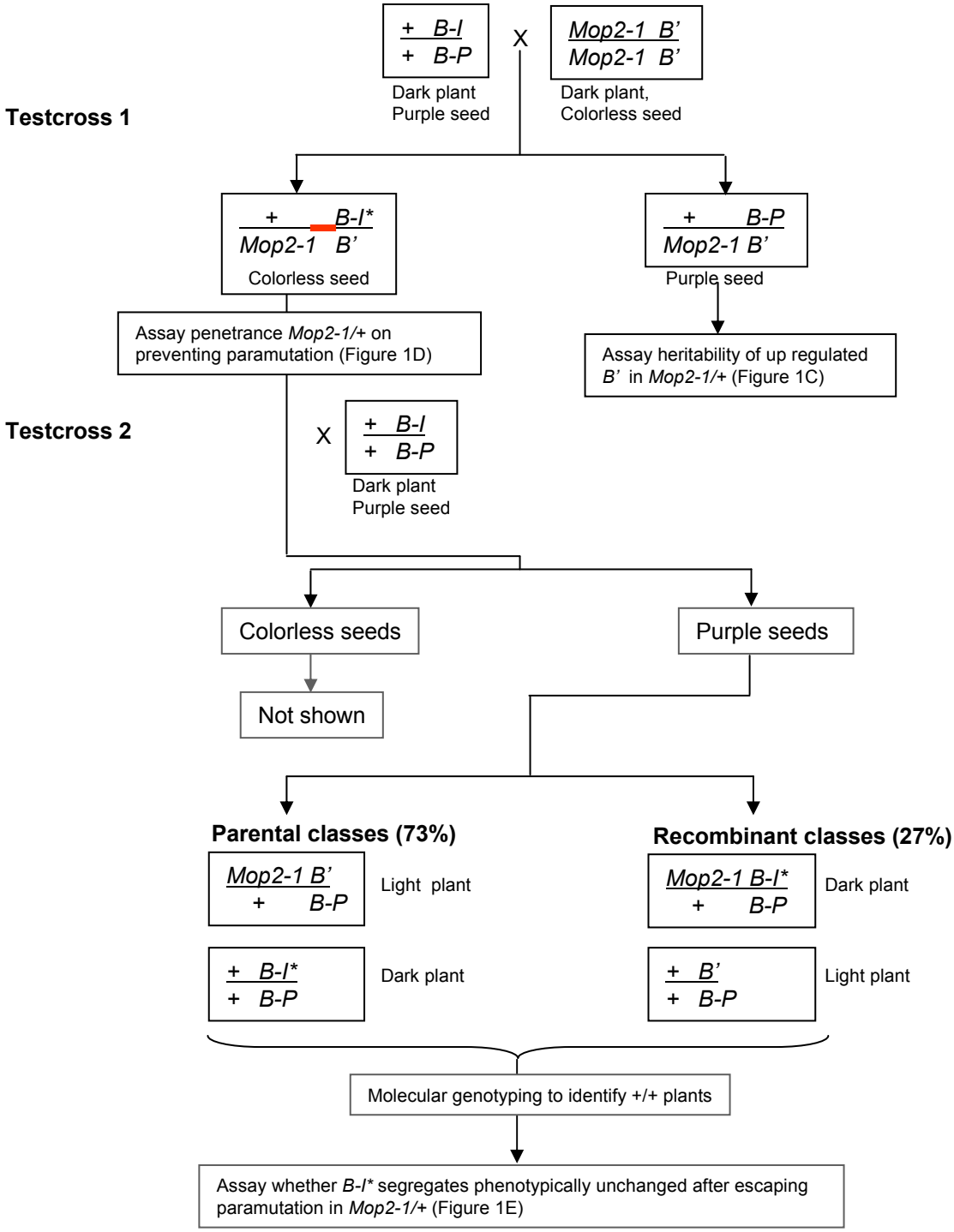

Figure S2. Crossing schema for the genetic test used to assay *Mop2-1/+* effects on preventing *b1* paramutation and relief of *B'* silencing. The *B-I* allele exposed to homozygous *Mop2-1* is denoted by an asterisk. The red bar indicates the potential for recombination as the *b1* and *Mop2-1* loci are linked (27cM). The *B-Peru* (*B-P*) allele of the *b1* gene does not undergo paramutation. Weak plant pigment specified by *B-P* is convenient for observing *B'* and *B-I** phenotypes. Because *B'* and *B-I* do not pigment seeds, the purple seed color specified by *B-P* is used for pre-planting segregation of *B'/B-I** and *B'/B-P* seeds. If *B-I** escaped paramutation in the previous generation, then accounting for the linkage between *b1* and *mop2*, assuming absence of spontaneous paramutation of *B-I** to *B',* and 100% penetrance of the *Mop2-1* mutation, 73% of dark + *B-I*/+ B-P* and 27% of light + *B'/+ B-P* progeny are expected.