

SEA BUCKTHORN (*Hippophae rhamnoides* L.) 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			

III CHARACTERIZATION AND EVALUATION DESCRIPTORS

Descriptor code	Descriptor scale (score)	Reference values	Reference varieties	Remarks
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III/1	Plant use			
	0 no use			
	1 fruit production			
	2 fruit production & ornamental			
	3 only ornamental			
	4 other (specify)			

III/2	Tree: vigour			
	1 weak			
	3 medium			
	5 strong			

III/3	Tree: habit			
	1 narrow piramidal			
	3 oval			
	5 rounded			
	7 spreading			

III/4	Tree: suckers			
	0 absent			
	3 a few			
	5 medium			
	7 strong			

III/5	Tree: crown density			
	1 sparse			
	3 medium			
	5 dense			

III/6	Two-year-old shoot: amount of thorns on 1 m			
	0 absent	0 to 6		
	3 medium	7 - 12		
	7 heavy thorny	more than 12		

III/7	Shoot: pubescence			
	0 absent			
	3 medium			
	7 strong			

III/8	Bud: female bud size (length)			
	1	small	<3 mm	
	3	medium	6 mm	
	5	large	>6 mm	

III/9	Bud: male bud size (length)			
	1	small	<5 mm	
	3	medium	5- 8 mm	
	5	large	>8 mm	

III/10	Bud: shape			
	1	round		
	2	oval		
	3	cylindrical		
	4	ovate		
	5	obovate		
	6	other		

III/11	Leaf blade: length (in the middle part of the shoot)			
	1	small	< 3 cm	
	3	medium	3 –6 cm	
	5	large	> 6 cm	

III/12	Leaf blade: shape			
	1	oval		
	2	oblong oval		
	3	oblong ovate		
	4	lanceolate		
	5	linear lanceolate		
	6	other		

III/13	Flower: female flower size (length)			
	1	small	<2 mm	
	3	medium	2 – 5 mm	
	5	large	>5 mm	

III/14	Flower: male flower size (length)			
	1	small	<3 mm	
	3	medium	3 - 7 mm	
	5	large	>7 mm	

III/15	Flower: perianth colour of female flower			
	1	silvery – green		
	2	yellowish – green		
	3	brownish – green		
	4	green		

	5	other			
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III/16	Flower: perianth colour of male flower				
	1	silvery – green			
	2	yellowish – green			
	3	brownish – green			
	4	green			
	5	other			

III/17	Berries: use				
	1	no use			
	3	dessert			
	5	processing			
	7	other			

III/18	Berries: size				
	1	small	0,2 – 0,4 g		
	2	medium	0,5 – 0,7 g		
	3	large	0,8 – 1 g		

III/19	Berries: shape				
	1	flat – rounded			
	2	rounded			
	3	oval			
	4	elongated oval			
	5	ovate			
	6	obovate			
	7	cylindrical			
	8	other			

III/20	Berries: colour				
	1	light yellow			
	2	yellow			
	3	dark yellow			
	4	yellow - orange			
	5	orange			
	6	dark orange			
	7	red - orange			
	8	red			
	9	dark red			

III/21	Berries: stellate hairs on berries				
	1	absent			
	3	sparse – scales at the fruit apex			
	5	medium – sparse scales all surface apex			

	7	dense – dense scales all surface over			
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III/22	Berries: taste				
	1	sweet			
	2	sour sweet			
	3	sweety – sour & astringent			
	4	sour – bitter			
	5	other			

III/23	Berries: skin thickness				
	1	thin			
	3	medium			
	5	thick			

III/24	Berries: peduncle length				
	1	short	< 4 mm		
	3	medium	4 – 7 mm		
	5	long	> 7 mm		

III/25	Berries: type of tearing berries from the stalk				
	1	wet	> 75 % with rapture of the skin		
	3	semi – dry	30 – 75 %		
	5	dry	< 30 %		

III/26	Berries: transporting ability				
	1	low			
	3	medium			
	5	high			

III/27	Berries: biochemical composition				
	1	outcome of juice in %			
	2	ascorbic acid, mg%			
	3	carotenoides, mg%			
	4	antioxidative capacity			

III/28	Seed: weight of 100 seeds				
	1	small	< 1 g		
	3	medium	1 – 1,5 g		
	5	large	>1,5 g		

III/29	Seed: shape				
	1	oval			
	3	elongated oval			
	5	ovate			
	7	obovate			

III/30	Yield – visual yield assessment, points			
	1	some fruits		
	3	weak fruit bearing		
	5	satisfactory bearing		
	7	good bearing		
	9	abundant bearing		

III/31	Plant resistance to <i>Verticillium dahliae</i> Kleb			
	1	very - susceptible	> 75%	
	3	susceptible	51 – 75 %	
	5	medium resistant	26 – 50 %	
	7	highly resistant	11 – 25 %	
	9	very resistant	< 11 %	

III/32	Plant resistance to <i>Fusarium sporotrichiella</i> Bilad (<i>Pseudomonas syringae</i>)			
	1	very - susceptible	> 75%	
	3	susceptible	51 – 75 %	
	5	medium resistant	26 – 50 %	
	7	highly resistant	11 – 25 %	
	9	very resistant	< 11 %	

III/33	Phenological data			
	1	beginning of vegetation		
	2	beginning of flowering		
	3	mass of flowering		
	4	beginning of ripening		
	5	mass of ripening		
	6	end of vegetation		

III/34	Notes			
III/35	Cytological characterisation, identified genes			
III/36	Molecular markers			
III/37	Pictures			