

SORB (*Sorbus* spp., *Sorbus* sp. x spp.) DESCRIPTORS

II ACCESSION MANAGEMENT, MULTIPLICATION/REGENERATION DESCRIPTORS

Descriptor code	Descriptor scale (score)	Reference values	Reference varieties	Remarks
II/1	Number of times accession regenerated			
II/2	Patent status			
	0 Non-patented cultivar			
	1 Patented cultivar			
II/3	Number of plants sampled			
				Approximate number of plants collected (sampled) in the field to produce this accession.
II/4	Nature of vegetative sample			
	0 Not vegetative (seed)			
	1 Cuttings - for grafting			
	2 Cuttings - for rooting			
	3 Rooted plants			
	4 Tissue culture			
	5 Other (specify in NOTES descriptor, II/11)			
II/5	Virus disease status (including mycoplasma)			
	1 Virus disease free**			** Record results of virus tests in the NOTES descriptor, II/11 (positive or negative)
	2 Virus disease tested (infected)**			
	3 Not tested			
II/6	End use			
	1 Scion cultivar – dessert			
	2 Scion cultivar – processing			
	3 Dual or multipurpose consumption			
	4 Clonal rootstock			

	5	Clonal interstock			
	6	Seedling rootstock			
	7	Ornamental/pollinator (pollinizer)			
	8	Botanical (wild) species			
	9	Other (specify in NOTES descriptor, II/11) for example 'valuable unnamed selections from a breeding programme'			
II/7	Other notes from collector				
					Collectors should record ecological/cli matic information. For cultivated crops, cultivation practices should be recorded.
II/8	Rootstock				
					Name of rootstock on which accession is grafted, if any.
II/9	Condition of tree				
	1	Dead			
	2	Dying			
	3	Old – declining			
	4	Mature – diseased			
	5	Mature - non-vigorous			
	6	Mature – vigorous			
	7	Young - not yet bearing			
	8	Other (specify in NOTES descriptor, II/11)			
II/10	Propagation method				
	1	Grafting (including budding)			
	2	Hardwood cuttings			
	3	Softwood cuttings			
	4	Stool beds			
	5	Layering			
	6	Micropropagation			
	7	Seed			
	8	Other (specify in NOTES descriptor, II/11)			

II/11	Notes
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III CHARACTERIZATION AND EVALUATION DESCRIPTORS

Descriptor code	Descriptor scale (score)	Reference values	Reference varieties	Remarks
III/1	Tree habit			
	1 Creepy			Natural habit of an untrained, non-juvenile tree. Figure 1, Appendix
	2 Creepy/ shrub		<i>S. reducta</i>	
	3 Shrub		<i>S. cascadiensis</i> , <i>S. rosea</i>	
	4 Shrub / tree		<i>S. cashmiriana</i> , <i>S. rupicola</i>	
	5 Compact columnar / fastigiata tree		<i>S. decora</i> var. 'Fastigiata'	
	6 Upright pyramidal tree		<i>S. latifolia</i> x <i>chaemomespilus</i>	
	7 Pyramidal tree		<i>S. aucuparia</i> var. <i>rossicca</i> , <i>S. latifolia</i>	
	8 Drooping pyramidal tree		'Krasnaya Krupnaya'	
	9 Upright spreading tree		<i>S. decora</i>	
	10 Rounded spreading tree		<i>S. esseutianii</i> , <i>S. decora</i> , 'Krasavitsa'	
	11 Rounded drooping tree		<i>S. discolor</i>	
	12 Weeping tree			
	13 Weeping only on high stem grafting		<i>S. aucuparia</i> var. 'Pendula'	Evaluate on high stems grafted plants for accessions only, for which normally grafted plants or plants on their own roots are scored III/1 as 1 or 2
III/2	Angles of branches			
	1 Very narrow	<15°	<i>S. decora</i> var. <i>fastigiata</i>	
	3 Narrow	15° - 30°	<i>S. aucuparia</i> , <i>S. coreana</i>	
	5 Medium	31° - 45°	<i>S. americana</i> , <i>S. hybrida</i>	

	7	Wide	46° - 60 °	<i>S. esseutianii</i> , ‘Granatnaya’	
	9	Very wide	>60 °	<i>S. discolor</i>	
III/3	Tree vigour				
	1	Extremely weak	<0,5 m	‘Dessertnaya Mitchurinskaya’, <i>S. scalaris</i>	Based on measurements of adult trees on their own roots, or relative to reference cultivars on the same rootstock (use reference cultivars or species on a common rootstock for each site) of an untrained trees.
	3	Weak	0,5-1,5 m	<i>S. sambucifolia</i> , ‘Burka’	
	5	Intermediate	1,51-2,5 m	‘Granatnaya’, <i>S. rupicola</i>	
	7	Vigorous	2,51-3,5m	<i>S. aucuparia</i>	
	9	Extremely vigorous	>3,5 m	<i>S. intermedia</i>	

PROPAGATION

III/4	Affinity to rootstocks				
	1	No affinity to <i>S. aucuparia</i>		<i>S. torminalis</i> , <i>S. domestica</i>	See also III/ 5
	3	Good affinity to <i>S. aucuparia</i>		<i>S. aucuparia</i> , <i>S. aria</i> , <i>S. hybrida</i>	
	5	No affinity to <i>Crataegus monogyna</i>			
	7	Good affinity to <i>Crataegus monogyna</i>		<i>S. domestica</i>	
	9	Affinity to different rootstock			
	11	Not tested			
III/5	Affinity to different rootstock				
		Fill in the name of rootstock			If in scale III/4 is scored 9
III/6	Ability to propagation with softwood cuttings				
	1	Absent		<i>S. domestica</i>	
	3	Present		‘Granatnaya’	
III/7	Ability to seed propagation				
	1	In sexual way		<i>S. aucuparia</i>	
	3	Apomictic/ asexual		<i>S. aria</i>	
	5	Sexual and apomictic			

