

**Table S10.** The observation numbers of seed- and seedling traits of *X. sorbifolium* (5 replicates).

Provenance	SL	SW	SDW	1000SW	SSSC	SCPC	RL	RA	RV
AB	13.84	12.48	0.77	822.71	4.58	38.76	328.24	129.31	9.19
AB	13.39	12.52	0.72	807.46	7.47	33.62	263.08	78.91	3.82
AB	13.31	12.2	0.7	799.54	0.16	33.55	89.93	36.59	2.84
AB	13.31	12.12	0.71	791.84	3.8	33.15	86.19	34.31	2.69
AB	13.28	11.89	0.67	797.8	28.26	32.04	402.53	111.48	8.29
OB	14.09	12.83	0.78	924.19	12.93	56.45	243.5	81.46	8.56
OB	14.3	13	0.82	947.7	6.15	42.52	170.65	56.95	4.99
OB	14.52	12.93	0.82	957.42	6.16	33.95	188.68	54.16	3.45
OB	14.24	12.89	0.75	964.85	0.08	33.47	128.67	18.53	2.29
OB	13.89	12.94	0.82	970.42	14.29	37.33	123.08	24.09	2.48
SX	13.28	12.12	0.72	768.88	12.78	33.92	280.16	84.83	8.12
SX	13.5	12.07	0.75	771.63	6.07	37.99	317.18	60.31	2.31
SX	12.8	11.67	0.67	725.93	13.25	34.89	281.49	53.35	2.92
SX	13.27	11.93	0.73	772.13	18.06	35.17	195.75	42.41	3.31
SX	12.95	11.57	0.66	737.72	4.92	37	218.91	53.58	3.38
ML	13.57	12.33	0.81	872.81	27.71	34.73	780.93	166.22	7.99
ML	12.91	12.27	0.76	839.78	25.19	38.48	453.9	126.22	7.29
ML	13.12	12.71	0.83	857.41	19.32	32.14	526.84	93.97	2.64
ML	12.94	12.31	0.75	816.97	21.6	32.95	172.47	50.53	6.42
ML	12.98	12.56	0.79	867.06	12.65	33.51	178.1	50.39	6.03

AB-Ar Horqin Banner; OB-Ongniud Banner; SX-Shanxian; ML-Mulei; SL-seed length; SW-seed width; SDW-seed dry weight; 1000SW-1000-seed weight; SSSC-seed soluble sugar concentration; SCPC-seed crude protein concentration; RL-root length; RA-root area; RV-root volume.