



TG/160/3

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**

**MUME**  
**(JAPANESE APRICOT)**

*(Prunus mume* Sieb. et  
*Zucc.)*

**GENEVA**  
**1998**

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## **GUIDELINES**

### **FOR THE CONDUCT OF TESTS**

#### **FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

**MUME  
(JAPANESE APRICOT)**

***(Prunus mume* Sieb. et  
Zucc.)**

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 vegetatively propagated fruit varieties of *Prunus mume* Sieb. et Zucc. and its hybrids.

## II. Material Required

1. The competent authorities decide when, where and in what quantity and quality the plant material 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. As a minimum, the following quantity of plant material is recommended:

(a) Varieties obtained from crossings:

6 one-year-old plants grafted on *Prunus mume* seedlings or

(b) Varieties obtained by mutation:

10 one year-old plants grafted on *Prunus mume* seedlings.

2. The plant material supplied should be visibly healthy, not lacking in vigor or affected by any important pests or diseases. It should preferably not be obtained from *in vitro* propagation.

3. 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. To assess distinctness, it is essential for the plants under test to bear a satisfactory crop of fruit for at least two 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. Pollinators should be planted beforehand. The fruits should be thinned to leave 2 or 3 fruits per spur. In the case of one-year-old shoots, the fruits should be thinned to leave one fruit at intervals of five centimetres. The tests should be carried out under conditions ensuring normal growth. Each test should include a total of 6 plants of varieties obtained from crossings or 10 plants for varieties obtained by mutation. 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 measurements, weighing or counting should be made on 5 plants or 10 parts 2 from each of 5 plants for varieties obtained from crossings or 10 plants or 20 parts 2 from each of 10 plants for varieties obtained by mutation.
2. For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied for varieties obtained from crossings, and a population standard of 2% with the same acceptance probability for varieties obtained by mutation. In the case of a sample size of 6 plants, the maximum number of off-types allowed would be 1, in the case of 10 plants the maximum number of off-types allowed would also be 1.
3. All observations on the tree should be made in the dormant season before pruning.
4. All observations on the one- year-old shoot should be made on well-developed shoots in the dormant season.
5. Unless otherwise stated, all observations on the leaf should be made on fully developed leaves at the middle part of the current season vegetative shoot before harvest.
6. All observations on the flower should be made on spurs at the time of full flowering.
7. Unless otherwise stated, all observations on the fruit should be made on physiological ripe fruits.
8. All observations on the stone should be made on dry stones after removal of the flesh.

#### 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) Tree: predominant distribution of flower buds (characteristic 3)
  - (b) Fruit: size (characteristic 23)
  - (c) Time of flowering (80% of flowers open) (characteristic 37)
  - (d) Time of physiological ripeness (characteristic 39)

#### 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 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 Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>1. Tree: habit</b>	<b>Arbre: port</b>	<b>Baum: Wuchsform</b>	<b>Árbol: porte</b>		
(+)					
upright	dressé	aufrecht	erecto	Bungo	1
semi-upright	demi-dressé	halbaufrecht	semi-erecto	Gessekai, Oshuku	2
semi-upright to spreading	demi-dressé à étalé	halbaufrecht bis breitwüchsig	semi-erecto à rastrero		3
spreading	étalé	breitwüchsig	rastrero	Shirokaga, Tamaume	4
drooping	retombant	hängend	colgante		5
<b>2. Tree: vigor</b>	<b>Arbre: vigueur</b>	<b>Baum: Wuchsstärke</b>	<b>Árbol: vigor</b>		
(*)					
weak	faible	gering	débil	Rinshu	3
medium	moyenne	mittel	medio	Nanko	5
strong	forte	stark	fuerte	Shirokaga	7
<b>3. Tree: predominant distribution of flower buds</b>	<b>Arbre: distribution prédominante des boutons à fleur</b>	<b>Baum: überwie-gende Verteilung der Blütenknospen</b>	<b>Árbol: distribución predominante de botones florales</b>		
on spurs only	seulement sur des brindilles	nur an kurzen Fruchtspießen	solo en los estolones		1
on spurs and one-year-old shoots	sur des brindilles et sur des rameaux d'un an	an kurzen Fruchtspießen und an ein-jährigen Trieben	en los estolones y tallos de un año		2
<b>4. One-year-old shoot: thickness</b>	<b>Rameau d'un an: épaisseur</b>	<b>Einjähriger Trieb: Dicke</b>	<b>Tallo de un año: grosor</b>		
thin	fin	dünn	delgado	Kaoume, Naniwa	3
medium	moyen	mittel	medio	Nanko	5
thick	épais	dick	grueso	Bungo, Natsuka	7



