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TG/187/1

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

PRUNUS ROOTSTOCKS

(*Prunus* L.)

GENEVA
2002

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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.

TABLE OF CONTENTS PAGE

I. Subject of these Guidelines

These Test Guidelines apply to all varieties used as rootstocks of all species of *Prunus* L. If characteristics of the flower, the fruit or the seed are necessary to examine the varieties, the Test Guidelines for Almond TG/56/3, Apricot TG/70/3, Cherry TG/35/6, European Plum TG/41/4, Japanese Plum TG/84/3, Mume (Japanese Apricot) TG/160/1 or Peach, Nectarine TG/53/6 should be used for those characteristics, as appropriate.

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) 10 rooted cuttings, for vegetatively propagated varieties, or
(b) 40 one-year-old seedlings for seed propagated varieties.

2. In the case of seed, the seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should be stated by the applicant.

3. The plant material supplied should be visibly healthy, not lacking in vigor or affected by any important pest or disease. It should preferably not be obtained from *in vitro* propapation.

4. 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 the tests should normally be two independent growing cycles.

2. The tests should normally be conducted at one place. If any important characteristic 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 satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

4. Additional tests for special purposes may be established.

IV. Methods and Observations

1. Unless otherwise stated, all observations determined by measurement, weighing and counting should be made on 10 plants or parts taken from each of 10 plants for vegetatively propagated varieties, or on 40 plants or parts taken from each of 40 plants for seed propagated varieties.

2. For the assessment of uniformity of:

(a) vegetatively propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 10 plants, the maximum number of off-types allowed would be 1;

(b) self-pollinated seedling varieties, a population standard of 2% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 40 plants, the maximum number of off-types allowed would be 2.

(c) cross-pollinated seedling varieties, the assessment should be according to the recommendations in the General Introduction.

3. Unless otherwise stated, all observations on the plant and the leaf should be made during early summer.

4. Unless otherwise stated, all observations on the one-year-old shoot should be made during the dormant season.

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 group the varieties according to the botanical species and use the following characteristics for grouping varieties:

(a) Plant: vigor (characteristic 1)
(b) Leaf blade: length (characteristic 15)
(c) Leaf blade: shape (characteristic 18)
(d) Plant: flowers (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 characteristics.

