

Supplementary Figures

Genetic Contribution of Synthetic Hexaploid Wheat to CIMMYT's

Spring Bread Wheat Breeding Germplasm

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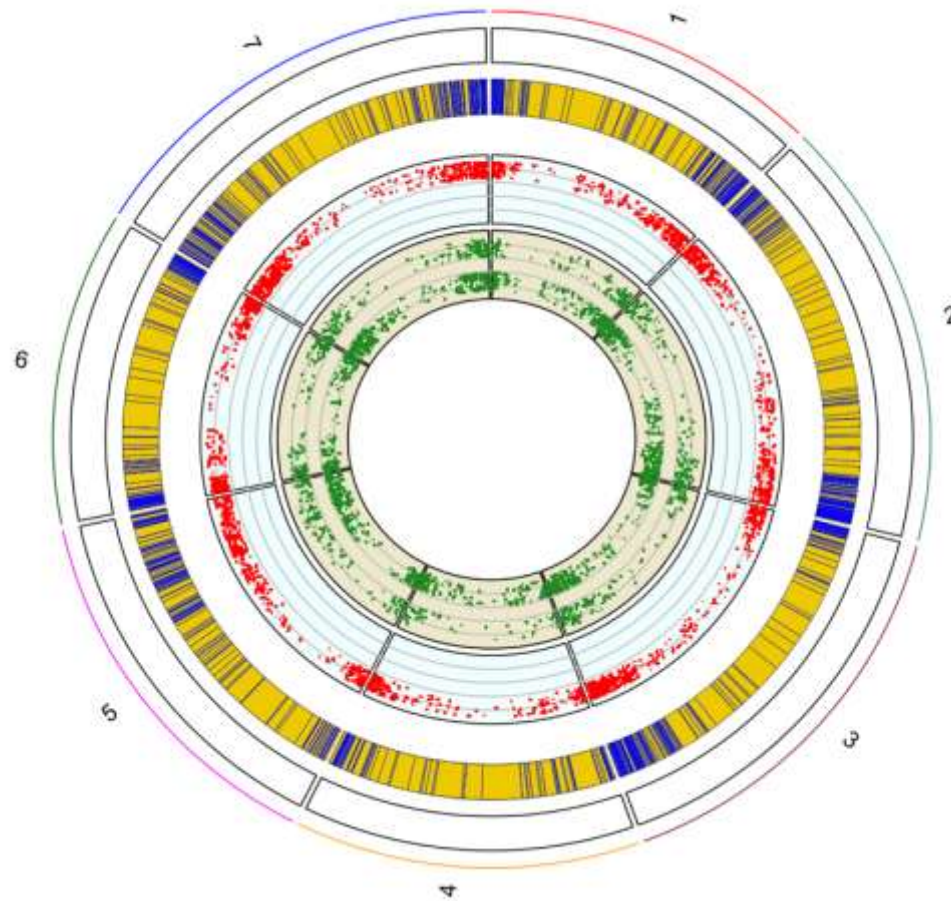


Figure S1: SNP markers (2669) and their distribution in the D genome – from outside: track 2 positions of PAV and SNPs, track 3: call rate of each marker (red dots), track 4: frequency difference between the *Ae. tauschii*/synthetic hexaploid wheat population and bread wheat population (green dots).