English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>5. One-year-old shoot: length of internode</b>	<b>Rameau d'un an: longueur de l'entre-nœud</b>	<b>Einjähriger Trieb: Länge des Internodiums</b>	<b>Tallo de un año: longitud del internudo</b>		
short	court	kurz	corta	Nanko	3
medium	moyen	mittel	media	Oshuku, Yoseibai	5
long	long	lang	larga	Rinshu	7
<b>6. (* One-year-old shoot: color</b>	<b>Rameau d'un an: couleur</b>	<b>Einjähriger Trieb: Farbe</b>	<b>Tallo de un año: color</b>		
green	vert	grün	verde	Tamaume	1
light red	rouge clair	hellrot	rojo claro	Nanko	2
reddish brown	brun rougeâtre	rötlichbraun	marrón rojizo	Bungo	3
<b>7. (* Young leaf: color</b>	<b>Feuille jeune: couleur</b>	<b>Junges Blatt: Farbe</b>	<b>Hoja joven: color</b>		
light green	vert clair	hellgrün	verde claro	Ryukyokoume, Tamaume	1
medium green	vert moyen	mittelgrün	verde medio	Taihei	2
dark green	vert foncé	dunkelgrün	verde oscuro	Bungo, Rinshu	3
red	rouge	rot	rojo	Kojiro, Nanko	4
<b>8. Leaf blade: length</b>	<b>Limbe: longueur</b>	<b>Blattspreite: Länge</b>	<b>Limbo: longitud</b>		
short	court	kurz	corto	Ryukyokoume	3
medium	moyen	mittel	medio	Gyokuei, Nanko	5
long	long	lang	largo	Shirokaga, Yoseibai	7
<b>9. Leaf blade: width</b>	<b>Limbe: largeur</b>	<b>Blattspreite: Breite</b>	<b>Limbo: anchura</b>		
narrow	étroit	schmal	estrecho		3
medium	moyen	mittel	medio		5
broad	large	breit	ancho		7

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>10. (*)</b>	<b>Leaf blade: ratio length/width</b>	<b>Limbe: rapport longueur/largeur</b>	<b>Blattspreite: Verhältnis Länge/Breite</b>	<b>Limbo: razón longitud/anchura</b>		
	small	petit	klein	pequeña	Bungo	3
	medium	moyen	mittel	media		5
	large	grand	groß	grande	Yakushiume	7
<b>11. (+)</b>	<b>Leaf blade: length of tip</b>	<b>Limbe: longueur du sommet</b>	<b>Blattspreite: Länge der Spitze</b>	<b>Limbo: longitud del extremo</b>		
	short	court	kurz	corto	Bungo, Yakushiume	3
	medium	moyen	mittel	medio	Koshushinko	5
	long	long	lang	largo	Koshusaisho, Shirokaga	7
<b>12. (+)</b>	<b>Leaf blade: shape of base</b>	<b>Limbe: forme de la base</b>	<b>Blattspreite: Form der Basis</b>	<b>Limbo: forma de la base</b>		
	acute	aiguë	spitz	aguda	Ishikawaomiume	1
	obtuse	obtuse	stumpf	obtusa	Nanko, Shirokaga	2
	rounded	arrondie	abgerundet	redondeada	Bungo	3
<b>13. (*)</b>	<b>Leaf blade: pubescence</b>	<b>Limbe: pubescence</b>	<b>Blattspreite: Behaarung</b>	<b>Limbo: pubescencia</b>		
	absent or very weakly expressed	absente ou très faiblement exprimée	fehlend oder sehr gering ausgeprägt	ausente o muy débilmente expresada	Koshusaisho, Nanko	1
	weakly expressed	faiblement exprimée	gering ausgeprägt	débilmente expresada		2
	strongly expressed	fortement exprimée	stark ausgeprägt	fuertemente expresada	Bungo	3
<b>14. (+)</b>	<b>Stipule: shape</b>	<b>Stipule: forme</b>	<b>Nebenblatt: Form</b>	<b>Estípula: forma</b>		
	lanceolate	lancéolée	lanzettlich	lanceolada	Nanko	1
	semi-palmate	demi-palmée	halb-handförmig	semipalmeada	Shirokaga	2
	palmate	palmée	handförmig	palmeada	Bungo, Ishikawaomiume	3

