Axis_analysis_18_feb_2019

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This script uses the metrics estimated in the previous scripts to run a series of `MCMCglmm` models in order to fit phylogentic regressions for each of the life history metrics against body mass and the matrix dimension. As each regression is run over 100 phylogentic trees using the mulTree package the output of each model is exported out of the R enviornment into the current directory. The required elements can then be read in as needed for the rest of the analysis. For more on the `multree` package see https://github.com/TGuillerme/mulTree

Note running this script in full will result in a runtime of approximatly 1 week.

First we load the required packages including MCMCglmm and the mulTree package which runs the MCMCglmm models over the 100 phylogenies.

```
library(phytools)
library(MCMCglmm)
library(mulTree)

source("Demography_functions.R")
```

Next we upload the datafile which has the life history metrics calculated from the previous Pop_metric_calulation script.

```
pop_data <- read.csv("axis_analysis_data.csv",
                          sep = ",", header = T)
```

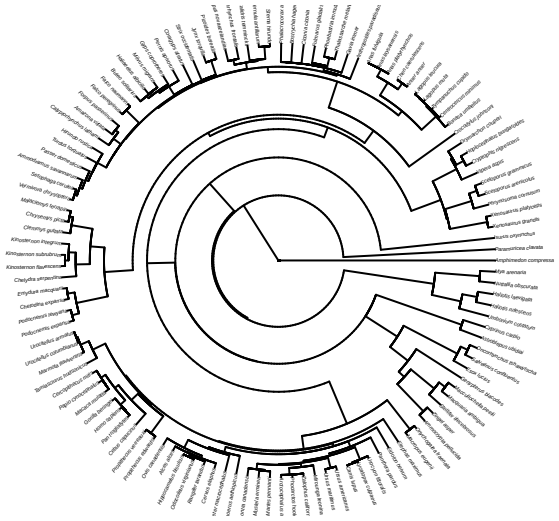
Next we upload the matching distribution of phylogenies calculated from the previous Phylogeny_construction and Pop_metric_calulation scripts. We do a quick ultrametric check and then plot out our tree.

```
axis_trees <- read.tree("axis_analysis_phylo.tre")


#check if ultrametric
is_ultra <- vector()
for(i in 1:100) {
  is_ultra[i] <- is.ultrametric(axis_trees[[i]])
  }
ultra_row <- which(is_ultra ==TRUE)

axis_trees <- axis_trees[ultra_row]

plot(axis_trees[[1]], cex = 0.2, type = "fan")
```



We then apply a log10 transform to each of the life histroy metrics.

```
log_list <- c("life_time_La",
              "mean_repo_rate_stable_state",
              "mean_repo_rate",
              "gen_time",
              "M_rep_lif_exp",
              "mass_g",
              "matrix_size")

pop_data_log <- pop_data

pop_data_log[,log_list] <- sapply(pop_data[,log_list], function(x) log10(x))
```

And mean center the data

```
mean_c_list  <- c( "life_time_La",
                   "mean_repo_rate",
                   "gen_time",
                   "M_rep_lif_exp",
                   "matrix_size",
                   "gini",
                   "mean_repo_rate_stable_state",
                   "mxlxsd",
                   "surv_sd",
                   "mass_g")

pop_data_log_mc <- pop_data_log
pop_data_log_mc[,mean_c_list] <- sapply(pop_data_log[,mean_c_list], function(x) mean_center(x))
```

MCMCglmm

First we make a multree object that holds both the data and the multiphylo object. We also specify the random terms which in this case are the animal term for the phylogentic random effect and species for withn speices population level variation.

```
pop_multree <- as.mulTree(data = pop_data_log_mc, tree = axis_trees, taxa = "animal", rand.terms = ~ani
```

Now now also set a prior

```
prior<-list(R = list(V = 1/2, nu=0.002),
            G = list(G1=list(V = 1/2,n = 1, alpha.mu=rep(0,1), alpha.V= diag(1)*10^3),
                     G1=list(V = 1/2,n = 1, alpha.mu=rep(0,1), alpha.V= diag(1)*10^3)))
```

We then set the number of iterations, thinning and the burnin to 1100000, 500 and 100000 as these have previously been found to give outputs where the chains converge and where the effective sample size is more then 1000. These criterion are automatcally checked as MulTree runs each model and are stored in the files ending _conv.rda

For the of running this script we run a dummy veresion with much lower parameters. For the full run use thr parameters above.

```
#parameters <- c(1100000, 500, 100000)
parameters <- c(2200, 1, 200)
```

Now we run each sets of models. The effective sample size (ESS) is set to 1000 and the number of chains to 2. This applies to each phylogeny so there will be 200 chains for each metric per run.

