13.	Mature leaf: color of blade	Feuille adulte : couleur du limbe	Ausgewachsenes Blatt: Farbe der Spreite	Hoja adulta: color del limbo		
PQ	(c) yellowish green	vert jaunâtre	gelblichgrün	verde amarillento	Gold (N)	1
	(d) medium green	vert moyen	mittelgrün	verde medio	Lanceolata (H)	2
	dark green	vert foncé	dunkelgrün	verde oscuro	Broad Leaf (B), Petite (N)	3
14. (+)	Mature leaf: mottling of blade	Feuille adulte : marbrures du limbe	Ausgewachsenes Blatt: Marmorierung der Spreite	Hoja adulta: jaspeado del limbo		
QN	(c) absent or very small	nulles ou très faibles	fehlend oder sehr gering	ausente o expresado muy débilmente	Gold (N), Lanceolata (H)	1
	(d) small	faibles	gering	expresado débilmente	Marble (B)	3
	medium	moyennes	mittel	expresado medianamente	Marble (N), Variegated (B)	5
	large	fortes	stark	expresado fuertemente	Variegated (N)	7
15. (+)	Inflorescence: length of peduncle	Inflorescence : longueur du pédoncule	Blütenstand: Länge des Blütenstandstiels	Inflorescencia: longitud del pedúnculo		
QN	short	court	kurz	corto		3
	medium	moyen	mittel	medio	Broad leaf (B)	5
	long	long	lang	largo	Gold (N), Variegated (B)	7
16. (+)	Inflorescence: length of spathe	Inflorescence : longueur de la spathe	Blütenstand: Länge der Scheide	Inflorescencia: longitud de la espata		
QN	(e) short	courte	kurz	corta	Gold (N)	3
	medium	moyenne	mittel	media	Oriental green (B)	5
	long	longue	lang	larga	Variegated (B)	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
17. (+)	Inflorescence: width of spathe	Inflorescence : largeur de la spathe	Blütenstand: Breite der Scheide	Inflorescencia: anchura de la espata		
QN	(e) narrow	étroite	schmal	estrecha	Gold (N)	3
	medium	moyenne	mittel	media	Broad Leaf (B)	5
	broad	large	breit	ancha		7
18.	Inflorescence: color of spathe	Inflorescence : couleur de la spathe	Blütenstand: Farbe der Scheide	Inflorescencia: color de la espata		
PQ	(f) yellowish green	vert jaunâtre	gelblichgrün	verde amarillento	Gold (N)	1
	green	vert	grün	verde	Broad Leaf (B)	2
	brownish green	vert brunâtre	bräunlichgrün	verde amarronado		3
19. (* (+)	Inflorescence: curvature of spathe on maturity	Inflorescence : courbure de la spathe à maturité	Blütenstand: Biegung der Scheide zum Zeitpunkt der Reife	Inflorescencia: curvatura de la espata en fase adulta		
QL	(e) straight	droite	gerade	recta	Lanceolata (H)	1
	curved	incurvée	gebogen	curvada	Marble (B), Petite (N)	2
20. (+)	Inflorescence: length of spadix	Inflorescence : longueur du spadice	Blütenstand: Länge des Kolbens	Inflorescencia: longitud del espádice		
QN	short	court	kurz	corto		3
	medium	moyen	mittel	medio	Broad Leaf (B)	5
	long	long	lang	largo		7
21. (+)	Inflorescence: width of spadix	Inflorescence : épaisseur du spadice	Blütenstand: Breite des Kolbens	Inflorescencia: anchura del espádice		
QN	thin	mince	schmal	delgado	Gold (N)	3
	medium	moyen	mittel	medio		5
	thick	épais	breit	grosso		7

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

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 rhizome stem is made at the base of the oldest leaf.
- (b) All observations on the young leaf should be made near the distal part of the shoots as soon as they have unfolded completely.
- (c) All observations on the mature leaf should be made on the 4th leaf from the tip or the leaf at the middle part of the horizontal rhizome.
- (d) The leaf blade color should be observed from the upper side.
- (e) The size of the spathe is observed at maturity (before pollination).
- (f) Only the outside color of the spathe is observed.