	7	Never develops germinable seeds under natural environments			
III/8	Seed stratification and germination remarks				
		Fill in text format duration of stratification (in days), temperatures needed, optimal substrate and all specific traits known, including necessity to germinate <i>in vitro</i> .			
III/9	Easiness of propagation				
	1	Extremely poor		<i>S. domestica</i>	See also II/10
	3	Poor		<i>S. aucuparia</i> var <i>fastigiata</i> , <i>S. rupicola</i>	
	5	Intermediate		<i>S. aucuparia</i> var. <i>pendula</i>	
	7	Good		<i>S. aria</i> , <i>S. hybrida</i> , <i>S. aucuparia</i>	
	9	Extremely good		‘Granatnaya’, ‘Titan’	

YIELDING

III/10	Yield efficiency				A high yield efficiency is defined as the induction in the scion of a high yield of fruit relative to the cross sectional area of the trunk
	1	Extremely poor		<i>S. latifolia</i>	
	3	Poor		‘Dessertnaya Mitchurinskaya’	
	5	Intermediate		<i>S.aria</i>	
	7	Good		‘Granatnaya’	
	9	Extremely good		<i>S. aucuparia</i> var. <i>moravica</i> , <i>S. hybrida</i>	
III/11	Predominant bearing habit				
	1	On the tops of young shoots mostly		<i>S. sambucifolia</i>	
	3	On the tops of young shoots initially, on short fruit branches/spurs afterwards		‘Granatnaya’, <i>S. aucuparia</i> , <i>S. aucuparia</i> var. <i>moravica</i>	
	5	On short fruit branches/spurs mostly		<i>S. aria</i> , ‘Krasavitsa’	
III/12	Regularity of bearing				
	1	Irregular		<i>S. aucuparia</i>	

	3 Regular		‘Burka’. ‘Granatnaya’, <i>S. aria</i>	
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MORPHOLOGICAL TRAITS

III/13	Pubescence of young shoots			
	Absent or very weak 1 pubescence			Evaluate during summer
	3 Pubescent		<i>S. aucuparia</i>	
III/14	Leaf blade shape			
	1 Simple without lobes		<i>S. aria</i>	
	2 Simple lobed, but without any free lobes/leaflets at base		<i>S. arranensis</i>	
	5 Simple lobed with 1-2 free lobes/leaflets at base		Burka	
	7 Simple lobed with more than 2 free lobes/leaflets at base			
	9 Pinnate - leaved		<i>S. aucuparia</i> , <i>S. domestica</i>	
	11 Simple, lobed and/or pinnate leaves on the one plant		Burka, <i>Sorbaronia sp.</i>	
III/15	Pairs of leaflets for pinnate leaves			
	1 Small	2-3 lapu pāri	Granatnaya	Examine only for accessions for which III/14 are scored 9 or 11
	3 Medium	4-6		
	5 Large	7-10	<i>S. aucuparia</i>	
	7 Very large	>11	<i>S. americana</i>	
III/16	Thickness of leaf blade			
	1 Thin, soft		<i>S. aucuparia</i>	
			<i>S. aria</i>	
	3 Medium			
	5 Thick		<i>S. arranensis</i>	
III/17	Pubescens on lover side of leaf blade			
	1 Absent			
	3 Weak		<i>S. aucuparia</i>	
	5 Medium		<i>S. hybrida</i>	
	7 Strong		<i>S. rupicola</i>	
III/18	Leaf blade profile in cross section			
	Straight		<i>S. aucuparia</i> <i>S. latifolia</i>	
	Concave		<i>S. pseudowilmorinii</i>	
	Convex		<i>S. coehneana</i>	
III/19	Incisions of leaf blade margin			
	1 Absent			
	3 Crenate		<i>S. aucuparia</i>	
	5 Sharply serrate			
	7 Corrugated, waved			

	9 Deep lobed		<i>S. aucuparia</i> var. 'Asplenifolia'	
III/20	Pairs of veins of leaf/leaflet			
	1 Medium	4-6 pairs	<i>S. torminalis</i>	For pinnate leaves medium pairs of leaflets are taken in to account
	3 Large	7-14 pairs	<i>S. latifolia</i> , <i>S. aria</i>	

III/21	Leaf blade attitude in relation to shoot			
	1 Semi - upwards		<i>S. americana</i>	In summer on young shoots
	3 Outwards		<i>S. aucuparia</i> var. <i>moravica</i>	
	5 Semi - downwards		<i>S. discolor</i>	

III/22	Size of leaflets (for pinnate-leaved accessions only)			
	1 Small			Use medium pair of leaflets, taken from full expanded leaves from sunny place and short fruit branches for measuring.
	3 Medium			
	5 Large			

III/23	Leave/leaflet shape			
	1 Narrow extended, lanceolate		<i>S. coreana</i> 'Dodong'	
	3 Ovate		<i>S. aucuparia</i>	
	5 Rounded		'Krasavica', <i>S. aria</i>	