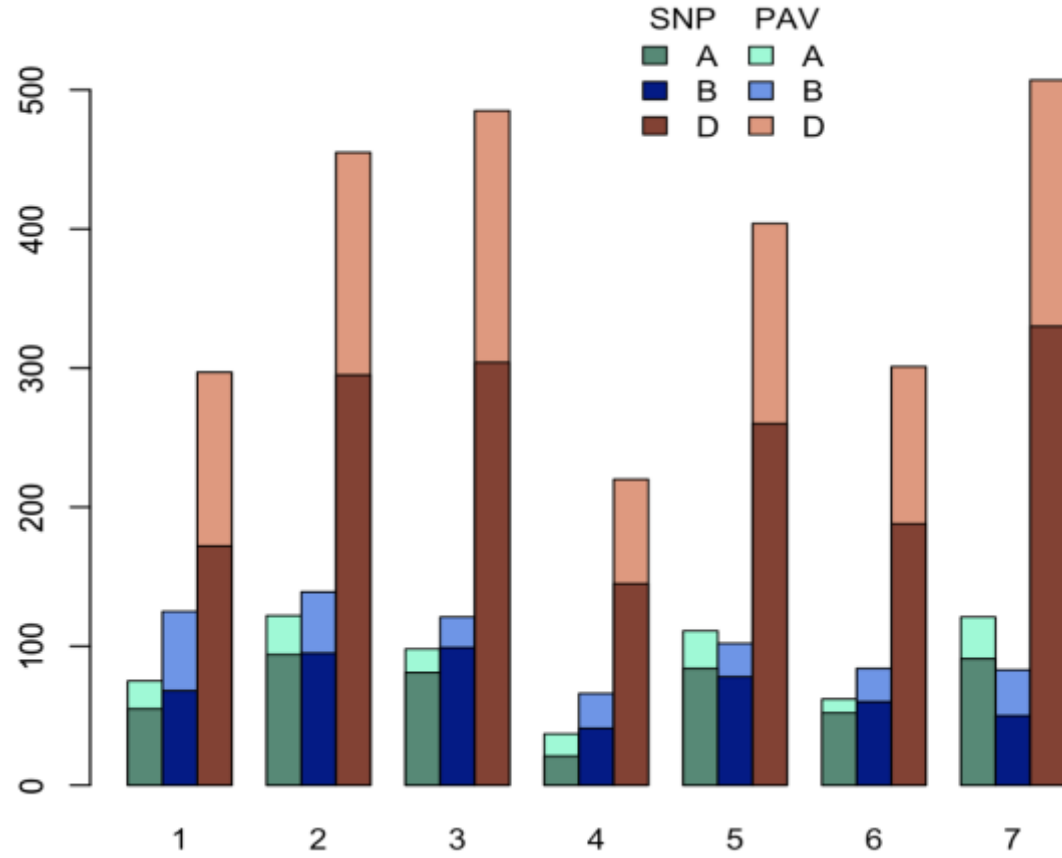


Figure S2: Number of genome specific markers with allele frequency difference greater than 0.3 among populations. Number of markers in genomes A and B are based on allele frequency different between durum wheat (AABB) and bread wheat (AABBDD) populations whereas the number of markers in the D genome are based on allele frequency difference between bread wheat (D) and *Ae. tauschii* - synthetic hexaploid wheat (D') populations.