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>15. Flower: type</b> (* )	<b>Fleur: type</b>	<b>Blüte: Typ</b>	<b>Flor: tipo</b>		
single	simple	einfach	sencillo	Koshusaisho, Nanko	1
semi-double	demi-double	halbgefüllt	semidoble		2
double	double	gefüllt	doble	Rinshu, Taishoume	3
<b>16. Flower: size</b> (* )	<b>Fleur: taille</b>	<b>Blüte: Größe</b>	<b>Flor: tamaño</b>		
small	petite	klein	pequeño	Kairyouchida, Koshusaisho	3
medium	moyenne	mittel	medio	Gyokuei, Nanko	5
large	grande	groß	grande	Bungo, Shirokaga	7
<b>17. Flower: shape of petal</b> (* )	<b>Fleur: forme du pétale</b>	<b>Blüte: Form des Blütenblattes</b>	<b>Flor: forma del pétalo</b>		
round	rond	rund	redondo	Baigo, Shirokaga, Tamaume	1
elliptic	elliptique	elliptisch	elíptico	Taihei	2
oblong	oblong	rechteckig	oblongo	Koshusaisho, Rinshu	3
<b>18. Flower: relative position of petals</b> (* )	<b>Fleur: position relative des pétales</b>	<b>Blüte: relative Position der Blütenblätter</b>	<b>Flor: posición relativa de los pétalos</b>		
apart	libres	frei	libre	Koshusaisho, Nanko	1
touching	touchants	sich berührend	tocándose		2
overlapping	chevauchants	überlappend	solapándose	Shirokaga	3
<b>19. Petal: color</b> (* )	<b>Pétale: couleur</b>	<b>Blütenblatt: Farbe</b>	<b>Pétalo: color</b>		
white	blanc	weiß	blanco	Nanko	1
light pink	rose clair	hellrosa	rosa claro	Yoseibai	2
medium pink	rose moyen	mittelrosa	rosa medio	Oshuku	3
medium red	rouge moyen	mittelrot	rojo medio	Kobai	4
dark red	rouge foncé	dunkelrot	rojo obscura	Kankobai	5

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>20. Pollen: viability</b> (* (+)	<b>Pollen: viabilité</b>	<b>Pollen: Keimfähigkeit</b>	<b>Polen: viabilidad</b>		
absent or very low	absente ou très faible	fehlend oder sehr gering	ausente o muy baja	Shirokaga	1
low	faible	gering	baja	Kojiro	3
medium	moyenne	mittel	media	Rinshu, Tamaume	5
high	forte	stark	alta	Kairyouchida, Nanko	7
very high	très forte	sehr stark	muy alta		9
<b>21. Calyx: recurvature of apex</b> (*	<b>Calice: courbure de l'apex</b>	<b>Kelch: Umbiegung der Spitze</b>	<b>Cáliz: recurvado del ápice</b>		
absent or very weakly expressed	absente ou très faiblement exprimée	fehlend oder sehr gering ausgeprägt	ausente o muy débilmente expresado	Nanko, Taihei	1
weakly expressed	faiblement exprimée	gering ausgeprägt	débilmente expresado		2
strongly expressed	fortement exprimée	stark ausgeprägt	fuertemente expresado	Bungo, Seiyobai	3
<b>22. Calyx: color</b>	<b>Calice: couleur</b>	<b>Kelch: Farbe</b>	<b>Cáliz: color</b>		
green	vert	grün	verde	Tamaume	1
green red	rouge vert	grünrot	rojo verde	Nanko, Shirokaga	2
red	rouge	rot	rojo	Bungo	3
<b>23. Fruit: size</b> (*	<b>Fruit: taille</b>	<b>Frucht: Größe</b>	<b>Fruto: tamaño</b>		
very small	très petit	sehr klein	muy pequeño	Koume	1
small	petit	klein	pequeño	Ryukyokoume	3
medium	moyen	mittel	medio	Yoseibai	5
large	gros	groß	grande	Baigo, Shirokaga	7
very large	très gros	sehr groß	muy grande	Bungo, Taihei	9