III/24	Stipule			
	1 Absent			
	3 Present		<i>S. domestica</i>	
	5 On long young shoots only		<i>S. aucuparia</i>	

III/25	Shape of stipule			
	1 Narrow extended, lanceolate, reduced or fan-shaped		<i>S. aucuparia</i>	
	3 Wide, strap-like, not divided at base at least in one side			
	5 Wide, divided from each other at base, not divided at half-way			

	Wide, divided from each other at base, divided at or below half-way		<i>S. domestica</i>	
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III/26	Ratio length / width of leaf blade			
	1 Small			
	3 Medium		<i>S. aria</i>	
	5 Large		<i>S. aucuparia</i>	

III/27	Position of fruit clusters relative to axis			
	1 Upward mostly		<i>S. americana</i>	
	3 Horizontal mostly		<i>S. aria</i>	
	5 Drooping mostly		<i>S. aucuparia</i>	

III/28	Size of fruit cluster			
	1 Small	1-10 fruits	<i>S. latifolia</i>	
	3 Medium	11-20 fruits	<i>S. gracilis</i> , <i>Granatnaya</i>	
	5 Large	20-100 fruits	<i>S. aucuparia</i>	
	7 Very large	>100 fruits	<i>S. americana</i>	

III/29	Lenticels on the fruit skin			
	1 Absent			Evaluate on full matured fruits
	2 Small, hard to see, few			
	3 Small, large count, equal dispersed			
	4 Small, large count, concentrated at calyx mostly			
	5 Small, large count, concentrated at base, stem mostly			
	6 Large, attractive, equal dispersed			
	7 Large, attractive, concentrated at calyx mostly			
	8 Large, attractive, concentrated at base, stem mostly			

III/30	Fruit shape			
	1 Flat rounded, obloid		<i>S. discolor</i>	Use scanned vertical slices of fruits
	3 Rounded, globose		<i>S. aria</i>	
	5 Oval, ovoid		<i>S. sambucifolia</i> , <i>Alaya Krupnaya</i>	
	7 Pyriform		<i>S. domestica</i>	
	9 Uprturned pyriform		<i>S. cashmiriana</i>	

III/31	Horizontal shape of fruit			
	1 Rounded		Rossicca	Use scanned

	3 Four angles symmetric ribbed		Kubovaya	horizontal slices of fruits in widest position
	5 Five angles symmetric ribbed		<i>S. aucuparia</i>	
	7 Slightly splashed or oval		<i>S. sambucifolia</i>	
	9 Asymetric, irregular shaped			

III/32	Ratio fruit diameter/height			
	1 Large	>1	<i>S. americana</i>	Use scanned vertical and horizontal slices of fruits or use sliding calliper on fresh fruits
	3 Medium	1	<i>S. aucuparia</i>	
	5 Small	<1	Alaya Krupnaya	

III/33	Fruit size			
	1 Small		<i>S. ruffoferruginea</i>	
	3 Medium		<i>S. aucuparia</i>	
	5 Large		<i>S. gracilis</i> , Alaya Krupnaya	

III/34	Average fruit weight			
				Use 100 full matured, typical and well developed fruits, without stems of clusters, at least from 3 different trees
	In grams			

ATTRACTIVITY AS ORNAMENTALS

III/35	Fruits attractiveness for birds (fruit persistence in garden)				
	1	Low persistence (very attractive)	Readily taken by birds, eats as first	<i>S. sambucifolia</i> , Rossica, Conzentra, Kubovaya, <i>S. americana</i>	In collection orchard in comparing to all accessions, use average rating of 3 seasons at least
	2	Medium persistence (medium attractive)	Eats when more attractive is eaten	Rosina, <i>S. aria</i>	
	3	Good persistence (not attractive)	Ignore, keeps in brances til winter mostly	Burka, Granatnaya, <i>S. discolor</i>	
III/36	Fruit colour				
	1	Pearly white		<i>S. opiculata</i>	

	2	White		<i>S. cashmiriana</i> , <i>S. frutescens</i> , ‘White Swaan’	
	3	Whitish-yellow		<i>S. aucuparia</i> var. <i>fructolutea</i>	
	4	Whitish-pink		<i>S. reducta</i> , <i>S. discolor</i>	
	5	Pink		<i>S. muliensis</i> , ‘Kirsten Pink’	
	6	Soft pink		<i>S. rosea</i>	
	7	Yellow		<i>S. cashmiriana</i> , ‘Joseph Rock’	
	8	Soft yellow			
	9	Yellowish-orange		‘Rossicca’	
	10	Orange		<i>S. aucuparia</i>	
	11	Pale red		<i>S. aria</i>	
	12	Red		<i>S. commixta</i> , <i>S. scalaris</i> , <i>S. cascadiensis</i>	
	13	Crimson		‘Alaya Krupnaya’, <i>S. vilmorinii</i>	
	14	Brownish-red		‘Titan’	
	15	Blackish – red		‘Burka’	
	16	Black			
	17	Brown		<i>S. torminalis</i>	
	18	Greenish brown		<i>S. latifolia</i>	
	19	Greenish yellow			
	20	Green			
	21	Different colour			
III/37	Fruit colour code				
	Fill in RHF code				On full matured fruits
III/38	Different colour speckles on fruit skin				
	1	Absent, fruit unicoloured		<i>S. aria</i>	
	3	Dashed/striped			
	5	Dotty			
	7	Nondescript shape		Red Tip	
III/39	Colour code of different colour speckles on fruit skin				
	Fill in RHF code				On full matured fruits
III/40	Change of fruit colour from full maturing to frost period				
	1	Absent		<i>S. aucuparia</i>	
	3	Present		<i>S. discolor</i>	
III/41	The chromoplast presence in fruit pulp cells				
	1	Flesh with cells lacking visible chromoplasts		<i>S. discolor</i> , <i>S. reducta</i>	

