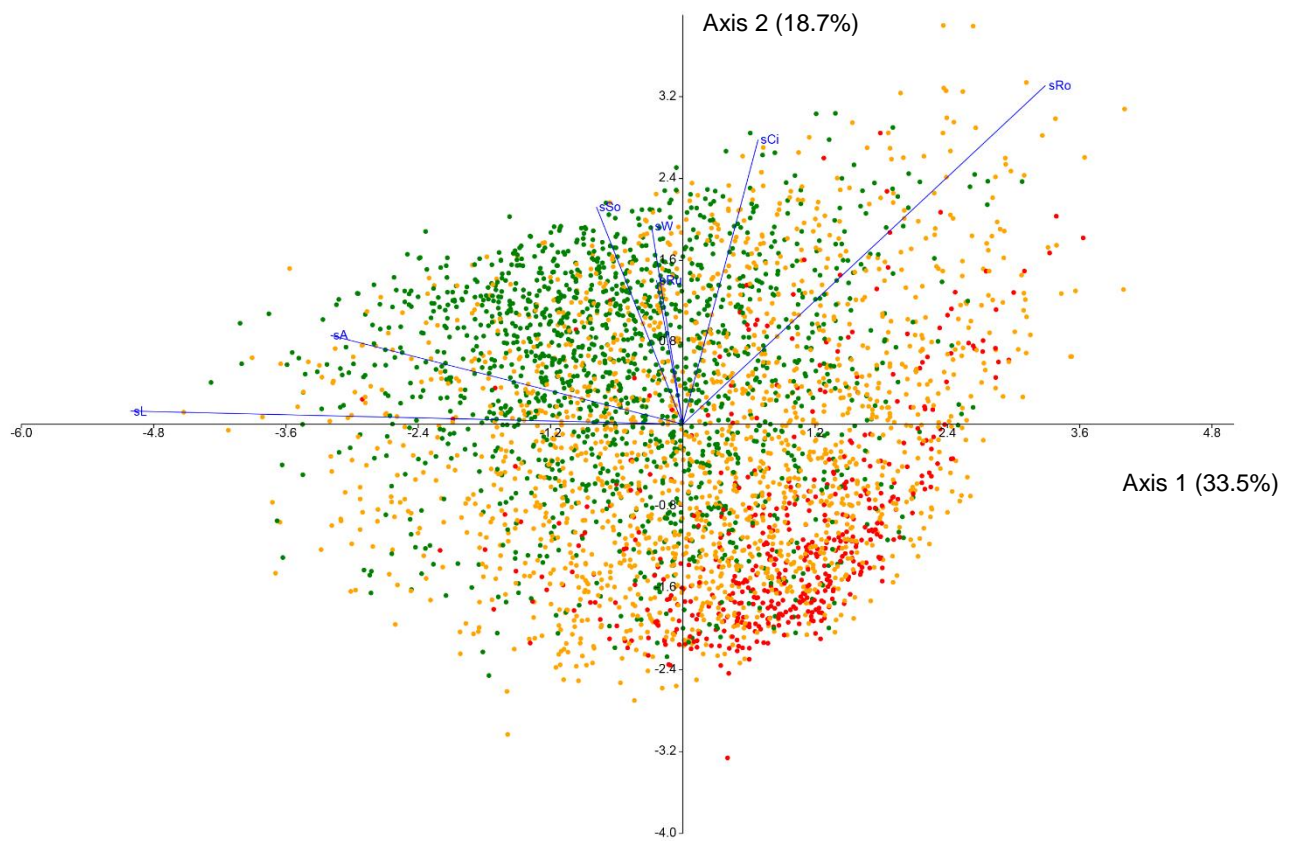


### Supplementary file S3

for the paper “Relationship between the characteristics of bread wheat grains, storage time and germination“ Afonnikov D.A., Komyshev E.G., Efimov V.M., Genaev M.A., Koval V.S., Gierke P.U., Börner A.



**Figure S1.** LDA biplot for seeds from 44 RILs in the plane of two first main axes of the color traits space. The fractions of variance for two axes are shown in parentheses.

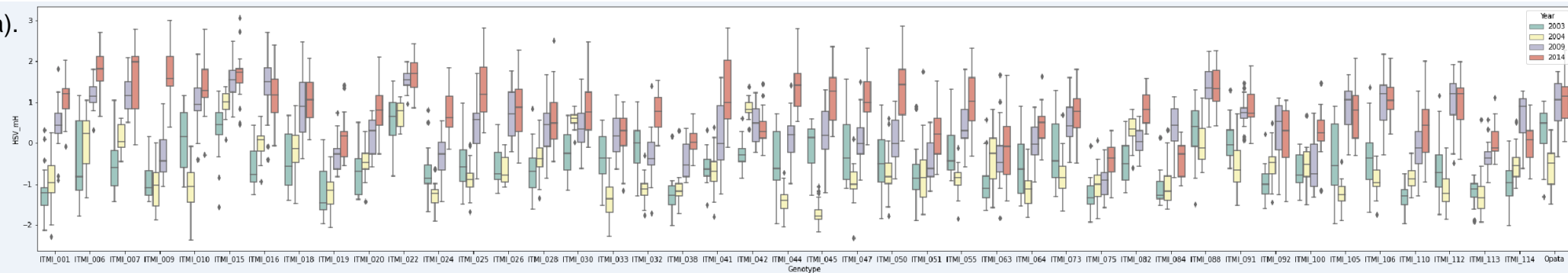


**Figure S2.** LDA biplot for seeds from 44 RILs in the plane of two first main axes of the size/shape traits space. The fractions of variance for two axes are shown in parentheses.