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>24. Fruit: shape in longitudinal section (in ventral view)</b> (* (+)	<b>Fruit: forme en section longitudinale (vue ventrale)</b>	<b>Frucht: Form im Längsschnitt (Bauchansicht)</b>	<b>Fruto: forma en sección longitudinal (en vista ventral)</b>		
elliptic	elliptique	elliptisch	elíptico	Taihei	1
round	rond	rund	redondo	Tamaume	2
oblate	aplatis	breitrund	achatado		3
ovate	ovale	eiförmig	oval	Nanko	4
<b>25. Fruit: shape of apex</b> (+)	<b>Fruit: forme de l'apex</b>	<b>Frucht: Form der Spitze</b>	<b>Fruto: forma del ápice</b>		
depressed	déprimé	eingesenkt	deprimido	Bungo, Taihei	1
flat	plan	flach	plano	Nanko	2
pointed	pointu	vorgewölbt	puntiagudo	Koshusaisho	3
<b>26. Fruit: depth of suture</b>	<b>Fruit: profondeur de la suture</b>	<b>Frucht: Tiefe der Naht</b>	<b>Fruto: profundidad de la sutura</b>		
shallow	peu profonde	flach	superficial	Koshusaisho, Nanko	3
medium	moyenne	mittel	media	Sugita	5
deep	profonde	tief	profunda	Bungo, Taihei	7
<b>27. Fruit: frequency of fruit asymmetric along the suture</b>	<b>Fruit: fréquence des fruits asymétriques le long de la suture</b>	<b>Frucht: Häufigkeit der entlang der Naht asymmetrischen Früchte</b>	<b>Fruto: frecuencia de frutos asimétricos a lo largo de la sutura</b>		
low	faible	gering	baja	Tamaume	3
medium	moyenne	mittel	media		5
high	forte	hoch	alta	Bungo	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>28. Fruit: color of skin (sunny side) (*)</b>	<b>Fruit: couleur de l'épiderme (face ensoleillée)</b>	<b>Frucht: Farbe der Haut (Sonnenseite)</b>	<b>Fruto: color del piel (lado soleado)</b>		
light green	vert clair	hellgrün	verde claro	Inazumi	1
medium green	vert moyen	mittelgrün	verde medio	Nanko, Shirokaga	2
yellow	jaune	gelb	amarillo	Orihime	3
red	rouge	rot	rojo	Sumomoume	4
<b>29. Fruit: anthocyanin coloration of skin (as for 28) (*)</b>	<b>Fruit: pigmentation anthocyanique de l'épiderme (comme pour 28)</b>	<b>Frucht: Anthocyan-färbung der Haut (wie unter 28)</b>	<b>Fruto: pigmentación antocianica de la piel (como en 28)</b>		
absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Bungo	1
weak	faible	gering	débil	Gyokuei, Shirokaga, Tamaume	3
medium	moyenne	mittel	media	Nanko	5
strong	forte	stark	fuerte	Koshushinko	7
very strong	très forte	sehr stark	muy fuerte		9
<b>30. Fruit: color of flesh (*)</b>	<b>Fruit: couleur de la chair</b>	<b>Frucht: Farbe des Fleisches</b>	<b>Fruto: color de la carne</b>		
light green	vert clair	hellgrün	verde clara	Nanko	1
yellow	jaune	gelb	amarilla	Orihime	2
yellow orange	jaune-orangé	gelborange	naranja amarilla	Taihei	3
red	rouge	rot	roja	Sumomoune	4
<b>31. Fruit: texture of flesh (*)</b>	<b>Fruit: texture de la chair</b>	<b>Frucht: Textur des Fleisches</b>	<b>Fruto: textura de la carne</b>		
fine	fine	fein	fina	Nanko	3
medium	moyenne	mittel	media		5
coarse	grossière	grob	grosera	Bungo, Seiyobai	7

