FIGURE S1.—Density distributions of the Euclidean distances between the observed and simulated statistics. We report here Epanechnikov kernel density estimations for distances $\delta < \delta_\varepsilon = 1.4$ generated under the two sampling schemes ABC and ABC-MCMC with $\varepsilon = 0.005$ for the model of population divergence without migration. Due to the tolerance level chosen, the proportion of distances $\delta < 1.4$ is expected to be 100 times higher for the ABC-MCMC than conventional ABC. We used 1 million steps for each sampler except ABC, for which we used ten million steps. The densities are estimated on 6434 and 66178 accepted simulations under the ABC and ABC-MCMC samplers respectively. The figure shows that the distributions of Euclidean distances obtained under ABC-MCMC approaches correspond exactly to those of a truncated prior $p_\alpha(\delta \mid S\theta, \delta \leq \delta_\varepsilon)$.