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EAST ASIA PLANT VARIETY PROTECTION FORUM

DURIAN

Durio zibethinus (L.) Murr.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

Alternative Names:

Botanical name	*English*	*French*	*German*	*Spanish*
Durio zibethinus (L.) Murr.	*Durian*			

The purpose of these guidelines ("Test Guidelines") is to fulfill the activities under the EAPVP Forum on harmonization of Test Guidelines.

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Durio zibethinus* (L.) Murr.

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 grafted trees, on a rootstock specified by the competent authority.

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

5 trees.

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

3.1.1 The minimum duration of tests should normally be two independent growing cycles.

3.1.2 The growing cycle is considered to be the period ranging from the beginning of vegetative growth or flowering, continuing through active vegetative growth or flowering and fruit development and concluding with the harvesting of fruit.

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

3.3.1 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 conduct of the examination.

In particular, it is essential that the trees produce a satisfactory crop of fruit in each of the two growing cycles.

3.3.2 The optimum stage of development for the assessment of each characteristic is indicated by a letter in the second column the Table of Characteristics. The stages of development denoted by each letter are described at the end of Chapter 8.

3.3.3 The recommend method of observing the characteristic is indicated by the following key in the second column of the Table of characteristics:

MG: Single measurement of a group of plants or parts of plants

MS: Measurement of a number of individual plants or parts of plants

VG: Visual assessment by a single observation of a group of plants or parts of plants

VS: Visual assessment by observation of individual plants or parts of plants

3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 5 trees

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 should be made on 5 plants or parts taken from each of 5 plants. In the case of observation parts taken from single plant, the number of parts to be taken from each of the plants should be 2.

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. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

4.2.2 For the assessment of uniformity of vegetatively propagated varieties, a population standard of 95% an acceptance probability of at least 1% should be applied. In the case of a sample size of 5 plants, no off-types are 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 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 blade: shape (characteristic 6)
(b) Flower bud: shape (characteristic 11)
(c) Fruit: shape (characteristic 22)
(d) Fruit: type of spine (characteristic 30)
(e) Flesh: main color (characteristic 46)

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 (section 6.1.2)

QL Qualitative characteristic – see Chapter 6 (section 6.3)
QN Quantitative characteristic – see Chapter 6 (section 6.3)
PQ Pseudo-qualitative characteristic – see Chapter 6 (section 6.3)
MG, MS, VG, VS : see Chapter 3 (section 3.3.3)

(a)-(f) See Explanations on the Table of Characteristics in Chapter 8 (Section 8.1)
(+) See Explanations on the Table of Characteristics in Chapter 8 (Section 8.2)

7. Table of Characteristic

		English	Example Varieties	Note
1.	VG	**Tree: growth habit**		
(+)	(a)	upright	Phuang Mani	1
QN		spreading	Saochomhet	2
		drooping	Kop Mongkon	3
2	VG	**Lateral branch: attitude**		
(+)	(a)	upward	Phuang Mani	1
QN		outward	Saochomhet	2
		downward	Kop Mongkon	3
3.	MG/ VG	**Leaf blade: length**		
QN	(b)	short		3
		medium		5
		long		7
4.	MG/ VG	**Leaf blade: width**		
QN	(b)	narrow		3
		medium		5
		broad		7
5.	MG/ VG	**Leaf blade: ratio length/width**		
QN	(b)	slightly elongated		3
		mooderately elongated		5
		strongly elongated		7
6.	VG	**Leaf blade: shape**		
(*)	(b)	ovate	Kop Takham, Kanyao Watsak	1
(+)		oblong	Monthong	2
PQ		elliptic	Kop maethao, Kop Nasan	3
		obovate	Kanyao	4
7.	VG	**Leaf blade: shape of base**		
(+)	(b)	acute	Kampan Doem, Kanyao	1
PQ		obtuse	Thongyoidoem, Kompan Khao	2
		rounded	Daeng Tanoi, Kop Tathuam	3
8.	VG	**Leaf blade: length of acuminate tip**		
(+)	(b)	short	Kop Phuang, Kanyoa Watsak	3
QN		medium	Monthong, Chani	5
		long	Kop Watphleng, Kampan Khao	7