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>32. Stone: shape (in lateral view)</b> (* (+)	<b>Noyau: forme (vue latérale)</b>	<b>Stein: Form (in Seitenansicht)</b>	<b>Hueso: forma (vista lateral)</b>		
elliptic	elliptique	elliptisch	elíptico	Kojiro	1
broad elliptic	elliptique large	breit elliptisch	elíptico ancho	Nanko, Ryukyokoume	2
round	rond	rund	redondo	Oshuku	3
obovate	obovale	verkehrt eiförmig	oboval		4
<b>33. Stone: angle at apex (as for 32)</b> (* (+)	<b>Noyau: angle de l'apex (comme pour 32)</b>	<b>Stein: Winkel an der Spitze (wie unter 32)</b>	<b>Hueso: ángulo en el ápice (como en 32)</b>		
acute	aigu	spitz	agudo	Taiwanyaseiume	1
approximately right-angled	presque droit	etwa rechtwinklig	aproximadamente ángulo recto	Oshuku	2
obtuse	obtus	stumpf	obtuso	Bungo	3
<b>34. Fruit: ratio stone size/fruit size</b> (*	<b>Noyau: rapport taille du noyau/taille du fruit</b>	<b>Frucht: Verhältnis Größe des Steines/Größe der Frucht</b>	<b>Fruto: razón tamaño del hueso/tamaño del fruto</b>		
small	petit	klein	baja	Oshuku	3
medium	moyen	mittel	media	Shirokaga	5
large	grand	groß	alta	Juro, Yoseibai	7
<b>35. Stone: roughness of surface</b>	<b>Noyau: rugosité de la surface</b>	<b>Stein: Rauheit der Schale</b>	<b>Hueso: rugosidad de la superficie</b>		
smooth	lisse	glatt	lisa	Koshusaisho, Ryukyokoume	3
medium	moyen	mittel	media	Shirokaga	5
rough	rugueux	rauh	rugosa	Bungo, Taihei	7
<b>36. Stone: adherence to flesh</b> (*	<b>Noyau: adhérence à la chair</b>	<b>Stein: Anhaften am Fleisch</b>	<b>Hueso: adherencia a la carne</b>		
absent or very weakly expressed	absente ou très faiblement exprimée	fehlend oder sehr gering ausgeprägt	ausente o muy débilmente expresada		1
weakly expressed	faiblement exprimée	gering ausgeprägt	débilmente expresada	Bungo	2
strongly expressed	fortement exprimée	stark ausgeprägt	fuertemente expresada	Nanko, Shirokaga	3

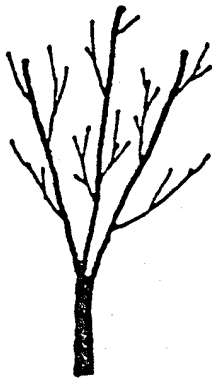
English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>37. (*)</b>	<b>Time of flowering (80% of flowers open)</b>	<b>Époque de floraison (80 % des fleurs épanouies)</b>	<b>Zeitpunkt der Blüte (80 % der Blüten geöffnet)</b>	<b>Fecha de la floración (80 % de las flores abiertas)</b>	
	early	précoce	früh	temprana	Ryukyokoume 3
	medium	moyenne	mittel	media	Nanko 5
	late	tardive	spät	tardía	Bai, Oshuku 7
<b>38. (*)</b>	<b>Time of leaf bud burst (10% of buds burst)</b>	<b>Époque du débourrement (10 % des bourgeons)</b>	<b>Zeitpunkt des Blattknospenaufbrechens (10 % der Knospen aufgebrochen)</b>	<b>Fecha de apertura de los botones (10 % de los botones)</b>	
	early	précoce	früh	temprana	Kairyouchida 3
	medium	moyenne	mittel	media	Nanko 5
	late	tardive	spät	tardía	Bungo, Shirokaga 7
<b>39. (*)</b>	<b>Time of physiological ripeness</b>	<b>Époque de maturité physiologique</b>	<b>Zeitpunkt der physiologischen Reife</b>	<b>Fecha de madurez fisiológica</b>	
	very early	très précoce	sehr früh	muy temprana	Ryukyokoume 1
	early	précoce	früh	temprana	Nanko, Tamaume 3
	medium	moyenne	mittel	media	Oshuku, Yoseibai 5
	late	tardive	spät	tardía	Gyokuei, Shirokaga 7
	very late	très tardive	sehr spät	muy tardía	9
<b>40.</b>	<b>Time of leaf fall (80% of leaves fall)</b>	<b>Époque de chute des feuilles (80 % des feuilles)</b>	<b>Zeitpunkt des Laubfalles (80 % des Laubes)</b>	<b>Fecha de caída de las hojas (80 % de las hojas)</b>	
	early	précoce	früh	temprana	3
	medium	moyenne	mittel	media	Nanko, Ryukyokoume, Tamaume 5
	late	tardive	spät	tardía	Shirokaga 7