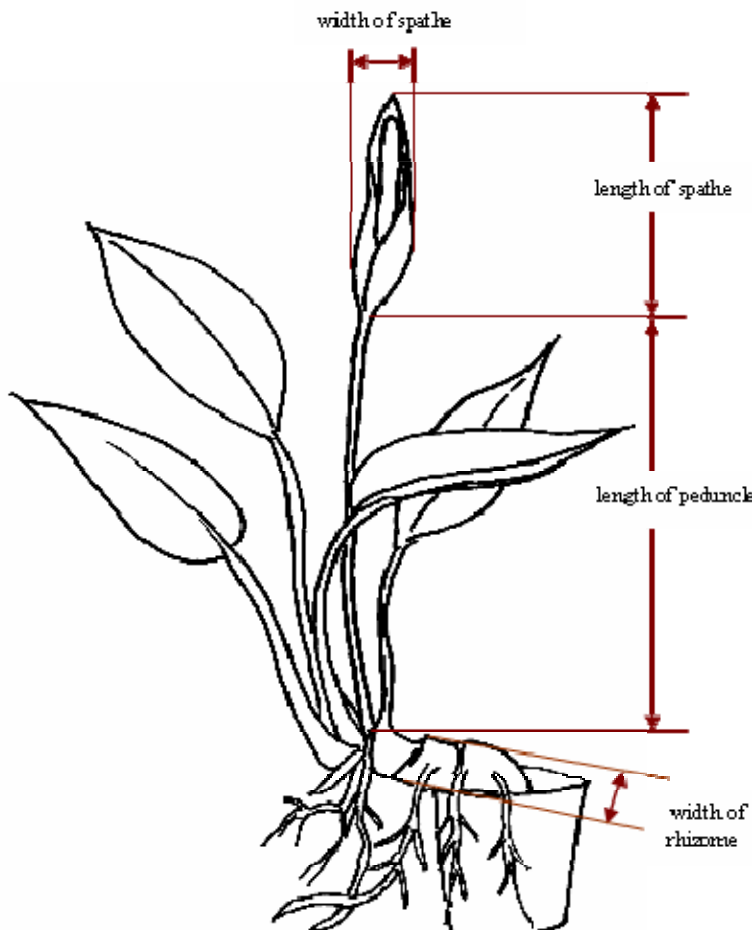
8.2 *Explanations for individual characteristics*

Ad. 1: Rhizome: width

Ad. 15: Inflorescence: length of peduncle

Ad. 16: Inflorescence: length of spathe

Ad. 17: Inflorescence: width of spathe

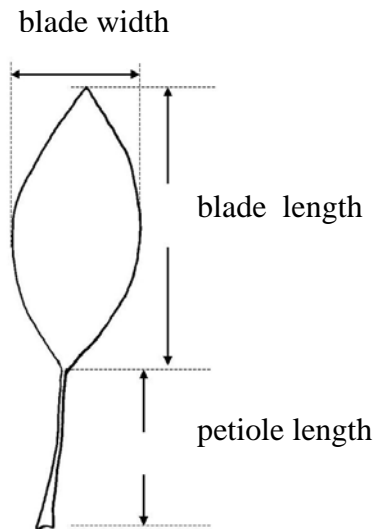


Ad. 2: Leaf: length of blade

Ad. 3: Leaf: length of petiole

Ad. 4: Leaf: ratio length of blade / length of petiole

Ad. 5: Leaf blade: width



Ad. 7: Leaf blade: shape of apex

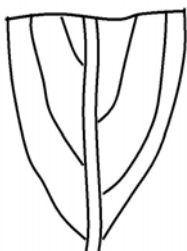


1
acute

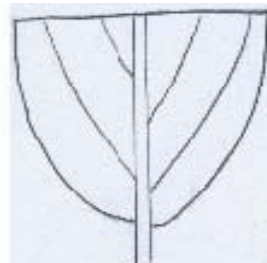


2
obtuse

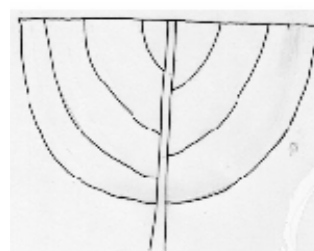
Ad. 8: Leaf blade: shape of base



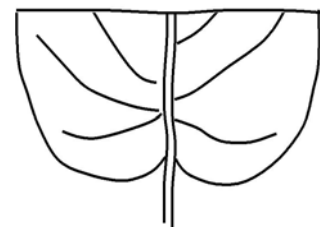
1
acute



2
obtuse



3
round



4
cordate

Ad. 9: Leaf blade: undulation of margin



1

absent or very weak



2

medium



3

strong

Ad. 10: Leaf blade: rippling



1

absent or very weak



2

medium



3

strong

Ad. 11: Leaf blade: depressions



1

absent



9

present

Depressions are small pits on the leaf surface.

Ad. 14: Mature leaf: mottling of blade



1

absent or very small



3

small



5

medium



7

large

Ad. 19: Inflorescence: curvature of spathe on maturity



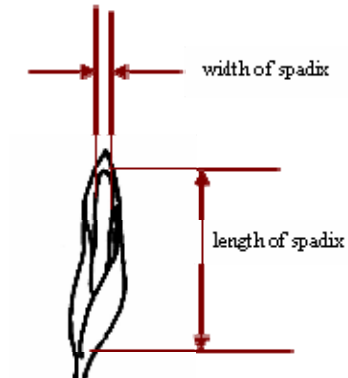
1
straight



2
curved

Ad. 20: Inflorescence: length of spadix

Ad. 21: Inflorescence: width of spadix



9. Literature

Crusio, W., 1979: A revision of *Anubias* Schott (Araceae). Meded, Landbouwhogeschool Wageningen 79(14).

