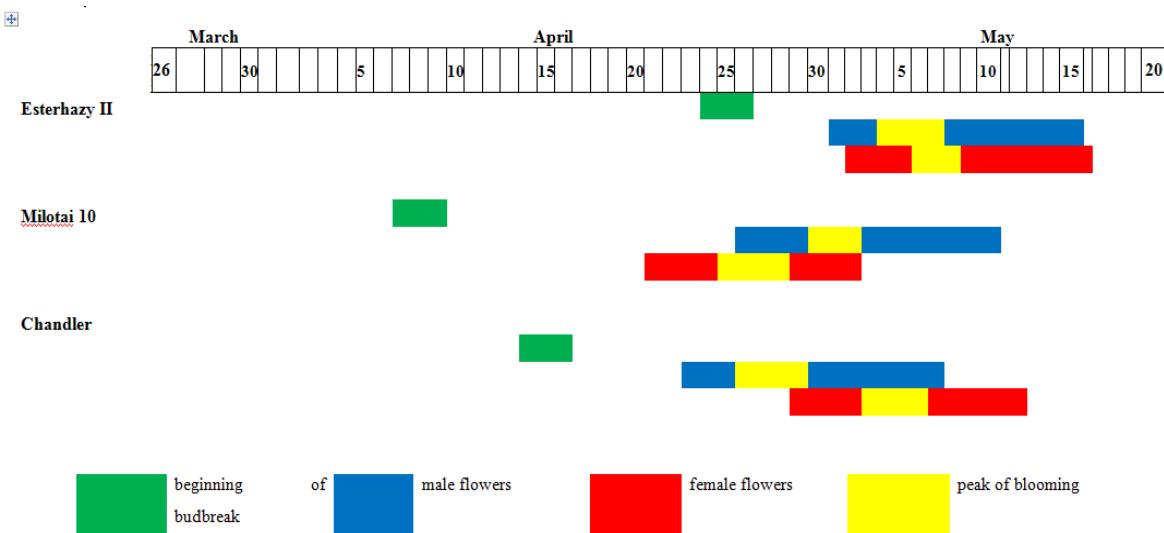
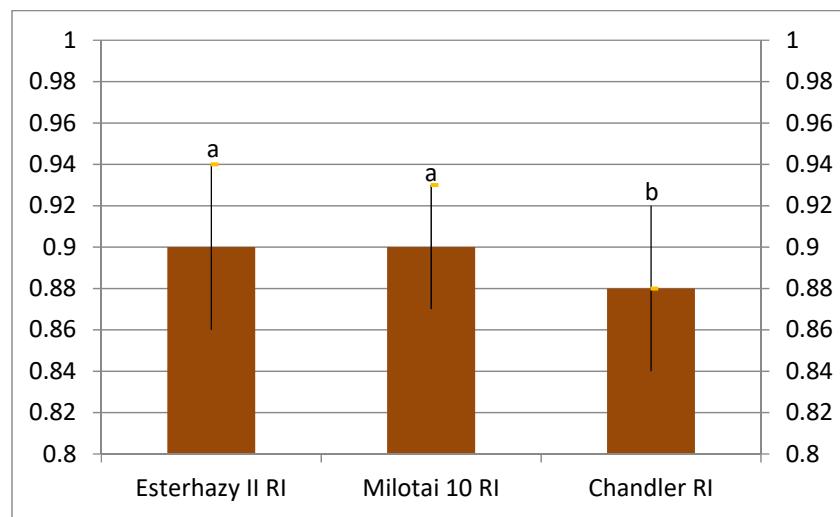


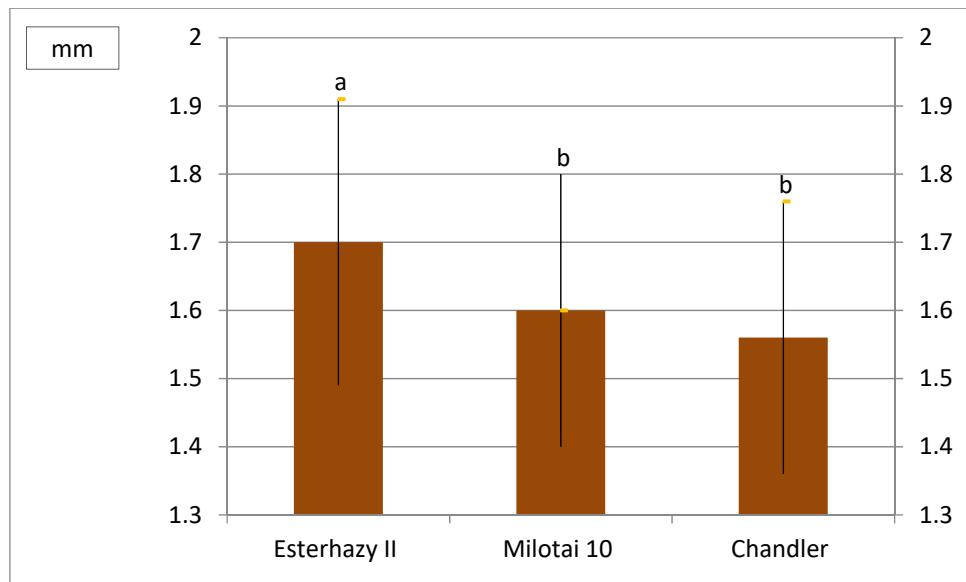
## Supplementary



**Figure S1.** related to Table 2. Phenogram of budbreak, pistillate receptivity and pollen shedding period of Esterhazy II in comparison with Milotai 10 and Chandler (2010-2019).



**Figure S2.** Roundness index (RI) of the 'Esterhazy II', 'Milotai 10', and 'Chandler' nuts (2010-2019) ( $SD_{5\%} = 0.015$ ).



**Figure S3.** Shell thickness of Esterhazy II, Milotai 10 and Chandler (2010-2019) ( $SD_{5\%} = 0.07$ ).

**Table S1.** (Related to Figure 5.) Genetic diversity indices of the analysed 18 *Juglans regia* cultivars applying 8 SSR markers (where N: number of samples,  $N_a$ : number of alleles,  $N_e$ : effective number of alleles, I: Shannon's information index,  $H_o$ : observed heterozygosity,  $H_e$ : expected heterozygosity, F: fixation index).

SSR Marker	N	$N_a$	$N_e$	I	$H_o$	$H_e$	F
WGA27	18	2	1.946	0.679	0.389	0.486	0.200
WGA72	18	2	1.314	0.403	0.278	0.239	-0.161
WGA89	18	4	2.090	0.939	0.611	0.522	-0.172
WGA118	18	6	2.919	1.290	0.778	0.657	-0.183
WGA202	18	9	4.101	1.703	0.667	0.756	0.118
WGA276	18	7	4.154	1.618	0.611	0.759	0.195
JR 6160	18	3	1.573	0.655	0.333	0.364	0.085
JR 1817	18	3	1.674	0.721	0.278	0.403	0.310
<b>Min</b>	18	2	1.314	0.403	0.278	0.239	-0.183
<b>Max</b>	18	9	4.154	0.721	0.778	0.759	0.310
<b>Mean</b>	18.000	4.500	2.471	1.001	0.493	0.523	0.049
<b>SE</b>	0.000	0.906	0.398	0.170	0.069	0.067	0.069