

Table 1. Software available for Bayesian analysis applied to population demography.

Program	Main function	Citation	Website
ABC (for R)	Generates simulated population sequence data and provides analysis for ABC	Csilléry et al., 2012	https://cran.r-project.org/web/packages/abc/index.html
BEAST	Bayesian estimation of population parameters by tree sampling	Drummond and Rambaut, 2007	http://beast.bio.ed.ac.uk/
BEAST 2	Bayesian estimation of population parameters by tree sampling	Bouckaert et al., 2019	https://www.beast2.org/
BESTT	Bayesian estimation of population parameters by tree sampling	Palacios et al., 2019	https://github.com/JuliaPalacios/phyloodyn
DIYABC	Generates simulated population sequence data and provides analysis for ABC	Cornuet et al., 2014	http://www1.montpellier.inra.fr/CBGP/diyabc/
IM, IMA, IMA2	Migration between populations by Bayesian allele assignment	Hey and Nielsen, 2007	https://bio.cst.temple.edu/~hey/software/software.htm
LAMARC	Bayesian estimation of population parameters	Kuhner, 2006	http://evolution.genetics.washington.edu/lamarc/index.html
MIGRATE, MIGRATE-N	Migration between populations (Bayesian and ML-based)	Beerli, 2006	http://popgen.sc.fsu.edu/Migrate/Download.html
MrBayes	Generates phylogenetic trees for multiple species	Huelsenbeck and Ronquist, 2001a; Ronquist and Huelsenbeck, 2003	http://mrbayes.sourceforge.net/
MS, MSprime	Generates simulated coalescent trees	Kelleher et al., 2016	https://msprime.readthedocs.io/en/stable/#
Serial SimCOAL	Generates simulated heterochronous population sequence data for ABC	Anderson et al., 2005	http://web.stanford.edu/group/hadlylab/ssc/index.html
SimCOAL, FastSIMCOAL	Generates simulated population sequence data for ABC	Excoffier et al., 2000, 2013	http://cmpg.unibe.ch/software/simcoal/ , http://cmpg.unibe.ch/software/fastsimcoal2/
SLiM	Forward simulation of populations	Heller et al., 2019	https://messengerlab.org/slim/
STRUCTURE	Population structuring by Bayesian allele assignment	Pritchard et al., 2000; Falush et al., 2003; Falush et al., 2007; Hubisz et al., 2009	http://pritchardlab.stanford.edu/structure.html