Kasselmann, C., 2003: Aquarium Plants. Krieger Publishing Company. Malabar, Florida, US, pp. 98 to 110.

Rataj, K., Horeman, T J., 1977: Aquarium Plants – Their identification, cultivation and ecology. T.F.H. Publications Inc. Neptune, New Jersey, 448 pp.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1	Botanical name	<input type="text" value="Anubias"/>
1.2	Common name	<input type="text" value="Anubias"/>
2. Applicant		
	Name	<input type="text"/>
	Address	<input type="text"/>
	Telephone No.	<input type="text"/>
	Fax No.	<input type="text"/>
	E-mail address	<input type="text"/>
	Breeder (if different from applicant)	<input type="text"/>
3. Proposed denomination and breeder's reference		
	Proposed denomination (if available)	<input type="text"/>
	Breeder's reference	<input type="text"/>

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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#4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme (indicate female component in first position):

Variety resulting from: [please "tick"]

4.1.1 Crossing

- (a) controlled cross []
(please state parent varieties)
- (b) partially known cross []
(please state known parent variety(ies))
- (c) unknown cross []

4.1.2 Mutation []
(please state parent variety)

4.1.3 Discovery and development []
(please state where and when discovered and how developed)

4.1.4 Other []
(please provide details)

4.2 Method of propagating the variety

- 4.2.1 Vegetative propagation
- (a) cuttings []
 - (b) in vitro propagation []
 - (c) other (state method) []

4.2.2 Seed

4.2.3 Other
(please provide details)

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

Characteristics	Example Varieties	Note
5.1 Leaf: length of blade (2)		
short	Petite (N), Wavy (B)	3 []
medium	Lanceolata (H), Oriental Green (B), Wrinkled (N)	5 []
long		7 []
5.2 Leaf: length of petiole (3)		
short	Broad Leaf (B), Petite (N),	3 []
medium	Gold (N), Lanceolata (H), Marble (N)	5 []
long		7 []
5.3 Leaf blade: width (5)		
narrow	Petite (N), Wavy (B)	3 []
medium	Golden (N), Lanceolata (H), Oriental Green (B)	5 []
broad	Broad Leaf (B), Round Leaf (N)	7 []
5.4 Leaf blade: shape of apex (7)		
acute	Broad Leaf (B), Lanceolata (H), Petite (N)	1 []
obtuse	Oriental Green (B), Round Leaf (N)	2 []

TECHNICAL QUESTIONNAIRE		Page {x} of {y}	Reference Number:
Characteristics	Example Varieties	Note	
5.5 Leaf blade: shape of base (8)			
acute	Lanceolata (H)	1 []	
obtuse	Gold (N), Marble (B)	2 []	
round	Round Leaf (N)	3 []	
cordate	Broad Leaf (B)	4 []	
5.6 Leaf blade: rippling (10)			
absent or very weak	Lanceolata (H), Oriental (B), Petite (N)	1 []	
medium	Broad Leaf (B), Variegated (N)	2 []	
strong	Wavy (B)	3 []	
5.7 Young leaf: color of blade (12)			
yellowish green	Gold (N)	1 []	
green	Lanceolata (H), Petite (N)	2 []	
brownish green	Round Leaf (N), Wavy (B)	3 []	
5.8 Inflorescence: curvature of spathe on maturity (19)			
straight	Lanceolata (H)	1 []	
curved	Marble (B), Petite (N)	2 []	

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6. Similar varieties and differences from these varieties

Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Leaf: length of petiole</i>	<i>short</i>	<i>long</i>

Comments:

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#7. Additional information which may help in the examination of the variety

7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?

Yes No

(If yes, please provide details)

7.2 Are there any special conditions for growing the variety or conducting the examination?

Yes No

(If yes, please provide details)

7.3 Other information

7.3.1 Representative color photographs of the variety should accompany the Technical Questionnaire.

7.3.2 Main use of the variety

- Fully submerged aquarium / pond plant
- Partially submerged aquarium / pond plant
- Floating aquarium / pond plant
- Dry terrarium plant
- Other (please provide details):

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes No

(b) Has such authorization been obtained?

Yes No

If the answer to (b) is yes, please attach a copy of the authorization.

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

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9. Information on plant material to be examined or submitted for examination.

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

- | | | |
|---|---------|--------|
| (a) Microorganisms (e.g. virus, bacteria, phytoplasma) | Yes [] | No [] |
| (b) Chemical treatment (e.g. growth retardant, pesticide) | Yes [] | No [] |
| (c) Tissue culture | Yes [] | No [] |
| (d) Other factors | Yes [] | No [] |

Please provide details for where you have indicated "yes".

.....

10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant's name

Signature

Date

[End of document]