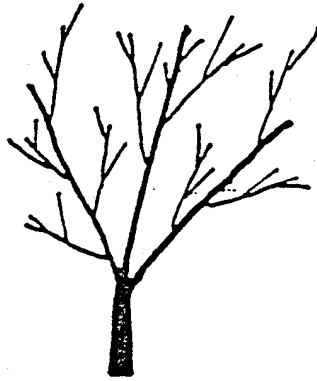
English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>41. (*)</b>	<b>Tendency to pre-harvest fruit drop</b>	<b>Tendance à la chute des fruits avant la récolte</b>	<b>Tendenz zum Fruchtfall vor der Ernte</b>	<b>Tendencia a la caída del fruto previa a la cosecha</b>	
absent or very low	nulle ou très faible	fehlend oder sehr gering	ausente o muy baja		1
low	faible	gering	baja	Nanko, Oshuku, Ryukyokoume	3
medium	moyenne	mittel	media	Taihei, Tamaune, Yoseibai	5
high	forte	hoch	alta	Bungo, Kairyouchida	7
very high	très forte	sehr hoch	muy alta		9
<b>42. (*)</b>	<b>Frequency of gummy fruits</b>	<b>Fréquence des fruits gommés</b>	<b>Häufigkeit gummierter Früchte</b>	<b>Frecuencia de frutos gomosos</b>	
low	faible	gering	baja	Jizoume, Nanko	3
medium	moyenne	mittel	media	Oshuku, Shirokaga	5
high	forte	hoch	alta	Gessekai, Natsuka, Togoro	7
<b>43. (*)</b>	<b>Plant: self-compatibility</b>	<b>Plante: auto-compatibilité</b>	<b>Pflanze: Selbstverträglichkeit</b>	<b>Planta: autocompatibilidad</b>	
absent	absente	fehlend	ausente	Baigo, Nanko	1
present	présente	vorhanden	presente	Jizoume, Yoseibai	9