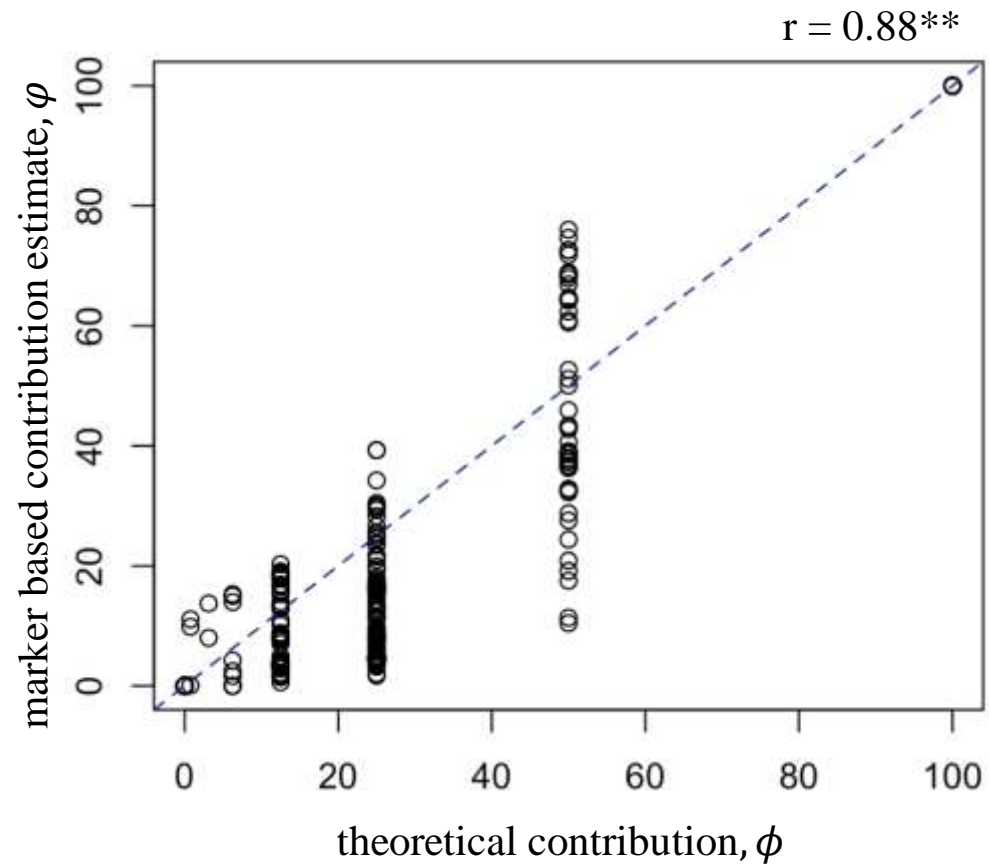


Figure S3: Comparison of theoretical contribution estimates versus marker-based contribution estimates