		English	Example Varieties	Note
9.	VG	**Leaf blade: curvature of tip**		
QN	(b)	absent or weak	Kanyao Watsak	1
		medium	Chani	2
		strong	Monthong	3
10.	VG	**Leaf blade : color of lower surface**		
PQ	(b)	whitish	D-24 (MAL)	1
		brownish	Monthong ,D99(MAL)	2
11.	VG	**Flower bud: shape**		
(*)	(c)	ovate	Klip Sa-mut	1
(+)		elliptic	Kanyao	2
PQ		circular	Chat Sithong	3
12.	VG	**Flower bud: shape of apex**		
(+)	(c)	rounded		1
PQ		acute		2
		obtuse		3
13.	MS	**Flower bud: diameter**		
(+)	(c)	small		3
QN		medium		5
		large		7
14.	VG	**Flower: width of petals**		
(+)	(d)	narrow	D’baltro,Siwar(IND)	1
QN		medium	Tian, Tuk, Tabe(IND)	2
		broad	Malahari ,Kumik,Hortimat (IND)	3
15.	VG	**Flower : Stigma position in relation to anther**		
(+)	(d)			
QN		below		1
		level /equal		2
		above		3
16.	VG	**Pedicel : length**		
QN	(e)	short		3
		medium		5
		long		7

		English	Example Varieties	Note
17.	VG	**Pedicel : shape**		
(+)	(e)	Type I	Kanyao	1
PQ		Type II	Kop SonKlin	2
		TypeIII	Luang Pomalet	3
		TypeIV	Monthong	4
18.	MS	**Fruit: weight**		
(*)	(e)	low		3
QN		medium		5
		high		7
19.	MS	**Fruit: length**		
(*)	(e)	short		3
QN		medium		5
		long		7
20.	MS	**Fruit: width**		
(*)	(e)	narrow		3
QN		medium		5
		broad		7
21.	VG	**Fruit: depth of groove**		
(+)	(e)	absent or weak	Kanyao	1
QN		medium	Monthong	2
		strong	Kop Mongkon	3
22.	VG	**Fruit: shape**		
(*)	(e)	ovate	Monthong	1
(+)		oblong	Monkhang	2
PQ		elliptic	Phuang Mani	3
		circular	Kanyao	4
		obovate	Chani Namtansai	5
		oblate	Thaphapnam	6
23	VG	**Fruit : symmetry**		
(+)		symmetric	Kanyao	1
PQ		slightly asymmetric	E-luang	2
		strongly asymmetric	Kanyoa Wadsak	3
24.	VG	**Fruit: shape of base**		
(+)	(e)	acute	Monkhang	1
PQ		rounded	Khunthong	2
		cordate	Kop Chaynum	3

		English	Example Varieties	Note
25.	VG	**Fruit: shape of the stylar end**		
(+)	(e)	pointed	E-Lipnaitip, Monkhang	1
PQ		rounded	Khunthong	2
		retuse	Kop Chainum	3
26.	MG	**Fruit : color of skin**		
PQ	(e)	greenish yellow		1
		light green		2
		dark green		3
		greyish green		4
		brownish green		5
		brown		6
27.	VG	**Fruit: presence of spines**		
(*)	(e)	absent		1
QL		present		9
28.	VG	**Fruit: length of spines**		
(*)	(e)	short	Luang Pomalet	3
QN		medium	Chani	5
		long	Kop MungKon	7
29.	VG	**Fruit: density of spines**		
QN	(e)	sparse	Kop Chainam	3
		medium	Chani	5
		dense	Saochomhet	7
30.	VG	**Fruit: type of spine**		
(+)	(e)	Type I	Luang Pomalet	1
PQ		Type II	Chani Kanyao	2
		Type III	Kop Lep-yiao	3
		Type IV	Saochomhet	4
		Type V	Thaphapnam	5
		Type VI	Thongmai	6
31.	VG	**Fruit: spines around the base of the pedicel**		
(+)	(e)	absent	E-lipnaitip	1
QL		present	Luang Pomalet	9
32.	VG	**Fruit: spineless area around the base of the pedicel**		
(+)	(e)	small		1
QN		medium		2
		large		3