VIII. Explanation on the Table of Characteristics

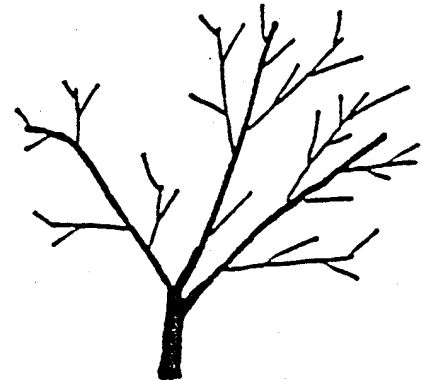
Ad. 1: Tree: habit



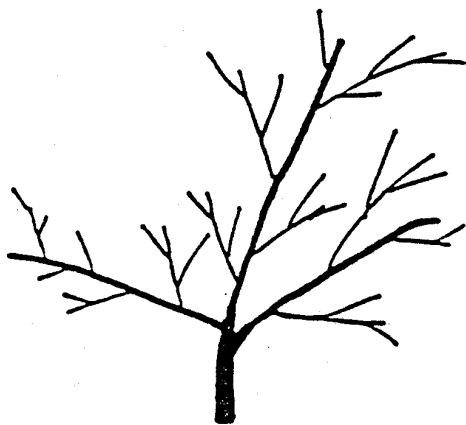
1  
upright



2  
semi-upright



3  
semi-upright to spreading

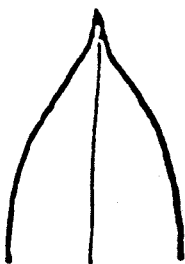


4  
spreading

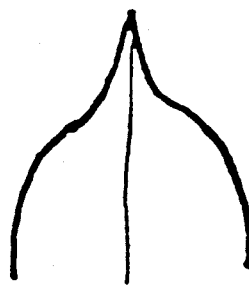


5  
drooping

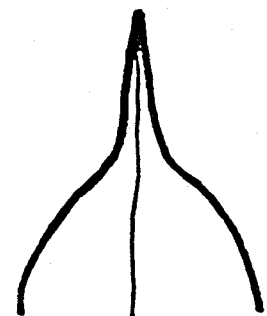
Ad. 11: Leaf blade: length of tip



3  
short

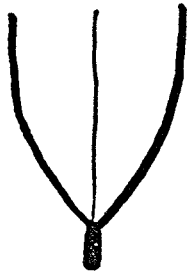


5  
medium

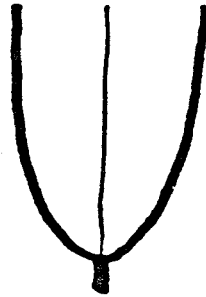


7  
long

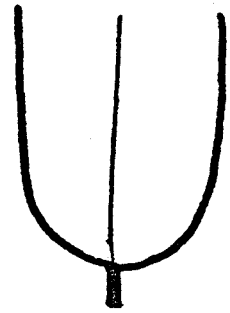
Ad. 12: Leaf blade: shape of base



1  
acute



2  
obtuse



3  
rounded

Ad. 14: Stipule: shape



1  
lanceolate



2  
semi-palmate

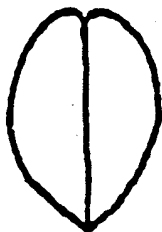


3  
palmate

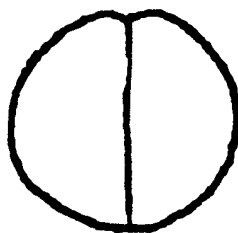
Ad. 20: Pollen: viability

The viability of the pollen should be observed by using aceto carmine.

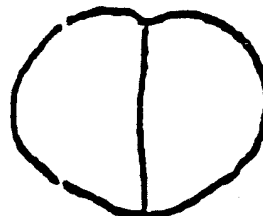
Ad. 24: Fruit: shape in longitudinal section (in ventral view)



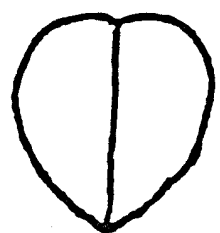
1  
elliptic



2  
round

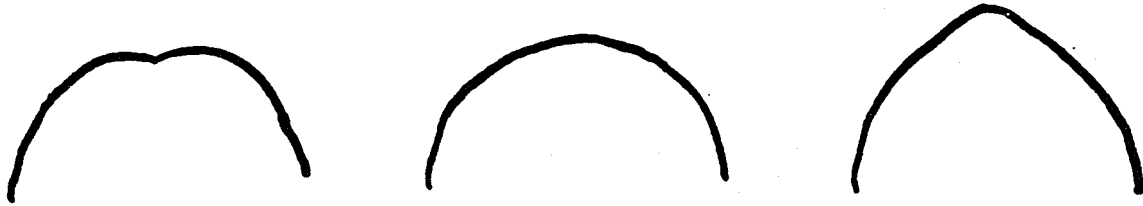


3  
oblate



4  
ovate

Ad. 25: Fruit: shape of apex

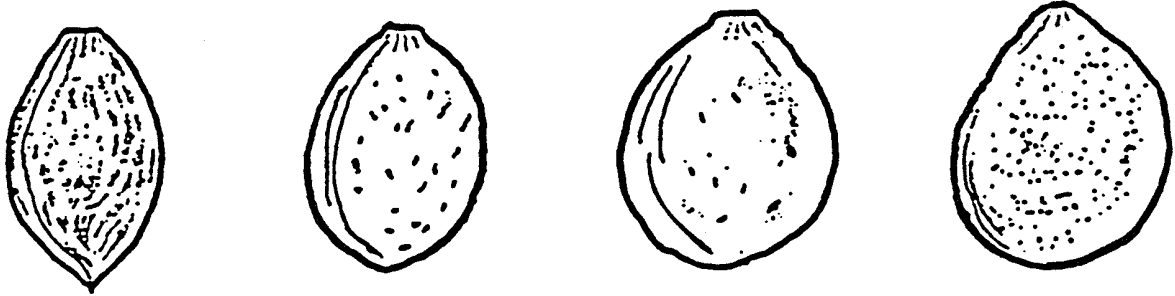


1  
depressed

2  
flat

3  
pointed

Ad. 32: Stone: shape (in lateral view)