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 Beispielssorten Variedades ejemplo	Note/ Nota
1. (*) (+)	**Plant: vigor**	**Plante: vigueur**	**Pflanze: Wuchsstärke**	**Planta: vigor**		
	weak	faible	gering	débil	Edabriz, Ferlenain	3
	medium	moyenne	mittel	medio	Brokforest, GM 61/1	5
	strong	forte	stark	fuerte	Alkavo, F 12/1	7
2. (*)	**Plant: habit**	**Plante: port**	**Pflanze: Wuchsform**	**Planta: porte**		
	upright	dressé	aufrecht	erecto	Colt	1
	spreading	étalé	breitwüchsig	rastrero	Gisela 5	3
	drooping	retombant	hängend	colgante	*Prunus besseyi*	5
3.	**Plant: branching**	**Plante: ramification**	**Pflanze: Verzweigung**	**Planta: ramificación**		
	weak	faible	gering	débil	F 12/1, Ferciana	3
	medium	moyenne	mittel	media	Pixy	5
	strong	forte	stark	fuerte	Gisela 5	7
4.	**One-year-old shoot: thickness**	**Pousse d'un an: grosseur**	**Einjähriger Trieb: Dicke**	**Rama de un año: espesor**		
	thin	fine	dünn	delgada	Edabriz, Gisela 5	3
	medium	moyenne	mittel	media	Colt, Pixy	5
	thick	grosse	dick	gruesa	Brooks-60, F 12/1	7
5.	**One-year-old shoot: length of internode (middle third of shoot)**	**Pousse d'un an: longueur de l'entre-nœud (tiers médian de la pousse)**	**Einjähriger Trieb: Internodienlänge (im mittleren Drittel des Triebes)**	**Rama de un año: longitud del entrenudo (en el tercio medio de la rama)**		
	short	court	kurz	corto	SL 64	3
	medium	moyen	mittel	medio	Colt	5
	long	long	lang	largo	F 12/1	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6.	**One-year-old shoot: pubescence (upper third)**	**Pousse d'un an: pilosité (tiers supérieur)**	**Einjähriger Trieb: Behaarung (oberes Drittel)**	**Rama de un año: pubescencia (en el tercio superior)**		
	absent	absente	fehlend	ausente	Pixy	1
	present	présente	vorhanden	presente	SL 64	9
7.	**One-year-old shoot: number of lenticels**	**Pousse d'un an: nombre de lenticelles**	**Einjähriger Trieb: Anzahl Lentizellen**	**Rama de un año: número de lenticelas**		
	few	petit	gering	pequeño	Colt, Fereley	3
	medium	moyen	mittel	medio	Gisela 4, Pixy	5
	many	grand	groß	grande	SL 64	7
8.	**One-year-old shoot: anthocyanin coloration of apex**	**Pousse d'un an: pigmentation anthocyanique du sommet**	**Einjähriger Trieb: Anthocyanfärbung der Spitze**	**Rama de un año: pigmentación antociánica del ápice**		
	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	F 12/1	1
	weak	faible	gering	débil	Fereley	3
	medium	moyenne	mittel	media	Pixy	5
	strong	forte	stark	fuerte	Hamyra	7
	very strong	très forte	sehr stark	muy fuerte	Ferciana	9
9. **(+)**	**One-year-old shoot: position of vegetative bud in relation to shoot**	**Pousse d'un an: position du bourgeon à bois par rapport au rameau**	**Einjähriger Trieb: Stellung der vegetativen Knospe im Verhältnis zum Trieb**	**Rama de un año: posición de la yema de madera en relación con la rama**		
	adpressed	appliqué	anliegend	alineada	Hamyra	1
	slightly held out	légèrement décollé	leicht abstehend	ligeramente divergente	Gisela 5	2
	markedly held out	nettement décollé	deutlich abstehend	fuertemente divergente	F 12/1	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
10.	**One-year-old shoot: size of vegetative bud**	**Pousse d'un an: taille du bourgeon à bois**	**Einjähriger Trieb Größe der vegetativen Knospe**	**Rama de un año: tamaño de la yema de madera**		
	small	petit	klein	pequeña	SL 64	3
	medium	moyen	mittel	media	F 12/1	5
	large	gros	groß	grande	Piku 1	7
11. **(*)** **(+)**	**One-year-old shoot: shape of apex of vegetative bud**	**Pousse d'un an: forme du sommet du bourgeon à bois**	**Einjähriger Trieb: Form der Spitze der vegetativen Knospe**	**Rama de un año: forma del ápice de la yema de madera**		
	acute	pointu	spitz	agudo	Hamyra, Pixy	1
	obtuse	obtus	stumpf	obtuso	Gisela 5	2
	rounded	arrondi	abgerundet	redondeado	F 12/1	3
12. **(+)**	**One-year-old shoot: size of vegetative bud support**	**Pousse d'un an: taille du support du bourgeon à bois**	**Einjähriger Trieb: Größe des Wulstes der vegetativen Knospe**	**Rama de un año: tamaño del soporte de la yema de madera**		
	small	petit	klein	pequeño	Hamyra	3
	medium	moyen	mittel	medio	F 12/1	5
	large	grand	groß	grande		7
13. **(*)**	**One-year-old shoot: branching (at the end of summer)**	**Pousse d'un an: ramification (à la fin de l'été)**	**Einjähriger Trieb: Verzweigung (zum Ende des Sommers)**	**Rama de un año: ramificación (al final del verano)**		
	weak	faible	gering	débil	Felinem, Mayor	3
	medium	moyenne	mittel	media	Adafuel	5
	strong	forte	stark	fuerte	GF 677	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14.	**Young shoot: intensity of anthocyanin coloration of young leaf (during rapid growth)**	**Jeune rameau: intensité de la pigmentation anthocyanique de la jeune feuille (pendant la croissance rapide)**	**Junger Trieb: Intensität der Anthocyanfärbung des jungen Blattes (während des schnellen Wachstums)**	**Rama joven: intensidad de la pigmentación antociánica de la hoja joven (durante el crecimiento rápido)**		
	weak	faible	gering	débil	Edabriz, Fereley, Hamyra	3
	medium	moyenne	mittel	media	F 12/1	5
	strong	forte	stark	fuerte	Colt	7
15.	**Leaf blade: length (*)**	**Limbe: longueur**	**Blattspreite: Länge**	**Limbo: longitud**		
	very short	très court	sehr kurz	muy corto	Myrobalan B	1
	short	court	kurz	corto	Edabriz, Weito T6	3
	medium	moyen	mittel	medio	Piku 1	5
	long	long	lang	largo	F 12/1	7
	very long	très long	sehr lang	muy largo	GF 677	9
16.	**Leaf blade: width**	**Limbe: largeur**	**Blattspreite: Breite**	**Limbo: anchura**		
	very narrow	très étroit	sehr schmal	muy estrecho	GF 677	1
	narrow	étroit	schmal	estrecho	Myrobalan B	3
	medium	moyen	mittel	medio	Fereley	5
	broad	large	breit	ancho	Broksec-60, F 12/1	7
	very broad	très large	sehr breit	muy ancho	Colt	9
17.	**Leaf blade: ratio length/width**	**Limbe: rapport longueur/largeur**	**Blattspreite: Verhältnis Länge/Breite**	**Limbo: relación entre la longitud y la anchura**		
	very small	très petit	sehr klein	muy pequeña	GM 61/1	1
	small	petit	klein	pequeña	Gisela 5	3
	medium	moyen	mittel	media	F 12/1, Pixy	5
	large	grand	groß	grande	Piku 3	7
	very large	très grand	sehr groß	muy grande	GF 677	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18. (*) (+)	**Leaf blade: shape**	**Limbe: forme**	**Blattspreite: Form**	**Limbo: forma**		
	narrow elliptic	elliptique étroit	schmal elliptisch	elíptico estrecho	GF 677	1