		English	Example Varieties	Note
33. QN	VG (e)	**Fruit: curvature of the spine apex at the base of the pedicel**		
		straight	Luang Pomalet	1
		slightly curved	Kop Lep-yiao	2
		strongly curved		3
34. (+) QL	VG (e)	**Friut: spines at the styler end**		
		absent	E-Lipnaitip	1
		present	Kop Lep-yiao	9
35. (+) QN	VG (e)	**Fruit: area of spines at the stylar end**		
		small		1
		medium		2
		large		3
36. PQ	VG (e)	**Fruit:** curvature of **spines at the stylar end**		
		straight	Phuang Mani	1
		slightly curved		2
		strongly curved		3
37 QN	VG	**Fruit-ridges along the line dividing sections**		
		weak		1
		medium		2
		strong		3
38. (+) QN	VG	**Fruit: small spines along the line dividing sections**		
		absent or few	D145	1
		medium	D8	2
		many	D2	3
39. QN	MS (e)	**Fruit: weight of peel**		
		low		3
		medium		5
		high		7
40. (+) QN	MS (e)	**Fruit: thickness of peel**		
		thin		3
		medium		5
		thick		7
41. (+) QN	MS (e)	**Fruit: weight of Seeds**		
		low		3
		medium		5
		high		7

		English	Example Varieties	Note
42.	MS	**Fruit: number of seeds per fruit**		
(+)	(e)	few		3
QN.		medium		5
		many		7
43.	MS	**Fruit: number of aborted seeds per fruit**		
(+)	(e)	few		3
QN		medium		5
		many		7
44.	MS	**Flesh: thickness of broadest pericarp**		
(+)	(f)	thin		3
QN		medium		5
		thick		7
45.	MS	**Flesh: weight**		
QN	(f)	low		3
		medium		5
		high		7
46.	VG	**Flesh: main color**		
(+)	(f)	white	Bangkhunnon	1
(*)		light yellow	Khamin	2
PQ		medium yellow	Monthong	3
		dark yellow	Metnai Kradom	4
		yellowish orange	Phuang Mani	5
		pinkish yellow	Chomphu Sri	6
		pink		7
		reddish orange		8
		red		9
47	VG	**Flesh: secondary color**		
(+)	(f)	white		1
PQ		light yellow		2
		medium yellow		3
		dark yellow		4
		yellowish orange		5
		pinkish yellow		6
		pink		7
		reddish orange		8
		red		9

		English	Example Varieties	Note
48.	VG	**Flesh: aroma**		
(+)	(f)	weak	Kop Thongkam	1
QN		medium	Chani	2
		strong	Champa	3
49.	VG	**Flesh: sweetness**		
(+)	(f)	weak	Monthong	1
QN		medium	Phuang Mani	2
		strong	Chani	3
50.	VG	**Flesh: bitterness**		
(+)	(f)	weak		1
QN		medium		2
		strong		3
51.	VG	**Flesh: texture**		
(+)	(f)	fine	Kop Phikun	1
QN		medium	KanyaoWatsak	2
		coarse	Kop Thongsuk	3
52.	VG	**Seed: shape**		
PQ	(f)	oblong		1
		circular		2
		elliptic		3
53.	VG	**Seed: intensity of brown color**		
QN	(f)	light		3
		medium		5
		dark		7
54.	MG	**Time of beginning of harvesting**		
(+)		early	Kradum	3
QN		medium	Monthong	5
		late	E-nak	7

8. Explanation 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) Tree: All observations on the tree should be made on the 1st preblossom stage

(b) Leaf: All observations on the leaf should be made on the 4th and 5th fully developed leaf of the terminal shoot.

(c) Flower bud: All observations on the flower bud should be made at the preblossom stage.

(d) Flower: All observations on the flower should be made at the blossom stage.

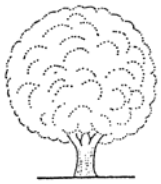
(e) Fruit, pedicel , fruit spine: All observations on the fruit should be made on fully formed fruit, the pedicel and the fruit spine should be made at the tip of the spines become dry and the area among the spines change to brown color.

(f) Flesh and seed: All observations on the flesh and seed should be made when the tip of the spines become dry and the area among the spines change to brown color.

