



Figure S1. Maximization of collinearity in the final consensus map from male and female informative markers. ALLMAPS output for the merged independently mapped markers that are informative for recombination in the male are in orange and blue-green for female markers. Left figures indicate the placement of markers in each sex specific map with the resulting consensus map in the center to indicate the final genome scaffold placement (alternating in white and grey along the chromosome). Plots on the right correlate the original centi-morgan (cM) position for markers (y-axis) with the resulting position in the consensus map. A) High collinearity between the sex-specific maps (ex. LG20, top left) results in a higher correlation with the new position in the consensus map (ex. LG20, top right). B) Low collinearity between the male and female map had greater differences between the maps (ex. LG5, bottom left) and has been previously associated with sex determination (Reid et al. 2016).