

NUT TREE (*Corylus avellana* 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/climatic 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			
				Šajā laukā ieraksta visas piezīmes, kas deskriptoros norādītas ‘Cits’.

III CHARACTERIZATION AND EVALUATION DESCRIPTORS

Descriptor code	Descriptor scale (score)	Reference values	Reference varieties	Remarks
	PLANT DATA			
III/1	Plant: vigour			
	1 very weak			
	3 weak			
	5 medium			
	7 strong			
	9 very strong			
III/2	Plant: habit			
	1 very erect			
	3 erect			
	5 semi-erect			
	7 spreading			
	9 drooping			
III/3	Plant: density of shoots			
	1 weak			
	2 medium			
	3 strong			
III/4	Plant: suckering			
	1 absent or very weak			
	3 weak			
	5 medium			
	7 strong			
	9 very strong			
III/5	One year old shoot thickness			
	3 thin			
	5 medium			
	7 thick			
III/6	One year old shoot hairiness			
	3 weak			
	5 medium			
	7 strong			
III/7	One year old shoot: density of lenticels			
	3 weak			
	5 medium			
	7 strong			
III/8	Leaf bud: shape			
	1 conical			
	2 ovoid			
	3 globular			
III/9	Leaf bud: color			
	1 green			
	2 reddish green			
	3 red			

	FLOWERS			
III/10	Male inflorescence: length			
	3 short			
	5 medium			
	7 long			
III/11	Male inflorescence: color			
	1 green			
	2 pink brown			
III/12	Stigma: color			
	1 pink			
	2 red			
	3 purple red			
	LEAVES			
III/13	Leaf blade: shape			
	1 elliptic			
	2 ovate			
	3 circular			
III/14	Leaf blade size			
	3 small			
	5 medium			
	7 large			
III/15	Leaf blade hairiness of lower side			
	3 weak			
	5 medium			
	7 strong			
III/16	Petiole: length			
	3 short			
	5 medium			
	7 long			
III/17	Petiole: hairiness			
	1 weak			
	3 medium			
	5 strong			
	FRUIT			
III/18	Involucre: constriction			
	1 absent			
	9 present			
III/19	Involucre: length compared to fruit length			
	3 shorter			
	5 equal			
	7 longer			
III/20	Involucre: indentation			
	1 weak			
	3 medium			
	5 strong			
III/21	Involucre: serration of indentations			
	1 weak			
	3 medium			
	5 strong			

III/22	Involucre: thickness of callus at base			
	1 thin			
	3 medium			
	5 thick			
III/23	Involucre: hairiness			
	1 absent			
	9 present			
III/24	Involucre: density of hairiness			
	3 weak			
	5 medium			
	7 lstrong			
III/25	Involucre: jointing of brachts			
	1 absent			
	2 on one side			
	3 on both sides			
III/26	Cluster: predominant number of fruits			
	1 one			
	2 one to two			
	3 two to three			
	4 three to four			
	5 more than four			
III/27	Fruit: size			
	1 very small			
	3 small			
	5 medium			
	7 large			
	9 very large			
III/28	Fruit: shape			
	1 globular			
	2 conical			
	3 ovoid			
	4 short subcylindrical			
	5 long subcylindrical			
III/29	Fruit: shape of cross section			
	1 eliptical			
	2 circular			
	3 triangular			
	4 rectangular			
	5 eliptical			
III/30	Fruit: color			
	1 greenish yellow			
	2 light brown			
	3 brown			
III/31	Fruit: number of stripes on shell			
	3 few			
	5 medium			
	7 many			
III/32	Fruit: thickness of shell			
	1 very thin			

	3	thin			
	5	medium			
	7	thick			
	9	very thick			
III/33	Fruit: shape of top				
	1	narrow acute			
	2	broad acute			
	3	obtuse			
	4	flat			
III/34	Fruit: apex				
	3	slightly prominent			
	5	medium prominent			
	7	strongly prominent			
III/35	Fruit: size of pistil scar				
	3	small			
	5	medium			
	7	large			
III/36	Fruit: hairiness of top				
	3	weak			
	5	medium			
	7	strong			
III/37	Fruit: size of basal scar				
	3	small			
	5	medium			
	7	large			
III/38	Fruit: curvature of basal scar				
	1	concave			
	2	plane			
	3	convex			
III/39	Fruit: adherence of involucreon fruits (after fruit fall)				
	1	absent or very weak			
	3	weak			
	5	medium			
	7	strong			
	9	very strong			
III/40	Fruit: double kernels				
	1	absent			
	9	present			
III/41	Fruit: percentage of kernel (by weight)				
	1	very low			
	3	low			
	5	medium			
	7	high			
	9	very high			
III/42	Kernel: size				
	1	very small			
	3	small			
	5	medium			
	7	large			