8.2 Explanations for individual characteristics

Ad.1: Tree: growth habit

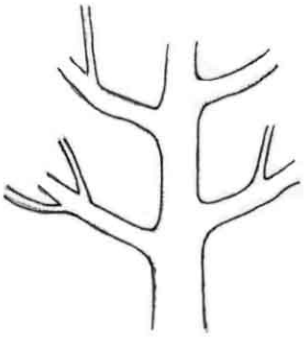
1
upright



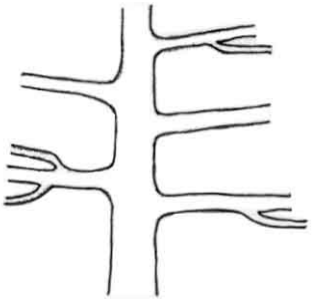
2
spreading

3
drooping

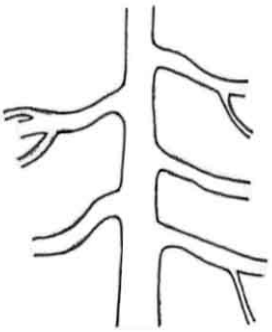
Ad.2: Tree: lateral branch : attitude



1
upward



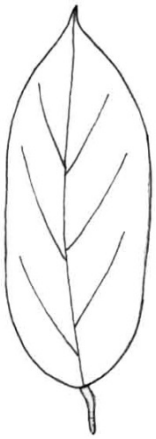
2
outward



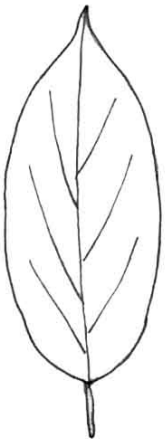
3
downward

Ad.6: Leaf blade: shape

1
ovate



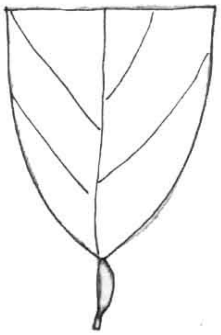
2
oblong



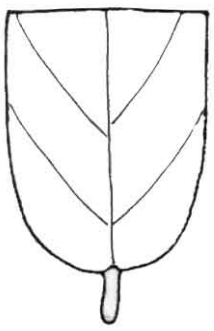
3
elliptic

4
obovate

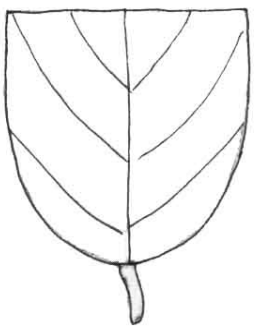
Ad.7: Leaf blade: shape of base



1
acute

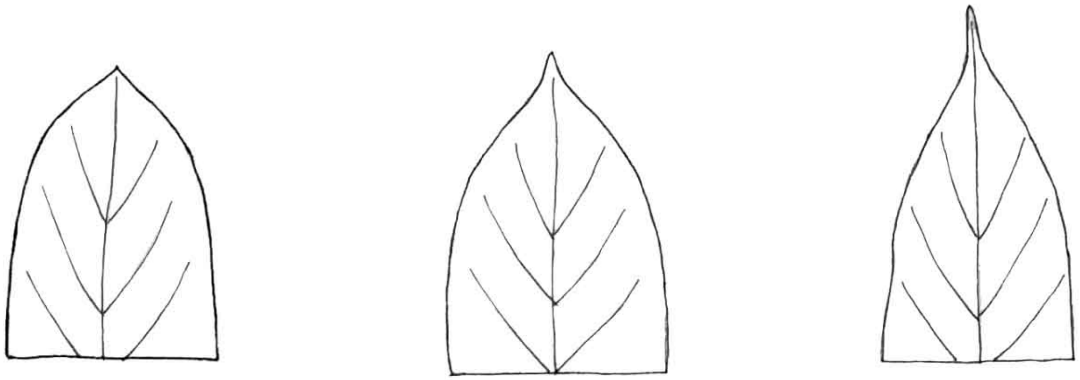


2
obtuse



3
rounded

Ad.8: Leaf blade: length of acuminate tip

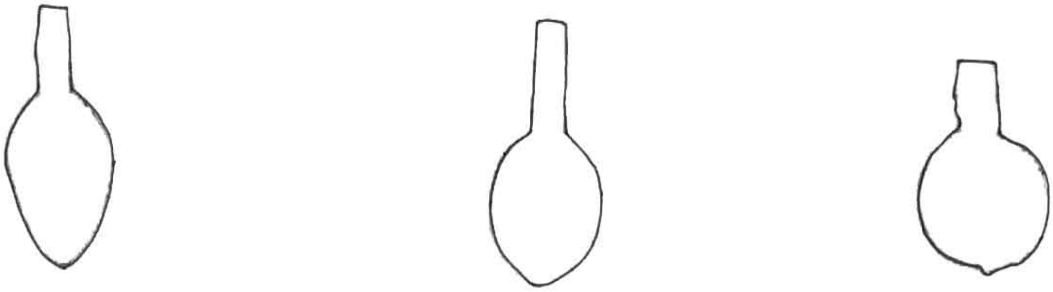


1
absent or short

2
medium

3
long

Ad.11: Flower bud: shape



1
ovate

2
elliptic

3
circular

Ad.14: Flower bud: shape of apex

1
rounded

2
pointed

3
obtuse

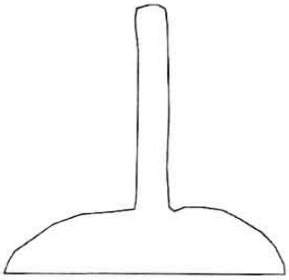
Ad.17: Flower: width of petals

1
narrow

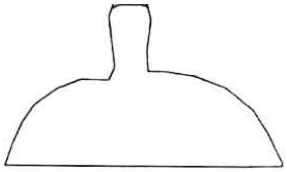
2
medium

3
broad

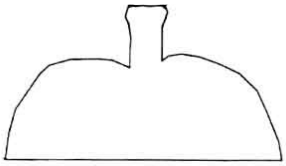