	3	Flesh with cells containing conspicuous chromoplasts		<i>S. aucuparia</i>	
III/42	Russet on fruit skin				
	1	Absent		<i>S. aucuparia</i>	
	3	Present		<i>S. domestica</i>	
III/43	Fruits skin pubescence				
	1	Absent		<i>S. aucuparia</i>	On fresh, fullmatured fruits
	3	Present at base		<i>S. pseudovilmorinii</i>	
	5	Present at calyx			
	7	Dispersed equally on all skin surface			

FLOWERING

III/44	Date of full flowering			
	1	Extremely early		3 seasons average evaluations at least
	3	Extremely early/ early	Titan	
	5	Early		
	7	Intermediate early	<i>S. aucuparia</i>	
	9	Late	<i>S. latifolia</i>	
	11	Late/very late	<i>S. aria</i>	
	13	Very late		
III/45	Colour of petals			
	1	White	<i>S. aucuparia</i>	
	3	Creamy white	<i>S. sambucifolia</i>	
	5	Pale pink	<i>S. cashmiriana</i>	
	7	Pink	<i>S. Hostii</i>	
	9	Greenish-white	<i>S. discolor</i>	
	11	Pale green	<i>S. gracilis</i>	
	13	Different colour		
III/46	Colour code of petals			
	Fill in RHF code			
III/47	Flower type			
	1	Simple, not filled	<i>S. aucuparia</i>	
	3	Rudimentary filled, semi-double		
	5	Double filled		
	7	More than double filled		
III/48	Position of inflorescence relatively to axis			
	1	Upwards	<i>S. aria</i> , <i>S. aucuparia</i> , <i>S. aucuparia</i> var. <i>moravica</i>	Predominant position on two- and more year old branches
	3	Horizontal	<i>S. sambucifolia</i>	
	5	Downwards, drooping	<i>S. discolor</i>	
III/49	Inflorescence shape			
	1	Umbellate	<i>S. hybrida</i> , <i>S. aucuparia</i>	

	3	Rounded, globose		Granatnaya	
	5	Irregular, asymmetric		<i>S. sambucifolia</i>	
III/50	Secondary flowering				
	1	Extremely rare		<i>S. hybrida</i>	
	3	Extremely rare/rare			
	5	Rare			
	7	Intermediate/frequent		<i>S. aucuparia</i>	
	9	Frequent			
	11	Every season			

SHOOTS AND FOLIAGE

III/51	Predominant spring colour of shoots				
	1	Yellow			In early spring before leaf expanding
	3	Yellowish-green			
	5	Green			
	7	Brownish-green			
	9	Pale brown		<i>S. aucuparia</i>	
	11	Brownish-green		<i>S. hybrida</i>	
	13	Dark brown			
		Reddish-gray		<i>S. discolor</i>	
	15	Reddish-brown		<i>S. americana</i>	
	17	Red		<i>S. aucuparia</i> var. <i>uralensis</i>	
	19	Pink		‘Kirsten Pink’	‘
III/52	Summer colour of leaf blade (upper side)				
	1	Yellowish-green		Dirkenii	More than one input is allowed, e.g. green basic colour + variegate type =3 and 6
	2	Pale green		<i>S. discolor</i>	
	3	Green		<i>S. aucuparia</i>	
	4	Dark green		<i>S. hybrida</i>	
	5	Silver green		<i>S. intermedia</i>	
	6	Variegata type with different coloured incrustations		<i>S. aucuparia</i> var. <i>pendula variegata</i>	
	7	With different coloured marginal zone			
III/53	Summer colour code of leaf blade (upper side)				
	Fill in RHF colour code				
III/54	Code of predominant spring colour of shoots				
	Fill in RHF colour code				
III/55	Pubescence colour on the lower side of leaf blade				
	1	Gray		<i>S. intermedia</i>	During summer on full expanded leaves, taken from sun side of tree and
	3	Silvery-white		<i>S. rupicola</i>	
	5	Brownish		<i>S. hybrida</i>	
	7	Yellow		<i>S. aria</i> var. <i>lutea</i>	
	9	Greenish			

	11 Different colour			from more than one season old branches
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III/56	Code of pubescence colour on the lower side of leaf blade			
	Fill in RHF colour code			

III/57	Predominant autumn colour of leaf blade (after frost influence)			
	1 Brown		Granatnaya	
	3 Yellowish-brown		<i>S. aria</i>	
	5 Yellow		<i>S. esseuzianii</i>	
	7 Yellowish-pink		Red Tip	
	9 Yellowish-orange		<i>S. aucuparia</i>	
	11 Orange		<i>S. pseudovilmorinii</i>	
	13 Orange-red		Burka	
	15 Red		Kirsten Pink	
	17 Crimson		<i>S. pseudohupehensis</i>	
	19 Brownish-red		Alaya Krupnaya	
	21 Silvery – green		<i>S. intermedia</i>	
	23 Different colour			

III/58	Code of predominant autumn colour of leaf blade (after frost influence)			
	Fill in RHF colour code			

