



Figure 4. *trxG* mutations block the derepression of Hox genes in PcG mutants. (A) Leg imaginal discs stained with antibodies against the protein encoded by the Hox gene, *Scr*, which specifies the identity of the labial and first thoracic segments, including the first leg. (B) Basitarsal segments of the legs of wild-type and mutant adults. Note the presence of sex comb teeth on the first leg, but not the second and third legs of wild-type adults. The *Scr* gene is partially derepressed in the second and third leg discs, in which it is normally silent, in individuals heterozygous for mutations in PcG genes leading to the appearance of ectopic sex comb teeth on the second and third legs. These phenotypes are suppressed by mutations in *brm* and many other *trxG* genes. (A, Reprinted, with permission, from Tamkun et al. 1992, © Elsevier; B, portion modified, with permission, from Kennison 2003, © Elsevier.)