



Figure S16. X Chromosomal enrichment analysis of sex-biased genes. **A**, Enrichment of sex biased genes on the X chromosome of seed beetles in gonads. **B**, Enrichment of sex biased genes on the X chromosome of seed beetles in guts. **C**, Enrichment of sex biased genes on the X chromosome of seed beetles in heads. Percentage of male biased genes and female biased genes located in the X-chromosomes (vertical bars) and in the autosomes (horizontal black solid lines) are shown. 'ALL' represents genes with sex-bias, regardless of the direction of bias. Significance was determined by a Fisher's exact test. $*p < 0.05$, $**p < 0.01$, $***p < 0.001$. **D-E**, Examples for Y-linked genes translocation. Flanking sequences of Y-linked genes are co-translocated with the genes themselves.