III/59	Complex suitability as ornamental plant			
	1 Very low			Combined assessment, impression about suitability for ornamental purposes.
	3 Low			
	5 Medium			
	7 Valuable			
	9 Of great value			

TRAITS SUTABLE FOR FRUIT PRODUCING

III/60	SPLIT OF FRUIT CLUSTER Augļu ķekara pārtraukums			
	1 One piece cluster		<i>S. hybrida</i>	Two (or

	3	Two or more part cluster		<i>S. aucuparia</i>	more) part cluster means if vegetative bud split central axis of cluster in two (or more) parts. One piece cluster means if vegetative bud develops under central stem basis or at the basis.
III/61	Fruit separation from stem				
	1	Easy to separate, without skin injury, dry separating		Alaya Krupnaya, Granatnaya	In harvest maturity
	3	Easy to separate, skin injuries at the base, dry separating		Rubinovaya. Dessertnaya Michurinskaya	
	5	At least part of fruits separates from cluster with parts of stems		<i>S. aucuparia</i>	
	7	Juicy, wet separating, fruits becomes deformed at harvest		<i>S. sambucifolia</i>	
III/62	The flesh firmness of fruits at full maturity				
	1	Soft		Rossica	Organoleptic impression
	2	Medium soft		Granatnaya	
	3	Firm		<i>S. hybrida</i>	
III/63	The flesh firmness degree of fruits (g)				
		Fill in value of measuring			Using needle-type penetrometer, 30 full matured, normally developed fruits, average from 3 seasons at least
III/64	Disposition to partenocarpy				
	1	Never had noticed			
	3	Very rare		<i>S.aucuparia</i>	
	5	Sometimes			
	7	Often		<i>S. aria</i> , Titan	

	9	Every season		Granatnaya, Likornaya	
III/65	Precocity of bearing				
	1	Extremely high precocity		Burka	
	3	High precocity		Granatnaya	
	5	Intermediate		<i>S. aucuparia</i>	
	7	Low precocity		<i>S. aucuparia</i> var. <i>moravica</i>	
	9	Extremely low precocity		Krasavica	
III/66	Yield capacity				
	1	Extremely low		Dessernaya Mitschurinskaya	
	3	Low		<i>S. intermedia</i>	
	5	Intermediate		Rubinovaya	
	7	High		<i>S. aucuparia</i> var. <i>moravica</i>	

STORABILITY AND YIELD QUALITY

III/67	FRESH FRUITS STORABILITY				
	1	Extremely low	From a few days until two weeks long	<i>S. sambucifolia</i>	In full maturity stage harvested fruits (not separated from clusters, in 10-15 cm thin layers) store in normal atmosphere fruit storage room at +2°C, 90-95% rH, until weight losses (spots + transpiration) will reach 10% from initial weight
	3	Low	A few weeks, not longer than one month	<i>S. aucuparia</i> var. <i>rossica</i>	
	5	Medium	From one to two months long	<i>S. aucuparia</i> , ‘Alaya Krupnaya’	
	7	Excellent	Longer than two months	‘Burka’, <i>S. aria</i>	
III/68	Maximum storage life				
		Fill in count of days			Maximum period in days, when fruits stores without lowering of their eating and market

				quality under the best commercial storage conditions	
III/69	Season of maturity for picking				
	1	Extremely early		<i>S. sambucifolia</i>	
	3	Early		<i>S. aucuparia</i> var. <i>rossica</i>	
	5	Mid-season		<i>S.aucuparia</i>	
	7	Late		<i>S. aria</i>	
	9	Very late		<i>S. domestica</i>	
III/70	Predominant fruit flavour				Organoleptic at stage of eating maturity
	1	Sour, acid		Moravica	
	3	Sweet-and-sour		Rossicca	
	5	Sweet		<i>S. aria</i>	
III/71	Tannins in fruits				Organoleptic
	1	Absent		<i>S. aria</i> , Moravica, Rossicca	
	3	Weakly		<i>S. meinichii</i>	
	5	Strong		<i>S. americana</i> , <i>S. aucuparia</i>	
III/72	Fruit flesh structure				Organoleptic
	1	Juicy		<i>S. aucuparia</i>	
	2	Mealy		<i>S. aria</i>	
III/73	Dessert eating quality				A combined assessment of flavour, acidity, sweetness, aroma and tannins at optimal eating maturity
	1	Extremely poor			
	3	Poor			
	5	Intermediate			
	7	Good			
	9	Excellent			
III/74	Suitability for freezing				
	1	Extremely poor			
	3	Poor			
	5	Intermediate			
	7	Good			
	9	Excellent			
III/75	Suitability for juice and fermented juice products				
	1	Extremely poor			
	3	Poor			
	5	Intermediate			
	7	Good			
	9	Excellent			

III/76	Suitability for fresh fruits in powdered sugar layer (dessert)			
	1	Extremely poor		A combined assessment of flavour, acidity, sweetness, aroma and tannins at optimal eating maturity
	3	Poor		
	5	Intermediate		
	7	Good		
	9	Excellent		
III/77	Suitability for dried fruit production			
	1	Extremely poor		
	3	Poor		
	5	Intermediate		
	7	Good		
	9	Excellent		
III/78	Biochemical composition of fruits			
		Fill in exact value or low level-medium-high level		At the stage of eating maturity
	Total acidity,%			
	Total sugars, mg%			
	Soluble solids, Brix%			
	Sorbic acid, mg%			
	Pectine, mg%			
	Total carotenes, mg%			
	PP vitamins, mg%			
	Anthocyane ,mg%			
	Vitamin C			
	Hydrocyanic acid in seeds			
	Total antioxydative activity			