Age at first reproduction

```
formula_la <- life_time_La ~ mass_g + matrix_size

mulTree(mulTree.data = pop_multree,
        formula = formula_la,
        priors = prior,
        parameters = parameters,
        output = "la_run",
        ESS = 1000,
        chains = 2)
```

```
## Output chain name "la_run" already exists!
## Press [enter] if you wish to overwrite the models or [esc] to cancel.
```

```
## Models will be overwritten...
```

```
##
## 2019-05-27 - 16:08:28: MCMCglmm performed on tree 1
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2272.111; 2000; 1760.466; 121.1077; 54.9341; 1118.696; 2212.049; 2000; 2000; 83.08013; 21.11167; 102
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.001684; 1.089257; 0.999658; 1.005024; 1.318294; 0.999721
## Individual models saved as: la_run-tree1_chain*.rda
## Convergence diagnosis saved as: la_run-tree1_conv.rda
##
## 2019-05-27 - 16:08:29: MCMCglmm performed on tree 2
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 2000; 100.531; 45.10347; 1070.446; 2000; 1869.093; 1547.024; 95.73137; 42.6426; 1084.599
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: FALSE
## 1.063319; 1.086601; 0.99952; 1.235586; 1.335342; 0.9995245
## Individual models saved as: la_run-tree2_chain*.rda
## Convergence diagnosis saved as: la_run-tree2_conv.rda
##
## 2019-05-27 - 16:08:30: MCMCglmm performed on tree 3
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 717.4797; 1595.469; 62.15845; 31.31524; 1118.592; 1798.807; 2000; 1794.446; 95.52867; 77.87069
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.065702; 1.056808; 1.001898; 1.220171; 1.093805; 1.010171
## Individual models saved as: la_run-tree3_chain*.rda
## Convergence diagnosis saved as: la_run-tree3_conv.rda
##
## 2019-05-27 - 16:08:31: MCMCglmm performed on tree 4
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1032.472; 2000; 52.03752; 19.25564; 1129.534; 2000; 1362.959; 1593.653; 81.05783; 34.54233; 103
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.237311; 1.693604; 0.9995818; 1.783771; 3.456615; 0.9998904
## Individual models saved as: la_run-tree4_chain*.rda
## Convergence diagnosis saved as: la_run-tree4_conv.rda
##
## 2019-05-27 - 16:08:31: MCMCglmm performed on tree 5
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1634.104; 2000; 1720.085; 80.42561; 33.83631; 1057.329; 2233.956; 2000; 1819.611; 86.89356; 50.16607
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.026284; 1.186163; 1.001724; 1.032222; 1.659825; 1.00991
## Individual models saved as: la_run-tree5_chain*.rda
## Convergence diagnosis saved as: la_run-tree5_conv.rda
##
## 2019-05-27 - 16:08:32: MCMCglmm performed on tree 6
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1926.441; 2000; 1537.577; 57.75398; 41.04586; 967.7631; 2000; 889.5354; 2000; 42.64292; 29.15821; 111
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.229828; 1.464666; 1.000603; 1.768713; 2.642048; 1.003672
## Individual models saved as: la_run-tree6_chain*.rda
## Convergence diagnosis saved as: la_run-tree6_conv.rda
##
## 2019-05-27 - 16:08:33: MCMCglmm performed on tree 7
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1874.49; 2000; 1438.862; 112.1793; 55.47909; 1120.389; 2176.56; 2000; 2000; 55.10191; 52.77591; 1136
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.010423; 1.016573; 1.000289; 1.010514; 1.076954; 1.001871
## Individual models saved as: la_run-tree7_chain*.rda
## Convergence diagnosis saved as: la_run-tree7_conv.rda
```

```
##
## 2019-05-27 - 16:08:34: MCMCglmm performed on tree 8
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1871.689; 1857.395; 71.00943; 34.58707; 1262.731; 2000; 2000; 1287.848; 83.4027; 28.69953; 105
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.019485; 1.159608; 1.000352; 1.089897; 1.561861; 1.000402
## Individual models saved as: la_run-tree8_chain*.rda
## Convergence diagnosis saved as: la_run-tree8_conv.rda
##
## 2019-05-27 - 16:08:35: MCMCglmm performed on tree 9
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1712.29; 1687.101; 1768.009; 83.55666; 32.1688; 934.711; 2000; 2000; 2000; 89.14049; 42.32845; 1092.8
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.070949; 1.249109; 1.000381; 1.277884; 1.987466; 1.003907
## Individual models saved as: la_run-tree9_chain*.rda
## Convergence diagnosis saved as: la_run-tree9_conv.rda
##
## 2019-05-27 - 16:08:35: MCMCglmm performed on tree 10
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1835.1; 116.6302; 41.09805; 968.44; 2164.26; 1761.827; 1248.894; 56.37348; 32.80632; 109
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.011653; 1.223217; 1.00545; 1.013846; 1.846032; 1.025869