	elliptic	élliptique	elliptisch	elíptico	Colt, Fereley, Pixy	2
	circular	circulaire	kreisförmig	circular	Adara, SL 64	3
	ovate	ovale	eiförmig	oval	Edabriz, Gisela 5	4
	obovate	obovale	verkehrt eiförmig	oboval		5
19. (+)	**Leaf blade: angle of apex (excluding tip)**	**Limbe: angle au sommet (hors extrémité)**	**Blattspreite: Winkel an der Spitze (ohne aufgesetzte Spitze)**	**Limbo: ángulo del ápice (excluyendo el extremo)**		
	acute	aigu	spitz	agudo	GF 677, Pixy	1
	right-angled	droit	rechtwinklig	en ángulo recto	Edabriz	2
	obtuse	obtus	stumpf	obtuso	Colt, Fereley	3
20. (*) (+)	**Leaf blade: length of tip**	**Limbe: longueur de la pointe**	**Blattspreite: Länge der aufgesetzten Spitze**	**Limbo: longitud del ápice**		
	short	courte	kurz	corto	Fereley	3
	medium	moyenne	mittel	medio	GM 61/1	5
	long	longue	lang	largo	Colt, Ferlenain	7
21. (*) (+)	**Leaf blade: shape of base**	**Limbe: forme de la base**	**Blattspreite: Form der Basis**	**Limbo: forma de la base**		
	acute	pointue	spitz	aguda	Colt	1
	obtuse	obtuse	stumpf	obtusa	F 12/1, Ferlenain	2
	truncate	tronquée	gerade	truncada	SL 64	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22.	**Leaf blade: color of upper side**	**Limbe: couleur de la face supérieure**	**Blattspreite: Farbe der Oberseite**	**Limbo: color del haz**		
	light green	vert clair	hellgrün	verde claro	Gisela 5, Pixy	1
	dark green	vert foncé	dunkelgrün	verde oscuro	Colt	2
	red	rouge	rot	rojo	Citation	3
	reddish brown	brun rougeâtre	rötlich braun	marrón rojizo	Rubira	4
23.	**Leaf blade: glossiness of upper side**	**Limbe: brillance de la face supérieure**	**Blattspreite: Glanz der Oberseite**	**Limbo: brillo del haz**		
	weak	faible	gering	débil	Hamyra	3
	medium	moyenne	mittel	medio	Fereley, Gisela 5	5
	strong	élevée	stark	fuerte	Colt	7
24.	**Leaf blade: pubescence of lower side at apex**	**Limbe: pilosité de la face inférieure de l'apex**	**Blattspreite: Behaarung der Unterseite an der Spitze**	**Limbo: pubescencia del envés en el ápice**		
	weak	faible	gering	débil	Hamyra	3
	medium	moyenne	mittel	media	Pixy	5
	strong	forte	stark	fuerte	Weito T6	7
25. (*) (+)	**Leaf blade: incisions of margin**	**Limbe: incisions du bord**	**Blattspreite: Randeinschnitte**	**Limbo: incisiones del borde**		
	only crenate	seulement crénelées	nur gekerbt	solamente crenadas	Pixy	1
	both crenate and serrate	crénelées et en dents de scie	gekerbt und gesägt	crenadas y aserradas	Adesoto, GF 1869	2
	only serrate	seulement en dents de scie	nur gesägt	solamente aserradas	Gisela 5	3
26.	**Leaf blade: depth of incisions of margin**	**Limbe: profondeur des incisions du bord**	**Blattspreite: Tiefe der Randeinschnitte**	**Limbo: profundidad de las incisiones del borde**		
	shallow	peu profondes	flach	poco profundas	Edabriz	3
	medium	moyennes	mittel	medianas	Piku 3	5
	deep	profondes	tief	profundas	Colt	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
27. (*)	**Petiole: length**	**Pétiole: longueur**	**Blattstiel: Länge**	**Pecíolo: longitud**		
	short	court	kurz	corto	Piku 3	3
	medium	moyen	mittel	medio	Pixy	5
	long	long	lang	largo	GF 677	7
28.	**Petiole: presence of pubescence of upper side**	**Pétiole: présence de pilosité de la face supérieure**	**Blattstiel: Vorhandensein von Behaarung der Oberseite**	**Pecíolo: presencia de pubescencia de la parte superior**		
	absent	absente	fehlend	ausente	F 12/1	1
	present	présente	vorhanden	presente	Weito T6	9
29.	**Petiole: intensity of pubescence of upper side**	**Pétiole: intensité de la pilosité de la face supérieure**	**Blattstiel: Stärke der Behaarung an der Oberseite**	**Pecíolo: intensidad de la pubescencia de la parte superior**		
	weak	faible	gering	débil	Colt	3
	medium	moyenne	mittel	media	Hamyra	5
	strong	forte	stark	fuerte	Weito T6	7
30. (+)	**Petiole: depth of groove**	**Pétiole: profondeur du canal**	**Blattstiel: Tiefe der Rinne**	**Pecíolo: profundidad de la acanaladura**		
	shallow	peu profond	flach	poco profunda	F 12/1	3
	medium	moyen	mittel	media	Gisela 5	5
	deep	profond	tief	profunda	Myrobalan B	7
31.	**Leaf: ratio length of leaf blade/length of petiole**	**Feuille: rapport longueur du limbe/longueur du pétiole**	**Blatt: Verhältnis Länge der Blattspreite/Länge des Blattstiels**	**Hoja: relación entre la longitud del limbo y la longitud del pecíolo**		
	small	petit	klein	pequeña	Piku 1	3
	medium	moyen	mittel	media	Colt	5
	large	grand	groß	grande	Fereley, GF 677	7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
32.	**Leaf: presence of stipules**	**Feuille: présence de stipules**	**Blatt: Vorhandensein von Nebenblättern**	**Hoja: presencia de estípulas**		
	absent	absentes	fehlend	ausentes	Hamyra	1
	present	présentes	vorhanden	presentes	F 12/1, Weito T6	9
33.	**Stipule: length**	**Stipule: longueur**	**Nebenblatt: Länge**	**Estípulas: longitud**		
	short	court	kurz	cortas	Weito T6	3
	medium	moyen	mittel	medianas	Gisela 5, Pixy	5
	long	long	lang	largas	F 12/1	7
34. **(*)**	**Leaf: presence of nectaries**	**Feuille: présence de nectaires**	**Blatt: Vorhandensein von Nektarien**	**Hoja: presencia de nectarios**		
	absent	absents	fehlend	ausentes	Ferlenain, Hamyra	1
	present	présents	vorhanden	presentes	GF 677, Pixy, St. Julien A	9
35. **(*)**	**Varieties with nectaries only: Leaf: predominant number of nectaries**	**Uniquement les variétés à nectaires: Feuille: nombre prédominant de nectaires**	**Nur Sorten mit Nektarien: Blatt: vorwiegende Anzahl Nektarien**	**Sólo variedades con nectarios: Hoja: número predominante de nectarios**		
	one	un	eins	uno	Weiroot 158	1
	two	deux	zwei	dos	Gisela 5, Pixy	2
	more than two	plus de deux	mehr als zwei	más de dos	Weito T6	3
36.	**Leaf: position of nectaries**	**Feuille: position des nectaires**	**Blatt: Stellung der Nektarien**	**Hoja: posición de los nectarios**		
	predominantly on base of blade	prédominance à la base du limbe	vorwiegend an der Basis der Spreite	predominantemente en la base del limbo	Gisela 5	1
	equally distributed on base of blade and petiole	également répartie à la base du limbe et sur le pétiole	gleichermaßen verteilt an der Basis der Spreite und am Blattstiel	igualmente distribuido en la base del limbo y en el pecíolo	Colt	2
	predominantly on petiole	prédominance sur le pétiole	vorwiegend am Blattstiel	predominantemente en el pecíolo	F 12/1	3