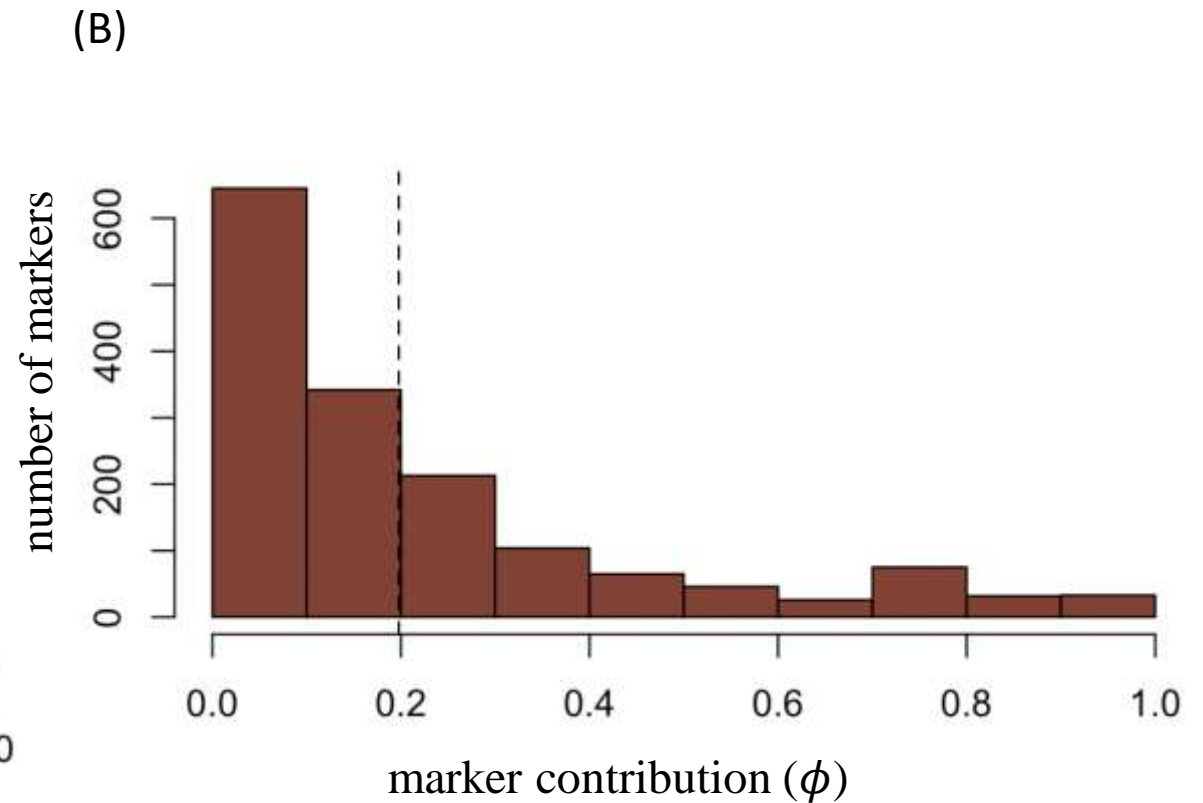
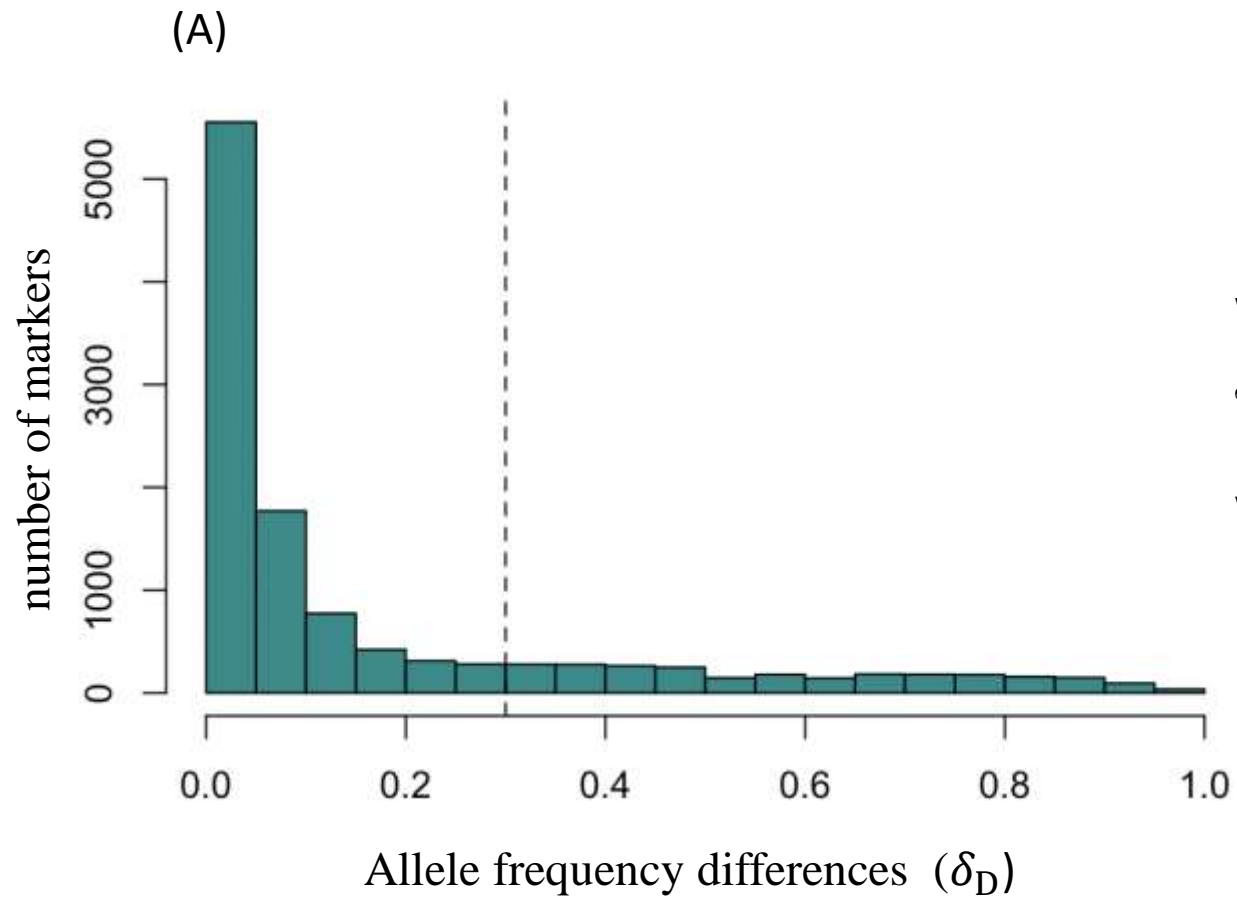