1  
elliptic

2  
broad elliptic

3  
round

4  
obovate

Ad. 33: Stone: angle at apex (as for 32)



1  
acute

2  
approximately right-angled

3  
obtuse

IX. Literature

The National Test Guideline for *Prunus Mume* in Japan

Kamibayashi, Y. , 1927: “The Study on Mume Flowering and Fruiting,” The Journal of Horticulture, Vol. 22, p. 64-74, Japan

Togashi, J. , 1933: “The Cultivation Methods of Peach and Mume,” Yoken-do, Japan

Imura, N., 1934: “The Morphological Study on Mume Flowers,” The Journal of Horticulture, Vol. 30, p. 21-44, Japan

Tanaka, Y., 1936: “A Monograph of *Prunus Mume* with Reference to its Fruit Varieties,” The Contributions from the Horticultural Institute, Faculty of Science and Agriculture, Taihoku Imperial University, No. 15, Japan (with English summary)

Maeda, T., Shibamoto, K., 1971: “Mume-Apricot,” Ienohikari Kyokai, Japan

Fumoto, J., 1972: “The Study on the Relationship between Apricot and Mume,” a degree thesis of Kyoto Prefecture University, Japan

Hasebe, H. 1 1980: “Varieties and Cultivation of Mume,” Nosangyoson Bunka Kyokai, Japan

1980: “The Mume in Gunma Prefecture,” Gunma Prefecture, Japan

1991: “Encyclopedia of Fruit Culture,” Yoken-do, Japan

Kozaki, J., Ueno, J., Tsutiya, S., Kajiura, J., 1996: “The Fruits in Japan,” Yoken-do, Japan (with English summary)

Kearns, C.A, Inouye D.W., 1993: “Techniques for Pollination Biologists,” University Press of Colorado, p. 109-110

X. Technical Questionnaire

	Reference Number (not to be filled in by the applicant)
<p>TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights</p>	
1. Species	<p><i>Prunus mume</i> Sieb. et Zucc. and its hybrids MUME (JAPANESE APRICOT) (Fruit Varieties)</p>
2. Applicant (Name and address)	
3. Proposed denomination or breeder's reference	

4. Information on origin, maintenance and reproduction of the variety

4.1 Breeding method

(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 that question is yes, please attach a copy of such an authorization.

4.2 Origin

(a) Seedling of unknown parentage [ ]

(b) Produced by controlled pollination [ ]  
(indicate parent varieties)

– Seed bearing parent [ ]

.....

– Pollen parent [ ]

.....

(c) Produced by open pollination of [ ]  
(indicate seed bearing parent plant)

.....

(d) Mutation or sport from (indicate parent variety) [ ]  
.....

(e) Discovery (indicate where and when) [ ]  
.....

4.3. *In vitro* propagation

The plant material has been obtained by *in vitro* propagation      yes      [ ]  
no      [ ]

4.4 Virus status

The variety is

(a) virus free      [ ]  
(indicate viruses)

.....

(b) virus tested      [ ]  
(indicate against which virus)

.....

(c) The virus status is unknown      [ ]

4.5 Pollinator

Good pollinators are the following varieties:

.....

4.6 Other information



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	
<b>5.1 Tree: predominant distribution of flower buds</b> <b>(3)</b>		
on spurs only		1[ ]
on spurs and one-year-old shoots		2[ ]
<b>5.2 Fruit: size</b> <b>(23)</b>		
very small	Koume	1[ ]
small	Ryukyokoume	3[ ]
medium	Yoseibai	5[ ]
large	Baigo, Shirokaga	7[ ]
very large	Bungo, Taihei	9[ ]
<b>5.3 Time of flowering (80% of flowers open)</b> <b>(37)</b>		
early	Ryukyokoume	3[ ]
medium	Nanko	5[ ]
late	Bai, Oshuku	7[ ]
<b>5.4 Time of physiological ripeness</b> <b>(39)</b>		
very early	Ryukyokoume	1[ ]
early	Nanko, Tamaume	3[ ]
medium	Oshuku, Yoseibai	5[ ]
late	Gyokuei, Shirokaga	7[ ]
very late		9[ ]

6. Similar varieties and differences from 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

A representative color photo of the variety should be included in the Technical Questionnaire.