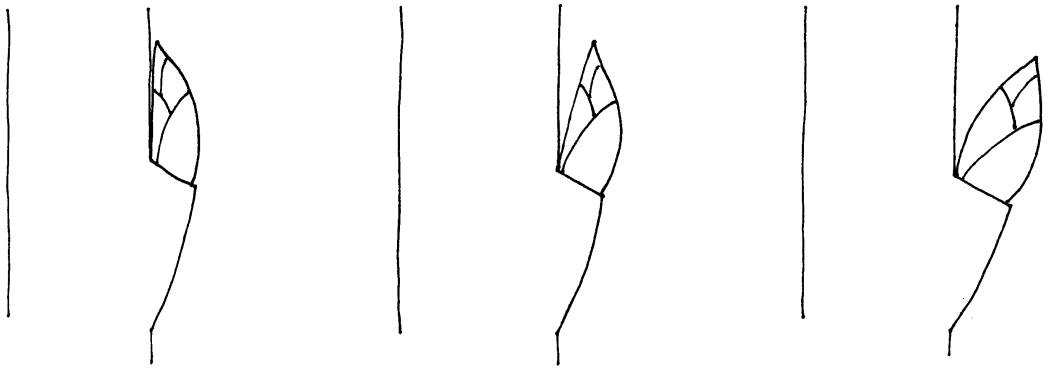
	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
37. (*)	**Nectary: color**	**Nectaire: couleur**	**Nektarie: Farbe**	**Nectario: color**		
	green	vert	grün	verde	Pixy	1
	yellow	jaune	gelb	amarillo	Weito T6	2
	red	rouge	rot	rojo	Weiroot 158	3
	violet	violet	violett	violeta	Colt	4
38. (*)	**Nectary: shape**	**Nectaire: forme**	**Nektarie: Form**	**Nectario: forma**		
	round	arrondi	rund	redonda	Gisela 5	1
	reniform	réniforme	nierenförmig	reniforme	Colt	2
39. (*)	**Plant: flowers**	**Plante: fleurs**	**Pflanze: Blüten**	**Planta: flores**		
	absent	absentes	fehlend	ausentes	Brokforest	1
	present	présentes	vorhanden	presentes	Colt	9

