Figure S1 Model choice by SDpop on simulated data. The proportion of simulations for which the XY model had the lowest BIC is indicated; each combination of simulation parameter values was repeated 10 times from a random seed. Vertical bars indicate the expected variance based on the binomial distribution. Different panels represent result for different values of the time since recombination suppression t; the colors indicate the percentage of simulated sex-linked genes (black 0%, blue 0.1%, orange 1% and red 10%; the remaining genes are autosomal); line types and symbols indicate whether only XY gametologous genes were simulated (0% X-hemizygous genes, solid lines with "+" symbols) or if half of the simulated sex-linked genes are X-hemizyous (dashed lines with "x" symbols). E.g., red dashed lines with "x" symbols correspond to simulations with 5% of the genes XY gametologs, 5% X-hemizygotes and 90% autosomal. These simulations were carried out with error rate $\epsilon = 0.001$; results with $\epsilon = 0.0001$ are shown in Figure 1.