Ad.21: Pedicel: shape



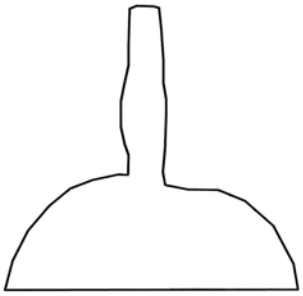
1
Type I



2
Type II

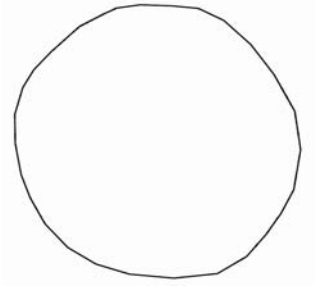


3
Type III

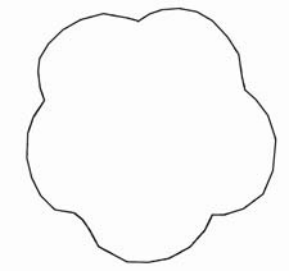


4
Type IV

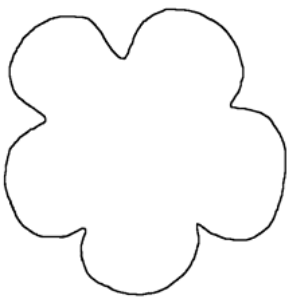
Ad.26: Fruit: depth of groove



1
absent or weak

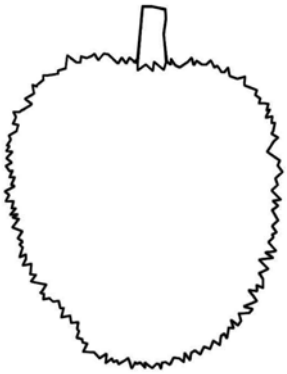


3
medium

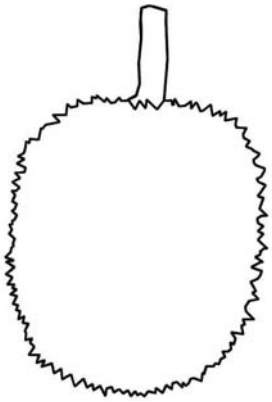


5
strong

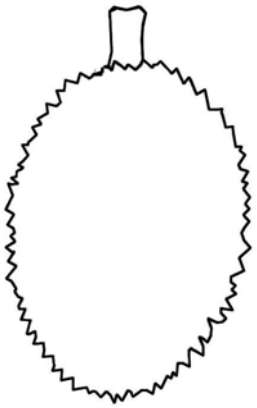
Ad.22: Fruit: shape in outline



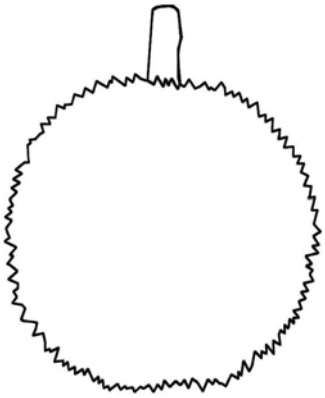
1
ovate



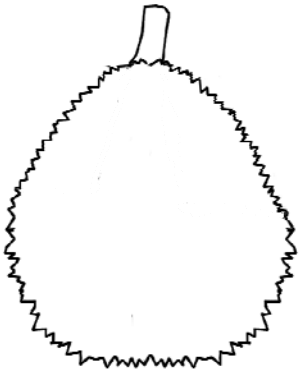
2
oblong



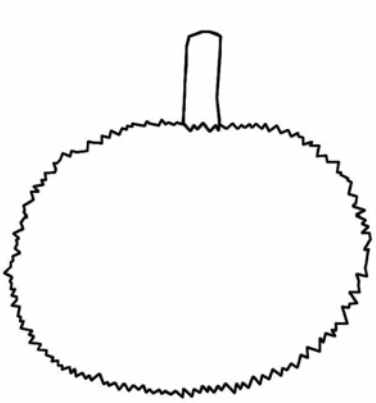
3
elliptic



4
circular



5
obovate



6
oblate

Ad 23 Fruit : symmetry

1
symmetric

2
slightly asymmetric

3
strongly asymmetric

Ad.24: Fruit: shape of base

1
acute

2
rounded

3
cordate

Ad.25: Fruit: shape of apex

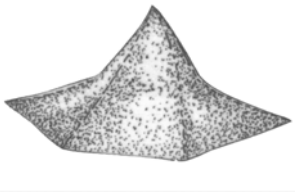
1
pointed

2
rounded

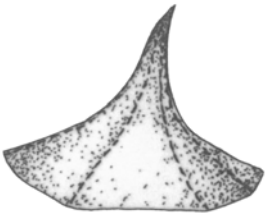
3
retuse

Ad.31: Fruit: type of spine

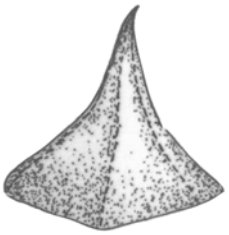
The observations on the leaf should be make on the middle part of the fruit on the largest carpels