VIII. Explanations on the Table of Characteristics

Ad. 1: Plant: vigor

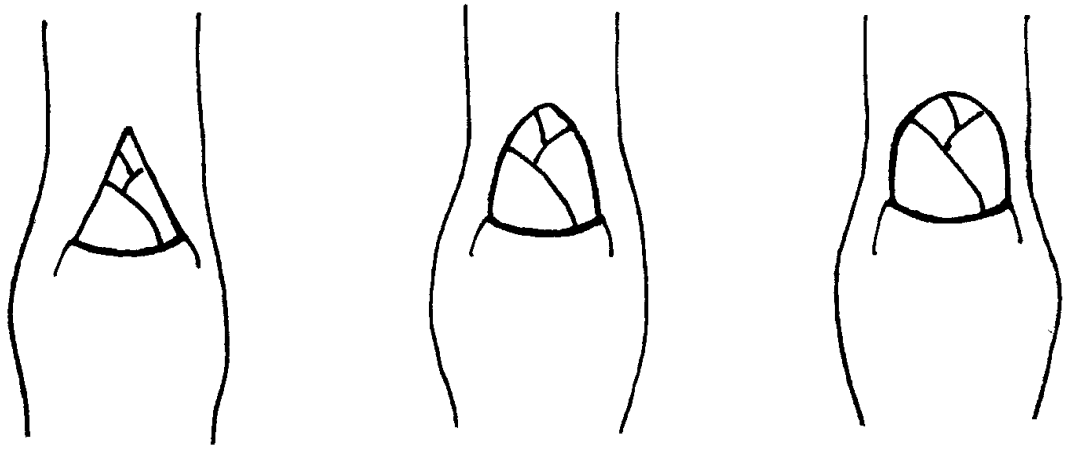
The vigor of the plant should be considered as the overall abundance of vegetative growth.

Ad. 9: One-year-old shoot: position of vegetative bud in relation to shoot



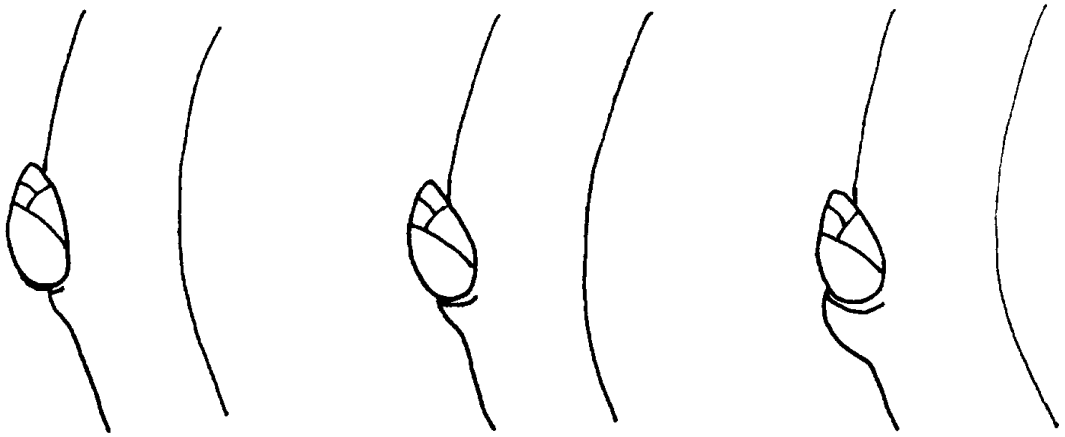
1	2	3
adpressed	slightly held out	markedly held out

