

Table S1. Simulation programs that include demography and selection

Program	Type	Reference	Availability
<i>mbs</i>	Coalescent conditional on selection trajectories and population size changes	Teshima&Innan (2009)	http://www.sendou.soken.ac.jp/esb/innan/InnanLab
<i>msms</i>	Forward and backward simulations allowing selection and population structure	Ewing&Hermisson (2010)	http://www.mabs.at/ewing/msms
<i>SFS_Code</i>	Forward simulations	Hernandez (2008)	http://sfscode.sourceforge.net

References

Ewing G, Hermisson J(2010)MSMS: a coalescent simulation program including recombination, demographic structure and selection at a single locus. *Bioinformatics*, **26**, 2064-2065

Hernandez RD (2008)A flexible forward simulator for populations subject to selection and demography. *Bioinformatics*, **24**, 2786-2787

Teshima K, Innan H (2009) mbs: modifying Hudson's ms software to generate samples of DNA sequences with a biallelic site under selection. *BMCBioinformatics*, **10**, 166.