1
Type I

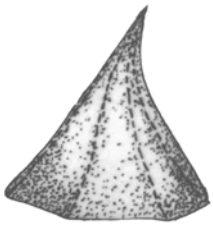


2
Type II

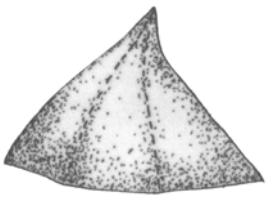


3
Type III

4
Type IV



5
Type V



6
Type VI

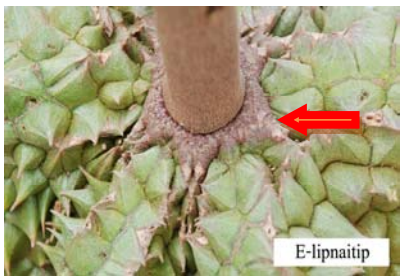
Ad.32: Fruit: spine around the base of the pedicel

1
absent

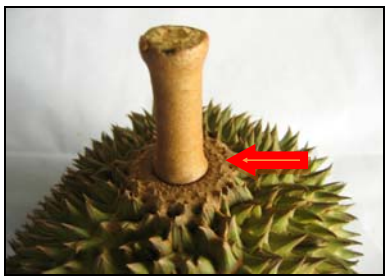
2
present

Ad.32: Fruit: spineless area around the base of the pedicel

1
small



2
medium



3
large

Ad.39: Fruit: spine at the stylar end

1
absent

2
present

Ad.40: Fruit: area of smaller spine at the styler end

1
small

2
medium

3
large

Ad.43: Fruit: thickness of peel

Observation should be made at the market stage 5 points on the middle peel from base to apex.

Ad.45: Flesh: thickness

Observation should be made at the market stage 5 points on the middle of fresh from base to apex.

Ad.46: Flesh: Main color

The main color is the color covered by the largest surface area of the flesh.

The secondary color is the color covered by the second largest surface area of the flesh.

Ad.55: Time of fruit beginning of harvesting

Time of beginning to harvest is when the first fruits drop.