Ad. 11: One-year-old shoot: shape of apex of vegetative bud



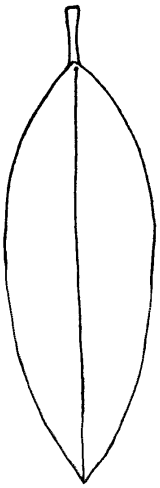
1	2	3
acute	obtuse	rounded

Ad. 12: One-year-old shoot: size of vegetative bud support

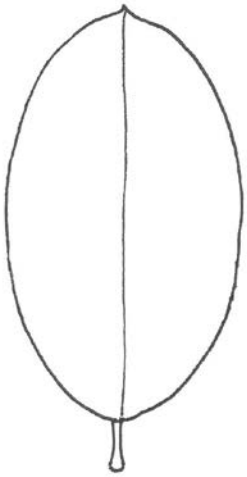


3	5	7
small	medium	large

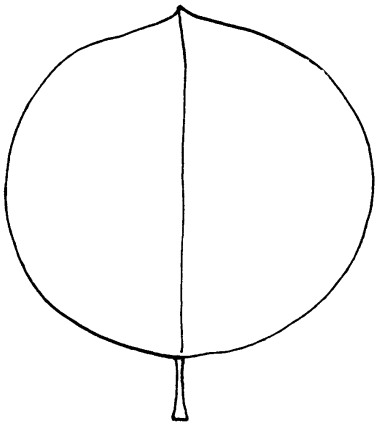
Ad. 18: Leaf blade: shape



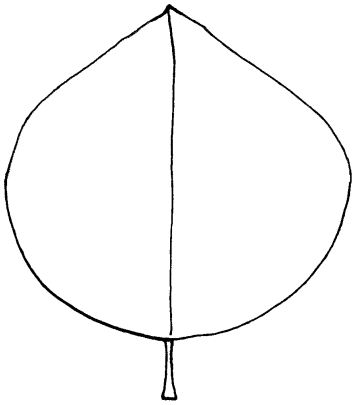
1
narrow elliptic



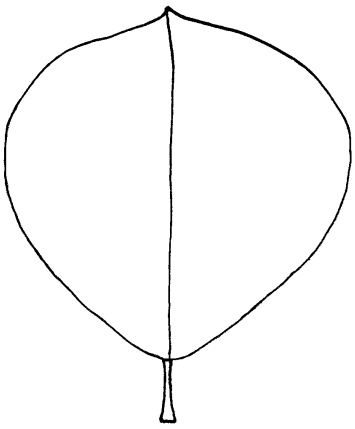
2
elliptic



3
circular

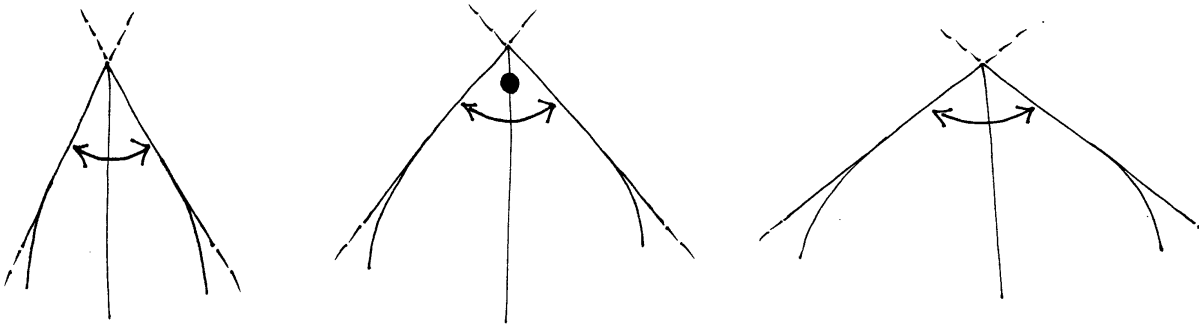


4
ovate



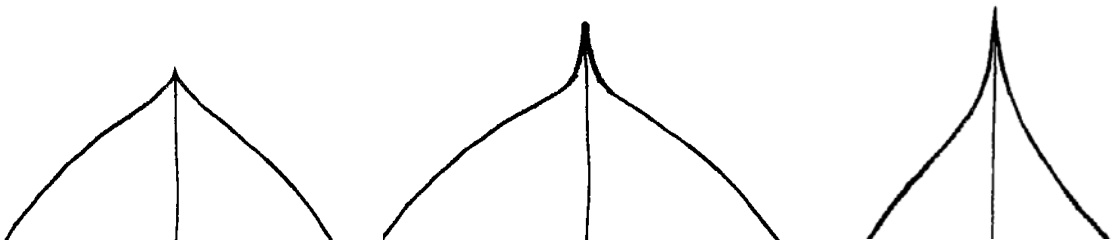
5
obovate

Ad. 19: Leaf blade: angle of apex (excluding tip)