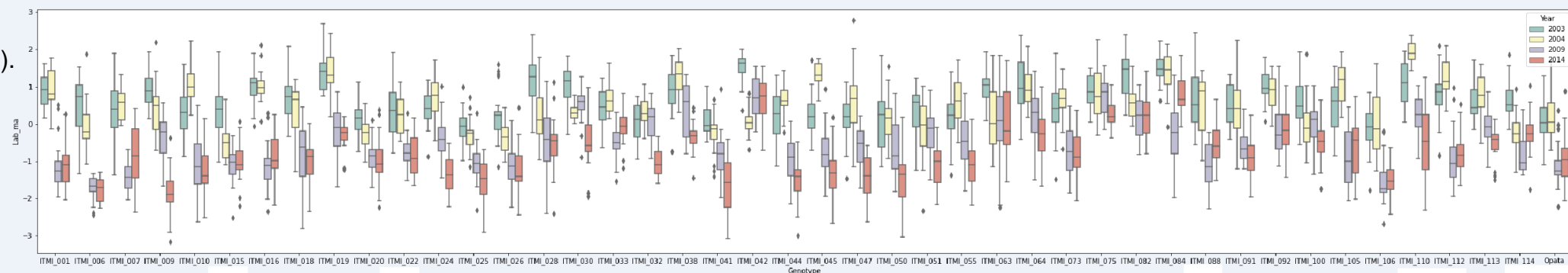


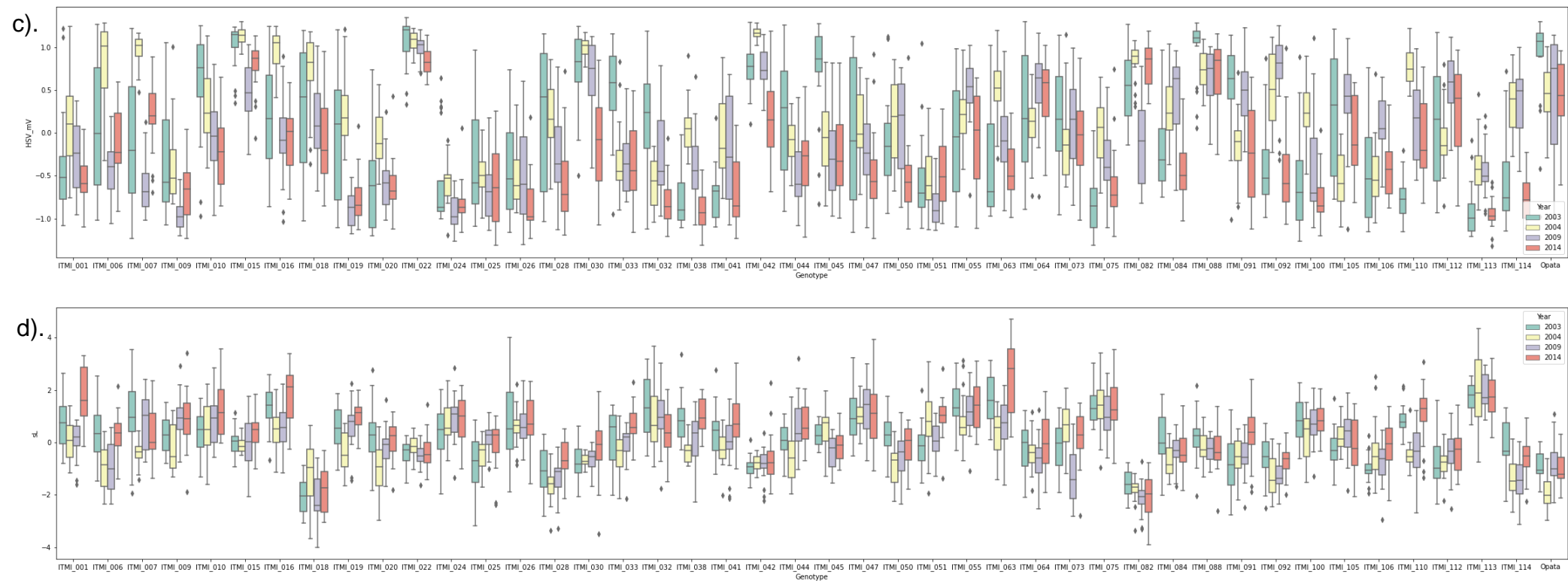
**Figure S3.** Images of grains from two RILs: ITMI\_016 (a) and ITMI\_028 (b).

a).



b).





**Figure S4.** Bar plots for the distribution of the HSV\_mH (a), Lab\_ma (b), HSV\_mV (c) and sL (d) trait values (Y axis) in the seed samples from different harvesting years and accessions (X axis; green bars for 2003, yellow bars for 2004, purple bars for 2009, red bars for 2014).

**Table S1.** The ANOVA results for the ITMI seed germination and the year of harvest.

Variance component	Sum of Squares	df	Mean square	F	P-value	F threshold
Between groups	12218.868	3	4072.956	41.238	$1.3 \cdot 10^{-15}$	2.732
Within groups	7111.158	72	98.766			
Total	19330.026	75				

**Table S2.** The ANOVA results for the ITMI seed germination and the genotype.

Variance component	Sum of Squares	df	Mean square	F	P-value	F threshold
Between groups	2101.776	18	116.765	0.3863	0.9858	1.788
Within groups	17228.250	57	302.250			
Total	19330.026	75				