	9	very large			
III/43	Kernel: shape				
	1	globular			
	2	ovoid			
	3	short cylindrical			
	4	long cylindrical			
III/44	Kernel: cross section				
	1	elliptical			
	2	circular			
	3	triangular			
III/45	Kernel: shape of top				
	1	pointed			
	2	obtuse			
	3	flat			
III/46	Kernel: shape of base				
	1	pointed			
	2	rounded			
	3	flat			
III/47	Kernel: lateral groove				
	1	absent			
	2	present			
III/48	Kernel: appearance of skin				
	1	not corky or very slightly corky			
	3	slightly corky			
	5	medium corky			
	7	strongly corky			
	9	very strongly corky			
III/49	Kernel: inside cavity				
	1	absent or very small			
	3	small			
	5	medium			
	7	large			
	9	very large			
	PHENOLOGICAL DATA				
III/50	Time of male flowering				
	1	very early			
	2	very early to early			
	3	early			
	4	early to medium			
	5	medium			
	6	medium to late			
	7	late			
	8	late to very late			
	9	very late			
III/51	Time of female flowering				
	1	very early			
	2	very early to early			
	3	early			

	4	early to medium			
	5	medium			
	6	medium to late			
	7	late			
	8	late to very late			
	9	very late			
III/52	Time of female flowering compared to time of male flowering				
	1	earlier			
	2	same time			
	3	later			
III/53	Time of ripening				
	1	very early			
	3	early			
	5	medium			
	7	late			
	9	very late			
III/54	Time of leaf fall				
	1	very early			
	3	early			
	5	medium			
	7	late			
	9	very late			
	PRODUCTION				
III/55	Yield				
	1	very low			
	3	low			
	5	medium			
	7	high			
	9	very high			
	SUSCEPTIBILITY TO STRESS, PEST AND DISEASES				
III/56	Susceptibility to winterfrost				
		Proportion of damaged buds, flowers, ovary of young fruits, %			
	1	not (resistant)	0 %		
	2	very small	< 5%		
	3	small	6 - 25 %		
	5	medium	26 - 50 %		
	7	strong	51 - 75 %		
	9	very strong (susceptible)	76 - 100%		
III/57	Susceptibility to spring frost				
		Proportion of damaged buds, flowers, ovary of young fruits, %			
	1	not (resistant)	0 %		
	2	very small	< 5%		
	3	small	6 - 25 %		
	5	medium	26 - 50 %		
	7	strong	51 - 75 %		

	9	very strong (susceptible)	76 - 100%		
III/58	Susceptibility to dry				
		Proportion of damaged buds, flowers, ovary of young fruits, %			
	1	not (resistant)	0 %		
	2	very small	< 5%		
	3	small	6 - 25 %		
	5	medium	26 - 50 %		
	7	strong	51 - 75 %		
	9	very strong (susceptible)	76 - 100%		
III/59	Susceptibility to <i>Balaninus nucum</i> L.				
		Proportion of damaged fruits, %			
	1	not (resistant)	0 %		
	2	very small	< 5%		
	3	small	6 - 25 %		
	5	medium	26 - 50 %		
	7	strong	51 - 75 %		
	9	very strong (susceptible)	76 - 100%		
III/60	Susceptibility to <i>Eriophyes avellanae</i> Nal.				
		Proportion of damaged buds, %			
	1	not (resistant)	0 %		
	2	very small	< 5%		
	3	small	6 - 25 %		
	5	medium	26 - 50 %		
	7	strong	51 - 75 %		
	9	very strong (susceptible)	76 - 100%		
III/61	Susceptibility to <i>Myzocallis coryli</i> Gotze				
		Proportion of damaged leaves, %			
	1	not (resistant)	0 %		
	2	very small	< 5%		
	3	small	6 - 25 %		
	5	medium	26 - 50 %		
	7	strong	51 - 75 %		
	9	very strong (susceptible)	76 - 100%		
III/62	Susceptibility to <i>Monilia coryli</i> Schul.				
		Proportion of damaged fruits, %			
	1	not (resistant)	0 %		
	2	very small	< 5%		
	3	small	6 - 25 %		
	5	medium	26 - 50 %		
	7	strong	51 - 75 %		
	9	very strong (susceptible)	76 - 100%		
III/63	Susceptibility to <i>Neumatospora coryli</i> Peglion				
		Peglion fruits, %			

	1	not (resistant)	0 %		
	2	very small	< 5%		
	3	small	6 - 25 %		
	5	medium	26 - 50 %		
	7	strong	51 - 75 %		
	9	very strong (susceptible)	76 - 100%		
III/64	Notes			Any other additional information	
III/65	Cytological characteristics and identified genes				
III/66	Molecular markers				
III/67	Pictures				

Reference:

TG 71/3 (deutsch)

Richtlinien für die Durchführung der Prüfung auf Unterscheidbarkeit, Homogenität und Beständigkeit, Haselnuss (*Corylus avellana* L., & *Corylus maxima*, Mill.) Datum 1979-03-28).