STRESS SUSCEPTIBILITY

III/79	Winterhardiness				
	1	Extremely tender			Complex frost resistance and thaw resistance are taken in to account
	3	Tender			
	5	Intermediate			
	7	Hardy			
	9	Extremely hardy			
III/80	Drought tolerance				
	1	Extremely tender		<i>S. coreana</i> `Dodong`, <i>S. vilmorinii</i>	
	3	Tender		<i>S. scalaris</i> , <i>S. aucuparia</i>	
	5	Intermediate		<i>S. pseudowilmorinii</i>	

	7	Hardy		<i>S. cascadiensis</i> , <i>S. cashmiriana</i>	
	9	Extremely hardy			
III/81	pH optimum level in soil				
	1	Prefers acid soils		<i>S. gracilis</i> , <i>S. aucuparia</i> var. <i>moravica</i>	
	3	Prefers neutral and alkalic soils		<i>S. rupicola</i> , <i>S. domestica</i>	
	5	High tolerance		<i>S. commixta</i> , <i>S. aucuparia</i>	
III/82	High soil moisture, low groundwater				
	1	Extremely low susceptibility		<i>S. aucuparia</i>	
	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility			
	9	Extremely high susceptibility			
III/83	Chlorosis				
	1	Extremely low susceptibility			
	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility		<i>S. aucuparia</i> var. <i>moravica</i>	
	9	Extremely high susceptibility			

PEST AND DISEASE SUSCEPTIBILITY INSECTS

III/84	<i>Argyresthia conjugella</i> codling moth				
	1	Extremely low susceptibility			
	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility			
	9	Extremely high susceptibility			
III/85	<i>Ottiorhynchus sulcatus</i> vine weevil grub				
	1	Extremely low susceptibility			
	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility			
	9	Extremely high susceptibility			
III/86	<i>Pīlādžu-kadiķu radziņu rūsa</i>				
	1	Extremely low susceptibility			
	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility			
	9	Extremely high susceptibility			
III/87	<i>Nectria galligena</i>, coral spot fungus				
	1	Extremely low susceptibility			

	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility			
	9	Extremely high susceptibility			
III/88	<i>Monilia fructigena</i>, <i>Monilia laxa</i>, <i>Monilia sp.</i> spot				
	1	Extremely low susceptibility			
	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility			
	9	Extremely high susceptibility			
III/89	<i>Erwinia amylovora</i> fireblight				
	1	Extremely low susceptibility			
	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility			
	9	Extremely high susceptibility			
III/90	<i>Pseudomonas syringae</i> bacterial blossom blight, blossom blast				
	1	Extremely low susceptibility			
	3	Low susceptibility			
	5	Medium susceptibility			
	7	High susceptibility			
	9	Extremely high susceptibility			

VIRUS AND MYCOPLASMA

III/91	Virus and mycoplasma				
	Fill in list of latin names of species found during tests				
III/92	Pedigree according molecular testing				
	1	Specie			
	3	Microspecie, agregate, sexual propagated seedling, plant from cross-pollination inside one specie			
	5	Vegetative uniform mutation			
	6	Vegetative mutation – chimera			
	7	Interspecies hybrid			
	9	Inter-generic hybrid			
	11	Inter-generic hybrid <i>Sorbus</i> x <i>Malus</i>			
	13	Inter-generic hybrid <i>Sorbus</i> x <i>Mespilus</i>			
	15	Inter-generic hybrid <i>Sorbus</i> x <i>Amelanchier</i>			
	17	Inter-generic hybrid <i>Sorbus</i> x <i>Aronia</i>			

	Inter-generic hybrid Sorbus x 19 different genera (fill in remark field which genus)			
	21 Inter-generic hybrid, but unknown pedigree			
	23 Not tested			

III/93	Ploidity			
	1 Haploid (1n)			
	2 Diploid (2n)			
	3 Triploid (3n)			
	4 Tetraploid (4n)			
	5 Higher level poliploid			

III/94	The chromosome count			
	Fill in the chromosome count evaluated in cytological tests			

