

**Figure S8.** Simulation study results from set 1 (**A**) and results from set 2 (**B**). The true hotspot was located between 15 kb and 16.5 kb and indicated by blue horizontal lines. Note that the locations of the hotspot for the two species are the same, so the shared hotspot is between 15 kb and 16.5 kb. **Left panel:** The 50% quantile of the BFs of shared hotspots over locations. **Middle panel:** Power (red) and false positive rate (black) of identifying shared hotspot estimated using the 4950 pairs across locations. **Right panel:** False positive rate of identifying shared hotspot as a function of distance to the left bound of the shared hotspot (15 kb) (black dots/line) and to the right bound of the shared hotspot (16.5 kb) (green dots/line)