Figure S4: (A) Allele frequency differences (δ_D) distribution of all useful D markers and (B) marker contribution (ϕ) for selected markers with $\delta_D > 0.30$

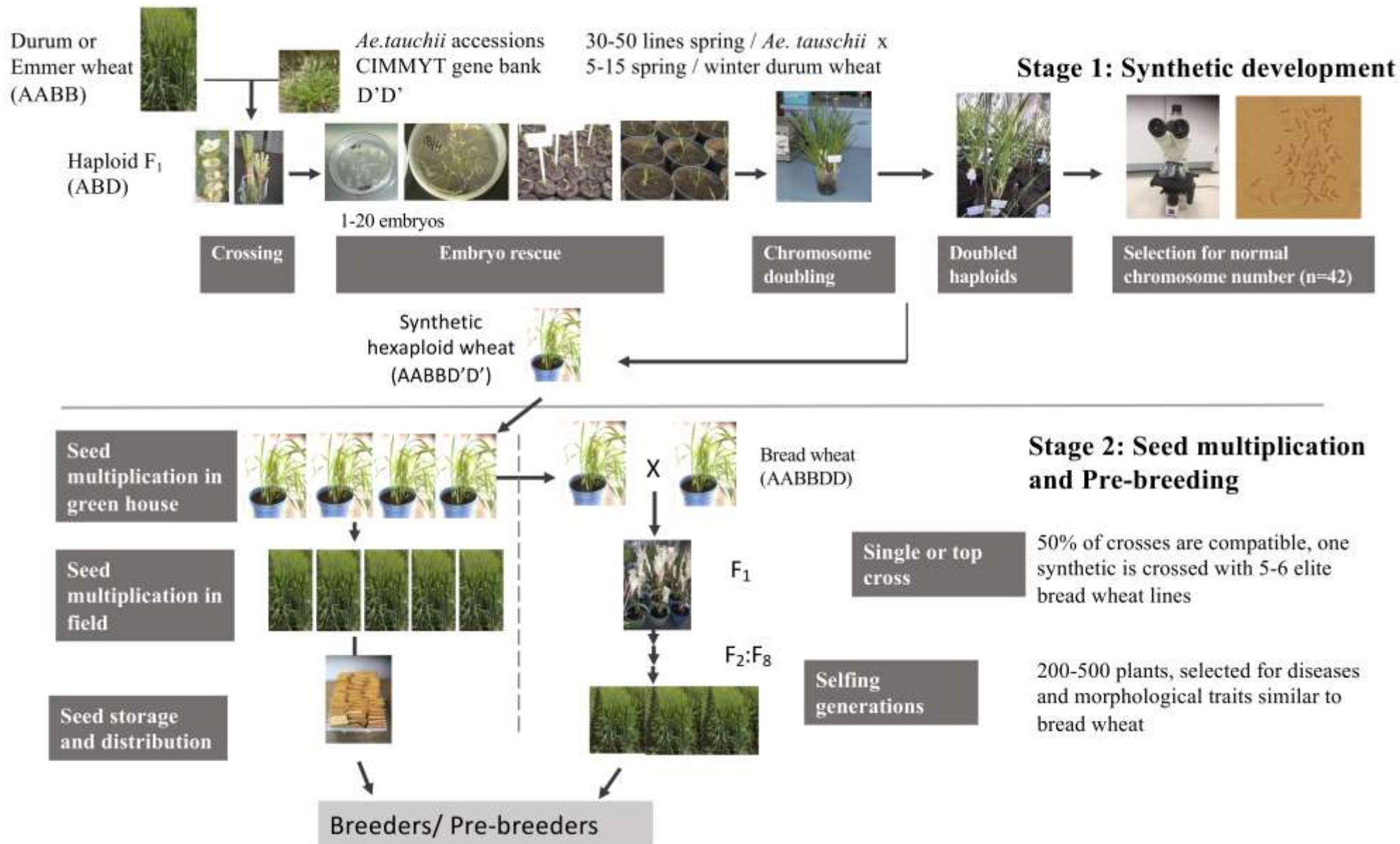


Figure S5: Synthetic hexaploid wheat and their derivative development protocol followed by CIMMYT wide-crosses program