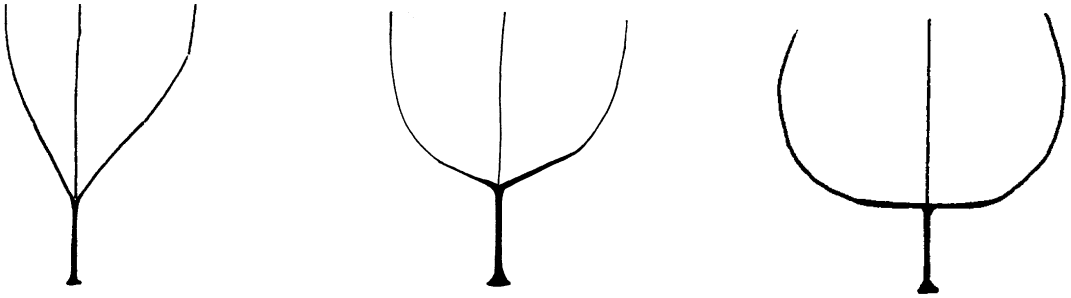
1	2	3
acute	right-angled	obtuse

Ad. 20: Leaf blade: length of tip



3	5	7
short	medium	long

Ad. 21: Leaf blade: shape of base



1	2	3
acute	obtuse	truncate

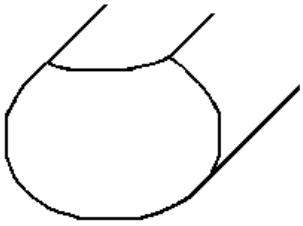
Ad. 25: Leaf blade: incisions of margin

1
only crenate

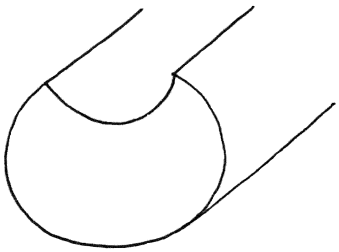
2
both crenate and serrate

3
only serrate

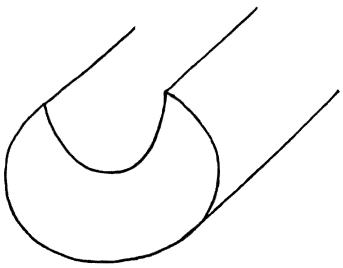
Ad. 30: Petiole: depth of groove



3
shallow



5
medium



7
deep

Explanations on the Reference Varieties

Variety denomination	**Species**
Adafuel	*Prunus dulcis* (Mill.) D.A. Webb x *P. persica* (L.) Batsch.
Adara	*Prunus cerasifera* Ehrh., open pollinated
Adesoto	*Prunus domestica* L. *ssp. insititia* (L.) Schneid
Alkavo	(syn. **Al**tenweddinger **Ka**ukasische **Vo**gelkirsche) *Prunus avium* (L.) L.
Brokforest	(syn. M x M14) *Prunus mahaleb* L. x *Prunus avium* (L.) L.
Brooks-60	(syn. Broksec, M x M60) *Prunus mahaleb* L. x *Prunus avium* (L.) L.
Citation	*Prunus domestica* L. x *P. persica* (L.) Batsch.
Colt	*Prunus avium* (L.) L. x *P. pseudocerasus* Lindl.
Edabriz	*Prunus cerasus* L.
F 12/1	*Prunus avium* (L.) L.
Felinem	*Prunus persica* (L.) Batsch. x *P. dulcis* (Mill.) D.A. Webb
Ferciana	(*Prunus cerasifera* Ehrh. x *P. salicina* Lindl.) x (*P. domestica* L. x *P. persica* (L.) Batsch.)
Fereley	(*Prunus salicina* Lindl. x *P. cerasifera* Ehrh.) x *P. spinosa* L.
Ferlenain	*Prunus besseyi* L.H. Bailey x *P. cerasifera* Ehrh.
GF 677	*Prunus persica* (L.) Batsch. x *P. dulcis* (Mill.) D.A. Webb
GF 1869	*Prunus domestica* (L.) *x P. persica* (L.) *Batsch.*
Gisela 4	(syn. 473/10) *Prunus avium* (L.) L. x *P. fruticosa* Pall.
Gisela 5	(syn. 148/2) *Prunus cerasus* L. x *P. canescens* Bois
GM 61/1	*Prunus dawyckensis* Sealy
Hamyra	*Prunus cerasifera* Ehrh.
Mayor	*Prunus persica* (L.) Batsch. x *P. dulcis* (Mill.) D.A. Webb
Myrobalan B	*Prunus cerasifera* Ehrh.
Piku 1	(syn. Pi-Ku 4,20) *Prunus avium* (L.) L. x (*P. canescens* Bois x *P. tomentosa* Thunb. ex Murr.)
Piku 3	(syn. Pi-Ku 4,83) *Prunus. pseudocerasus* Lindl. x (*P. canescens* Bois x *P. incisa* Thunb. ex Murr.)
Pixy	*Prunus domestica* L. ssp. *insititia* (L.) Schneid.
Rubira	*Prunus persica* (L.) Batsch.
SL 64	(syn. 'Saint Lucie 64') *Prunus mahaleb* L.
St. Julien A	*Prunus domestica* L. ssp. *insititia* (L.) Schneid.
Weiroot 158	*Prunus cerasus* L.
Weito T6	*Prunus tomentosa* Thunb. ex Murr.

