**Supplemental Figure 1. Phenotypic Differences Between the Species.** Representative female and male individuals from *Drosophila suboccidentalis* (top) and *Drosophila occidentalis* (bottom), highlighting the difference in abdominal pigmentation between the two species.

D. suboccidentalis female









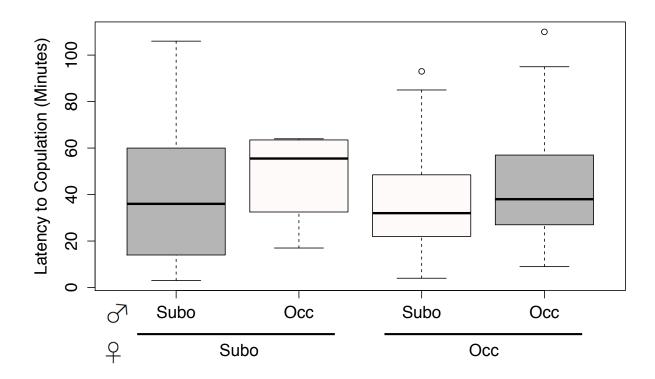
D. occidentalis female



D. occidentalis male

## Supplemental Figure 2. Latency to copulation for each type of pure species cross.

Only pairs that copulated are included. Horizontal bars indicate the median for each cross, and boxes represent upper and lower quartiles. "Subo" refers to *D. suboccidentalis* and "Occ" refers to *D. occidentalis*.



**Supplemental Figure 3. Latency to copulation for crosses involving hybrid individuals, compared to pure species controls.** Only pairs that copulated are included.

Horizontal bars indicate the median for each cross, and boxes represent upper and lower quartiles. "Subo" refers to *D. suboccidentalis*, "Occ" refers to *D. occidentalis*,

"F1(OxS)" refers to a F1 hybrid from a *D. occidentalis* female, and "F1(SxO)" refers to a F1 hybrid from a *D. suboccidentalis* female.