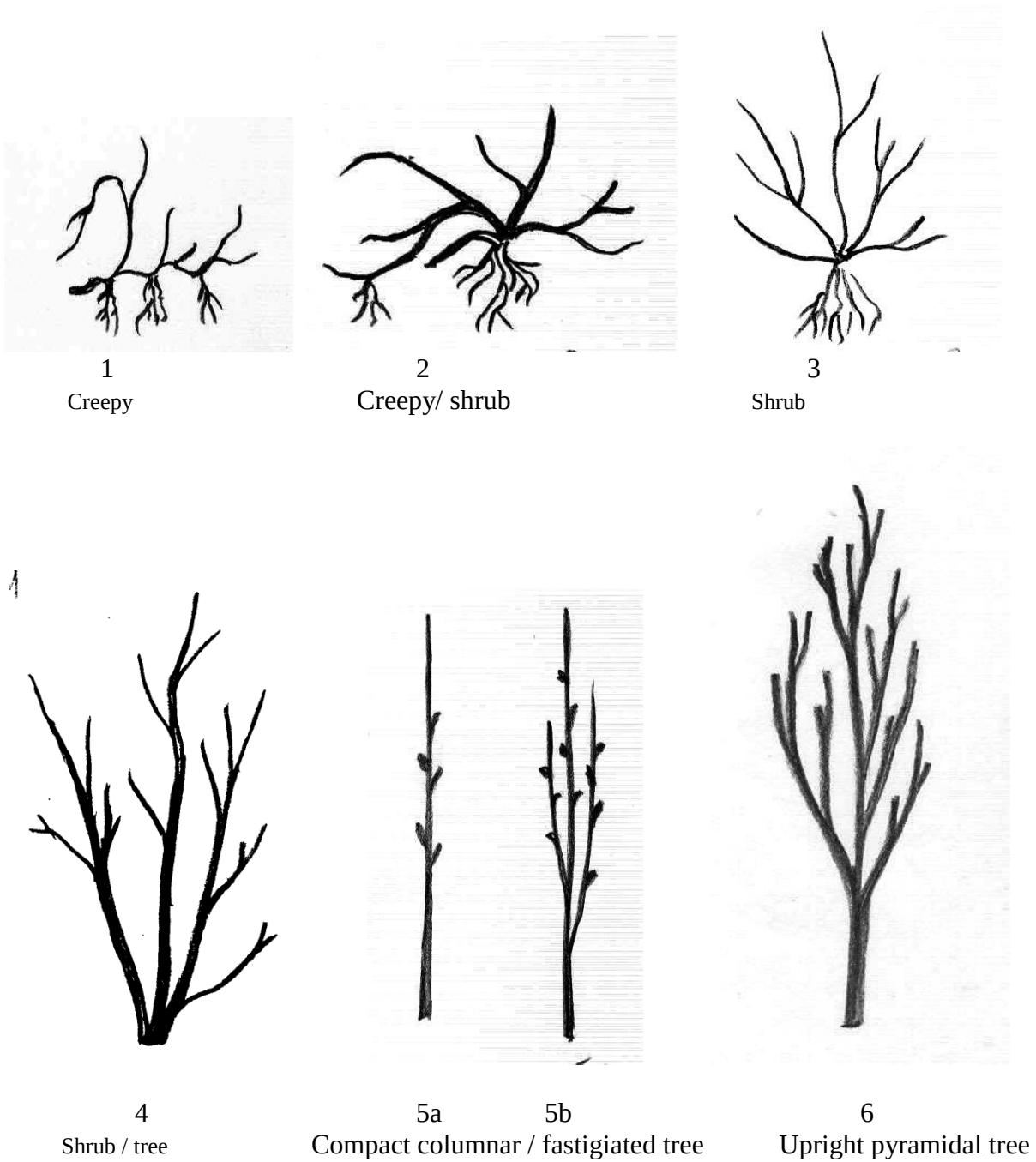
III/95	Identified genes, molecular markers			
	DNA tests			linked

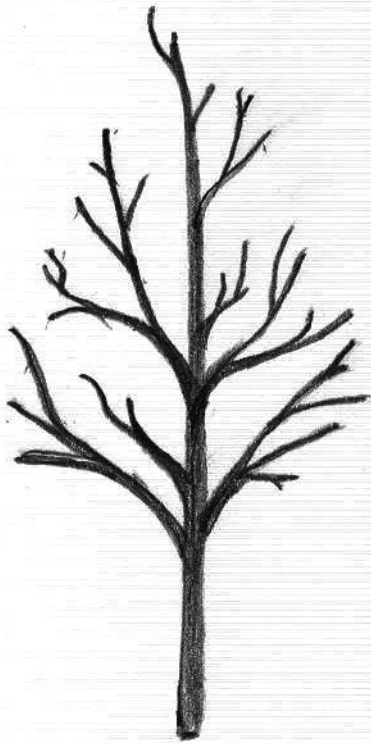
III/96	Remarks			
				Fill in all other notes and remarks important for characterisati on of accession

III/97	Pictures (accessible <i>via</i> links)			
	link1	Inflorescence		
	link2	Plant habit without leaves		
	link3	Yielding plant		
	link4	Scanned picture of leaf		
	link5	Fruit cluster on the branch		
	link6	Scanned vertical cross- slice of fruit		
	link7	Scanned horizontal cross- slice of fruit		

