

## Supplementary Material:

**Figure S1** Identification of Bx7<sup>OE</sup> among *Triticum* and *Aegilops* accessions by PCR amplifications with two STS markers.

Lines 1-28: bread wheat varieties (Langbow, Alpe, Floreal, Liocorno, Ilves, Nisu, Gemini, Ruso, Pandas, Pricarma, Salmone, Bussard, Bezostaya 1, Lumai 21, Gamenye, Jinan 16, Bainong 64, Jing 411, Jingdong 8, Nongda 116, Nongda 152, Yuandong 6, Linhan 917, Jinnong 207, Yumai 21, Yumai 54, CA 7722, Jinghe 951); Line 29-42: Synthetic hexaploid wheat (R2, R4, R5, R8, R12, R18, R21, R23, R30, R32, R39, R45, R60, R62); Line 43-56: *T. compactum* accessions (PI193009, PI286051, PI303663, PI306529, PI191489, PI372151, PI442912, PI559535, PI339845, PI 361822, PI 361850, PI 412976, TA 42198, TA 42202); Line 43-56: *Aegilops speltoides* accessions (PI172357, PI172685, PI173614, PI219867, PI369610, PI369615, PI393493, PI449341, PI487231, PI487232, PI487237, PI487238, PI499261, PI542238); Line 57-69: *Ae. searsii* accessions (PI599121, PI599124, PI599128, PI599130, PI599133, PI599135, PI599137, PI599140, PI599142, PI599146, PI599163, PI599169, PI599172); Line 70-82: *Ae. longissima* accessions (PI330486, PI542196, PI604103, PI604106, PI604107, PI604108, PI604110, PI604112, PI604115, PI604117, PI604118, PI604119, PI604122); Line 83-93: durum wheat varieties (Ofanto, Simeto, Creso, Latino, Mondur Rehhutte, Chandur, Capdur, Attila, Arcour, Agathe, Signadur); Line 94-105: *T. dicoccoides* accessions (PI266841, PI272582, PI355457, PI355458, PI467032, PI467036, PI467049, PI415149, PI415150, PI428018, PI428020, PI428021); Line 106-116: *T. dicoccum* accessions (PI355466, PI355486, PI276000, PI276009, PI352362, PI352369, ATRI5220/91, TD3489, TD43516, TD43521, DM7); Line 117-128: spelt wheat varieties (Baulander speltz, Erbe-weizen, Rouquin, Renva, Schwabenkorn, Hercule, Zuger Dinkel, Frankenkorn, Ostro, Albin, Hubel, Duhamelianum). Demai 3 (D) and Bajio (B) carrying Bx7<sup>OE</sup> were used as controls of Bx7<sup>OE</sup>. M: DNA marker.

