

Figure S1. Histogram of basic external fruit quality characteristics with marked commercial apple variety (Idared)

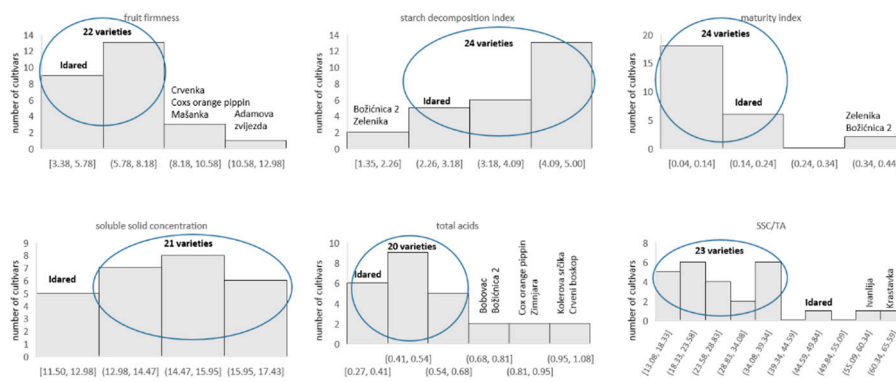


Figure S2. Histogram of basic internal fruit quality characteristics with marked commercial apple variety (Idared).

Table S1. Pearson correlation coefficient for internal and external fruit characteristics and seed characteristics

		Fruit characteristics				Fruit quality							Seeds		weight		
		weight g	height mm	width mm	shape index	firmness (kg cm ⁻²)	SDI	SSC (°Brix)	MI	TA (%)	SSC/TA	pH	total	Number healthy	bad	total g	1 seed g
external	weight (g)	1.00															
	height (mm)	0.77	1.00														
	width (mm)	0.94	0.72	1.00													
	shape index	0.05	0.63	-0.08	1.00												
	firmness (kg cm ⁻²)	-0.09	-0.27	-0.11	-0.30	1.00											
internal	SDI	-0.55	-0.35	-0.54	0.07	-0.19	1.00										
	SSC (°Brix)	0.04	0.14	0.00	0.21	-0.13	-0.07	1.00									
	MI	0.39	0.08	0.40	-0.32	0.51	-0.82	-0.24	1.00								
	TA (%)	0.14	0.11	0.22	-0.10	0.17	-0.16	0.06	0.18	1.00							
	SSC/TA	-0.03	0.09	-0.07	0.20	-0.23	0.08	0.31	-0.24	-0.77	1.00						
	pH	0.04	0.07	0.03	0.06	-0.39	0.03	0.02	-0.17	-0.25	0.33	1.00					
	total number	-0.22	-0.35	-0.27	-0.22	0.14	0.06	-0.17	-0.08	-0.18	0.09	-0.22	1.00				
	number of healthy	-0.46	-0.30	-0.44	0.06	0.00	0.27	-0.38	-0.21	-0.30	0.07	-0.03	0.66	1.00			
seeds	number of bad	0.45	0.24	0.35	-0.05	0.07	-0.26	0.34	0.17	0.21	0.00	-0.15	-0.16	-0.82	1.00		
	total weight(g)	-0.14	0.03	-0.12	0.18	0.10	-0.04	-0.47	0.06	-0.16	0.04	-0.12	0.47	0.78	-0.65	1.00	
	1 seed weight(g)	0.58	0.50	0.55	0.10	0.21	-0.51	-0.13	0.52	0.33	-0.19	-0.10	-0.30	-0.35	0.27	0.27	1.00

SDI – starch decomposition index; SSC – soluble solid concentration, MI – maturity index; TA – total acids (% of malic acid)