IX. Literature

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Friedrich, G.: Handbuch des Obstbaus. Radebeul: Neumann Verlag, 1993.

Kester, D. E. and C. Grasselly: Almond rootstocks, pp. 265-293 in: Roy C. Rom and Robert F. Carlson: Rootstocks for Fruit Crops. J. Wiley and Sons, 1987.

Layne, R. E. C.: Peach rootstocks, pp. 185-216 in: Roy C. Rom and Robert F. Carlson: Rootstocks for Fruit Crops. J. Wiley and Sons, 1987.

Maurer, E.: Die Unterlagen der Obstgehölze. Berlin: Parey Verlag, 1939.

Okie, W. R.: Plum rootstocks, pp. 321-360 in: Roy C. Rom and Robert F. Carlson: Rootstocks for Fruit Crops. J. Wiley and Sons, 1987.

Perry, R. L.: Cherry rootstocks, pp. 217-264 in: Roy C. Rom and Robert F. Carlson: Rootstocks for Fruit Crops. J. Wiley and Sons, 1987.

Raynaud, P. C. and J.M. Audergon: Apricot rootstocks, pp. 295-320 in: Roy C. Rom and Robert F. Carlson: Rootstocks for Fruit Crops. J. Wiley and Sons, 1987.

Salesses, G., Grasselly, C., Renaud, R., Claverie, J.: Les porte greffe des espèces fruitières à noyau du genre *Prunus.* "Amélioration des espèces végétales cultivées. Objectifs et critères de sélection", pp. 768, A. Gallais, H. Bannerot I.N.R.A. Paris, France, 605-619, 1992.

Wertheim, S.J.: Rootstock Guide. Fruit Research Station Wilhelminadorp, Publication no. 25, 1998.

X. Technical Questionnaire

	Reference Number (not to be filled in by the applicant)

TECHNICAL QUESTIONNAIRE
to be completed in connection with an application for Plant Breeders' Rights

1.1.	Genus	*Prunus* L. Prunus Rootstocks	
1.2.	Species	*P. armeniaca* L.	1 [ ]
		P. avium (L.) L.	2 [ ]
		P. cerasifera Ehrh.	3 [ ]
		P. cerasus L.	4 [ ]
		P. domestica L.	5 [ ]
		P. dulcis (Mill.) D.A. Webb (*P. amygdalus* Batsch)	6 [ ]
		P. mahaleb L.	7 [ ]
		P. persica (L.) Batsch	8 [ ]
		P. salicina Lindl.	9 [ ]
		other species (please specify)	10 [ ]
		interspecific hybrid (please specify)	11 [ ]

2. Applicant (Name and address)

3. Proposed denomination or breeder's reference

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

4.1 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 original parent variety) [ ]

.....

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

.....

4.2 *In vitro* propagation

The plant material of the candidate variety has been obtained by *in vitro* propagation yes [ ]
no [ ]

4.3 Other type of multiplication (seed, leaf cutting, hardwood cutting, layer) [ ]

4.4 Virus status

The plant material is virus tested yes [ ]
no [ ]

If the answer to that question is yes, please indicate against which viruses

.....

4.5 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	Note
5.1 (1)	**Plant: vigor**		
	weak	Edabriz, Ferlenain	3 [ ]
	medium	Brokforest, GM 61/1	5 [ ]
	strong	Alkavo, F 12/1	7 [ ]
5.2 (15)	**Leaf blade: length**		
	very short	Myrobalan B	1 [ ]
	short	Edabriz, Weito T6	3 [ ]
	medium	Piku 1	5 [ ]
	long	F 12/1	7 [ ]
	very long	GF 677	9 [ ]
5.3 (18)	**Leaf blade: shape**		
	narrow elliptic	GF 677	1 [ ]
	elliptic	Colt, Fereley, Pixy	2 [ ]
	circular	Adara, SL 64	3 [ ]
	ovate	Edabriz, Gisela 5	4 [ ]
	obovate		5 [ ]
5.4 (39)	**Plant: flowers**		
	absent	Brokforest	1 [ ]
	present	Colt	9 [ ]

6. Similar varieties and differences from these varieties

Denomination of similar variety	Characteristic in which the similar variety is different [o)]	State of expression of similar variety	State of expression of candidate variety

[o)] 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 Utilization as rootstock for

P. armeniaca L.	1 [ ]
P. avium (L.) L.	2 [ ]
P. cerasifera Ehrh.	3 [ ]
P. cerasus L.	4 [ ]
P. domestica L.	5 [ ]
P. dulcis (Mill.) D.A. Webb (*P. amygdalus* Batsch)	6 [ ]
P. mahaleb L.	7 [ ]
P. persica (L.) Batsch	8 [ ]
P. salicina Lindl.	9 [ ]
other species (please specify)	10 [ ]

7.3 Special conditions for the examination of the variety

7.4 Other information

A representative color photo of the variety should be included in 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 that question is yes, please attach a copy of such an authorization.

[End of document]