

Supplementary Material 2. The command blocks used for the Bayesian analysis of the first, second and third data sets.

We used the following command block for the first data set:

```
begin mrbayes;
  set autoclose=yes nowarn=yes;
  lset nst=6 rates=invgamma;
  unlink statefreq=(all) revmat=(all) shape=(all) pinvar=(all);
  prset applyto=(all) ratepr=variable;
  mcmcp ngen= 20000000 relburnin=yes burninfrac=0.05
printfreq=20000 samplefreq=20000 nchains=4 savebrlens=yes;
  mcmc;
  sumt;
end;
```

We used the following command block for the second data set:

```
begin mrbayes;
  charset COI = 1-1539;
  charset tRNA = 1540-1604;
  charset COII = 1605-2281;
  partition Names = 3: COI, tRNA, COII;
end;
begin mrbayes;
  set partition=Names;
  lset applyto=(1) nst=6 rates=invgamma;
  lset applyto=(2) nst=2 rates=equal;
  lset applyto=(3) nst=6 rates=invgamma;
  unlink shape=(all) pinvar=(all) statefreq=(all) revmat=(all);
  prset applyto=(all) ratepr=variable;
  mcmcp ngen= 20000000 relburnin=yes burninfrac=0.05
printfreq=20000 samplefreq=20000 nchains=4 savebrlens=yes;
  mcmc;
  sumt;
end;
```

We used the following command block for the third data set:

```
begin mrbayes;
  charset COI = 1-1539;
  charset tRNA = 1540-1604;
  charset COII = 1605-2281;
  charset ITS2 = 2282-2948;
  charset gaps=2949-2971;
  partition Names = 5: COI, tRNA, COII, ITS2, gaps;
end;
begin mrbayes;
  set partition=Names;
  lset applyto=(1) nst=6 rates=invgamma;
  lset applyto=(2) nst=2 rates=equal;
  lset applyto=(3) nst=6 rates=invgamma;
  lset applyto=(4) nst=6 rates=equal;
  unlink shape=(all) pinvar=(all) statefreq=(all) revmat=(all);
  prset applyto=(all) ratepr=variable;
  mcmcp ngen= 20000000 relburnin=yes burninfrac=0.05
printfreq=20000 samplefreq=20000 nchains=4 savebrlens=yes;
  mcmc;
  sumt;
```

end;