9. Literature

Plant Varieties Protection Division, 2001, “Plant Germplasm Database for Durian” Department of Agriculture, Government Press, Bangkok, Thailand, 154 p..

Songpol Somsri, 2007, “Thai Durian”, Horticulture Research Institute, Department of Agriculture, Chatuchak, Bangkok, Thailand, 52 p.

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

ASW13 In the case of hybrid varieties which are the subject of an application for plant breeders' rights, and where the parent lines are to be submitted as a part of the examination of the hybrid variety, this Technical Questionnaire should be completed for each of the parent lines, in addition to being completed for the hybrid variety.

1. Subject of the Technical Questionnaire

1.1 Latin name	*Durio zibethinus* (L.) Murr.
1.2 Common name	Durian

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	
Breeder (if different from applicant)	

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

4 . Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross [ ]
(please state parent varieties)
(……) x (…….)
female parent male parent

(b) partially known cross [ ]
(please state known parent variety(ies))
(……) x (…….)
female parent male parent

(c) totally unknown cross [ ]

4.1.2 Mutation [ ]
(please state parent variety)

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

4.1.4 Other [ ]
(please provide details)

4.2 Method of propagating 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 note which best corresponds)

	Characteristics	Example Varieties	Note
5.1	**Lateral branch: attitude**		
(2)	upward	Phuang Mani	1[ ]
	outward	Saochomhet	2[ ]
	downward	Kop Mongkon	3[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.2	**Leaf blade: shape**		
(6)	ovate	Kop Takham	1[ ]
	oblong	Monthong	2[ ]
	elliptic	Kop maethao	3[ ]
	obovate	Kanyao	4[ ]
5.3	**Flower bud: shape**		
(11)	ovate	Klip Sa-mut	1[ ]
	elliptic	Kanyao	2[ ]
	circular	Chat Sithong	3[ ]
5.4	**Pedicel : length**		
(16)	short		3[ ]
	medium		5[ ]
	long		7[ ]
5.5	**Pedicel : shape**		
(17)	Type I	Kanyao	1[ ]
	Type II	Kop SonKlin	2[ ]
	TypeIII	Luang Pomalet	3[ ]
	TypeIV	Monthong	4[ ]
5.6	**Fruit: shape**		
(22)	ovate	Monthong	1[ ]
	oblong	Monkhang	2[ ]
	elliptic	Phuang Mani	3[ ]
	circular	Kanyao	4[ ]
	obovate	Chani Namtansai	5[ ]
	oblate	Thaphapnam	6[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.7	**Fruit: shape of base**		
(24)	acute	Monkhang	1[ ]
	rounded	Khunthong	2[ ]
	cordate	Kop Chaynum	3[ ]
5.8	**Fruit: shape of the stylar end**		
(25)	pointed	E-Lipnaitip, Monkhang	1[ ]
	rounded	Khunthong	2[ ]
	retuse	Kop Chainum	3[ ]
5.9	**Fruit : color of skin**		
(26)	greenish yellow		1[ ]
	light green		2[ ]
	dark green		3[ ]
	greyish green		4[ ]
	brownish green		5[ ]
	brown		6[ ]
5.10	**Fruit: type of spine**		
(30)	Type I	Luang Pomalet	1[ ]
	Type II	Chani Kanyao	2[ ]
	Type III	Kop Lep-yiao	3[ ]
	Type IV	Saochomhet	4[ ]
	Type V	Thaphapnam	5[ ]
	Type VI	Thongmai	6[ ]
5.11	**Flesh: main color**		
(46)	white	Bangkhunnon	1[ ]
	light yellow	Khamin	2[ ]
	medium yellow	Monthong	3[ ]
	dark yellow	Metnai Kradom	4[ ]
	yellowish orange	Phuang Mani	5[ ]
	pinkish yellow	Chomphu Sri	6[ ]
	pink		7[ ]
	reddish orange		8[ ]
	red		9[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.12	**Time of beginning of harvesting**		
(50)	early	Kradum	3[ ]
	medium	Monthong	5[ ]
	late	E-nak	7[ ]

6. Similar varieties and differences from these varieties

Please use the table, and space provided for comments, below 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
Example			

Comments:

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

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

7.1 In additional to the information provided in Section 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

ASW 16 A representative color photograph of the variety should accompany the Technical Questionnaire.

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.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

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]