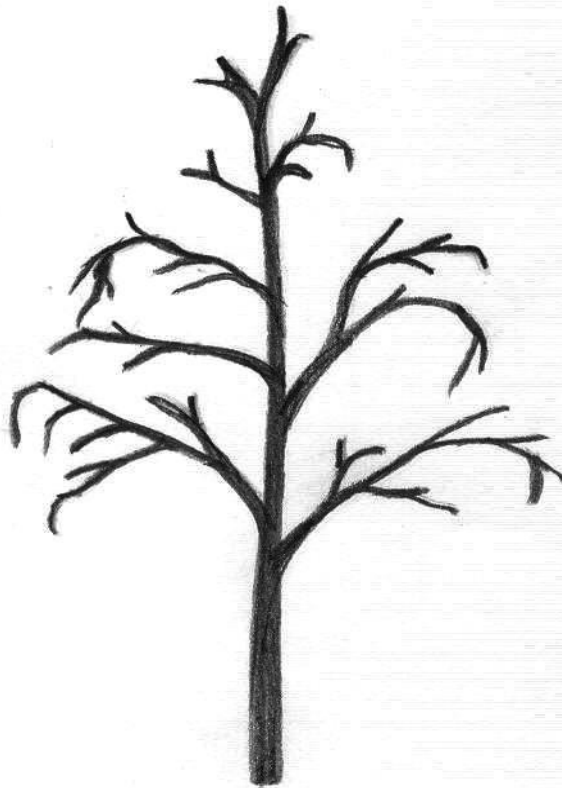
Appendix

Figure 1. III-1 Tree habit

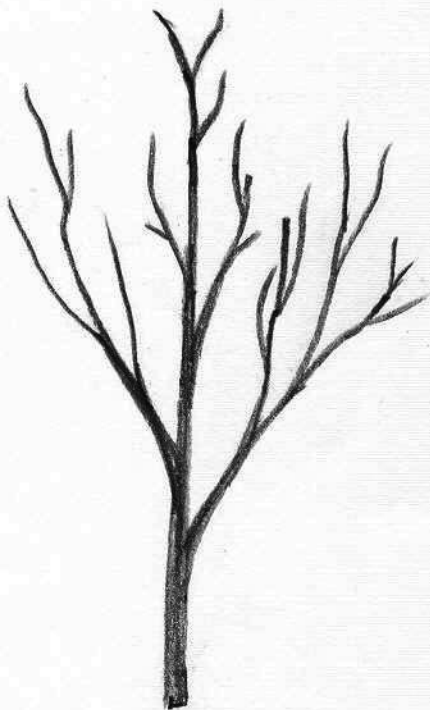




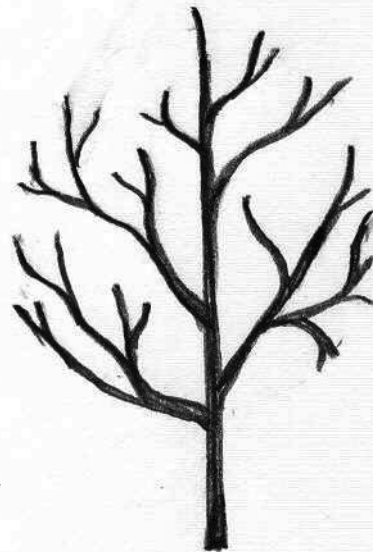
7
Pyramidal tree



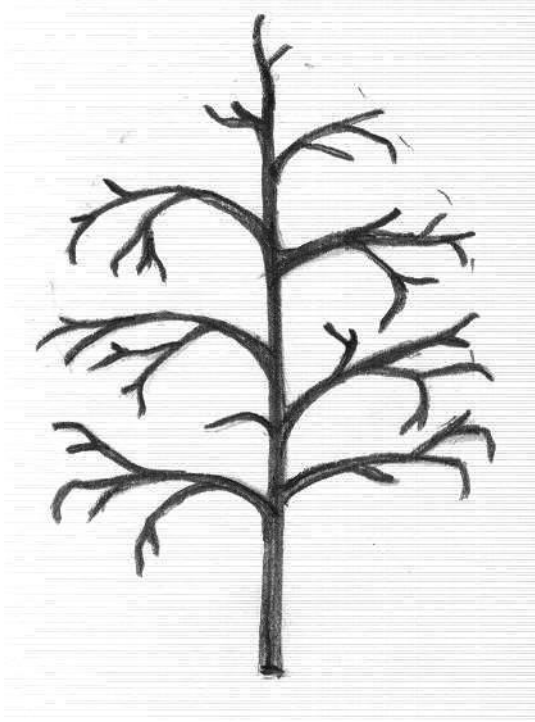
8
Drooping pyramidal tree



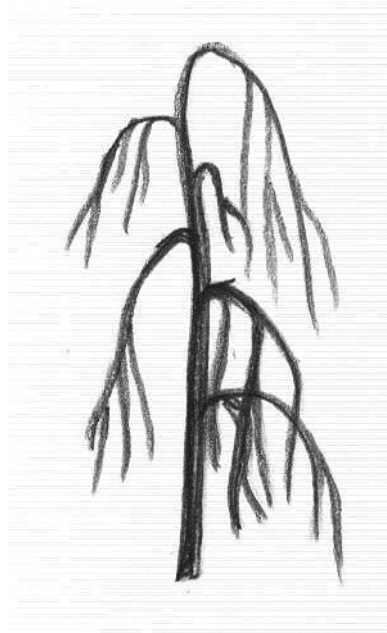
9
Upright spreading tree



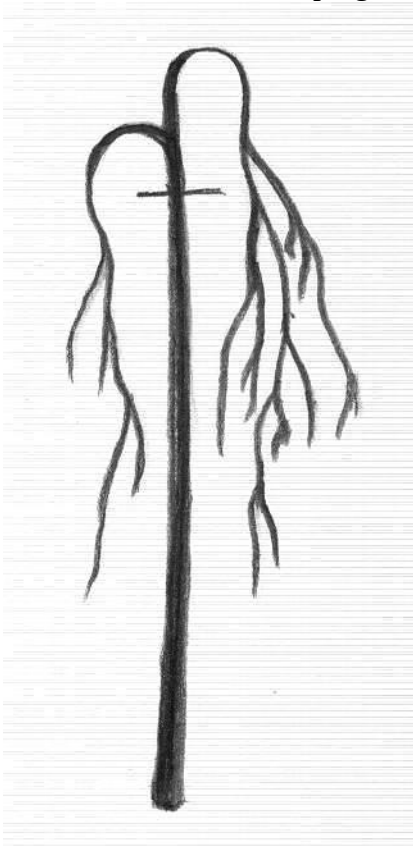
10
Rounded spreading tree



11
Rounded drooping tree



12
Weeping tree



13
Weeping only on high stem grafting