## Individual models saved as: la_run-tree10_chain*.rda
## Convergence diagnosis saved as: la_run-tree10_conv.rda
##
## 2019-05-27 - 16:08:36: MCMCglmm performed on tree 11
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1758.345; 809.4083; 1470.93; 68.24334; 35.33688; 925.4269; 2000; 2000; 1612.861; 82.64143; 93.63107;
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.038797; 1.014061; 1.000468; 1.161358; 1.043842; 1.00176
## Individual models saved as: la_run-tree11_chain*.rda
## Convergence diagnosis saved as: la_run-tree11_conv.rda
##
## 2019-05-27 - 16:08:37: MCMCglmm performed on tree 12
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1872.412; 1711.105; 85.32739; 86.62211; 1063.09; 2000; 2000; 1612.259; 87.85128; 35.59449; 100
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.006125; 1.143475; 1.00582; 1.006182; 1.511599; 1.028436
## Individual models saved as: la_run-tree12_chain*.rda
## Convergence diagnosis saved as: la_run-tree12_conv.rda
##
## 2019-05-27 - 16:08:38: MCMCglmm performed on tree 13
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 1845.28; 2000; 1676.349; 101.2492; 29.84185; 955.2099; 2000; 1800.951; 1173.534; 73.78735; 20.81041;
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.391654; 1.533297; 0.9999126; 2.205696; 3.289421; 1.001524
## Individual models saved as: la_run-tree13_chain*.rda
## Convergence diagnosis saved as: la_run-tree13_conv.rda
##
## 2019-05-27 - 16:08:38: MCMCglmm performed on tree 14
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1432.675; 1637.372; 65.56599; 31.37037; 1038.353; 1845.619; 1757.855; 1602.295; 72.26772; 21.7
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.020485; 1.026835; 0.9999832; 1.089812; 1.10663; 1.001788
## Individual models saved as: la_run-tree14_chain*.rda
## Convergence diagnosis saved as: la_run-tree14_conv.rda
##
## 2019-05-27 - 16:08:39: MCMCglmm performed on tree 15
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1843.271; 1511.457; 111.909; 61.62837; 995.9769; 2000; 2108.941; 2000; 98.64834; 40.30055; 1058
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.029967; 1.006093; 1.002578; 1.040027; 1.007416; 1.014614
## Individual models saved as: la_run-tree15_chain*.rda
## Convergence diagnosis saved as: la_run-tree15_conv.rda
##
## 2019-05-27 - 16:08:40: MCMCglmm performed on tree 16
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1674.367; 71.20229; 29.15894; 1085.245; 1872.936; 2000; 1623.634; 89.73002; 24.62047; 107
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.04782; 1.181338; 1.000306; 1.049468; 1.591752; 1.001068
## Individual models saved as: la_run-tree16_chain*.rda
## Convergence diagnosis saved as: la_run-tree16_conv.rda
##
## 2019-05-27 - 16:08:41: MCMCglmm performed on tree 17
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1869.365; 814.0636; 1819.334; 54.25113; 14.61574; 1129.98; 2000; 497.6641; 1509.521; 55.48596; 13.568
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.008768; 1.049965; 1.006416; 1.040242; 1.059607; 1.027439
## Individual models saved as: la_run-tree17_chain*.rda
## Convergence diagnosis saved as: la_run-tree17_conv.rda
##
## 2019-05-27 - 16:08:42: MCMCglmm performed on tree 18
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 2000; 69.95311; 57.32732; 1162.26; 2234.386; 1218.34; 1757.492; 61.25297; 67.53329; 1035
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.024943; 1.243827; 0.9997185; 1.057313; 1.800884; 1.000581
```

```
## Individual models saved as: la_run-tree18_chain*.rda
## Convergence diagnosis saved as: la_run-tree18_conv.rda
##
## 2019-05-27 - 16:08:42: MCMCglmm performed on tree 19
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2551.648; 1902.532; 1701.522; 82.85725; 60.77138; 1045.291; 2000; 1603.41; 1841.173; 90.8887; 34.698
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.122984; 1.611935; 1.000604; 1.449017; 3.635338; 1.001207
## Individual models saved as: la_run-tree19_chain*.rda
## Convergence diagnosis saved as: la_run-tree19_conv.rda
##
## 2019-05-27 - 16:08:43: MCMCglmm performed on tree 20
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2187.461; 1807.889; 128.5494; 72.15105; 1129.562; 2000; 973.5217; 1842.734; 60.57266; 26.18428
## C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.302287; 1.670801; 0.9999383; 1.987195; 6.167174; 1.001577
## Individual models saved as: la_run-tree20_chain*.rda
## Convergence diagnosis saved as: la_run-tree20_conv.rda
##
## 2019-05-27 - 16:08:44: MCMCglmm performed on tree 21
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1607.631; 2000; 101.1009; 23.6729; 1137.608; 2000; 1690.897; 1351.585; 44.62862; 81.66419; 112
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.103094; 1.581754; 1.000477; 1.388239; 2.942454; 1.002745
## Individual models saved as: la_run-tree21_chain*.rda
## Convergence diagnosis saved as: la_run-tree21_conv.rda
##
## 2019-05-27 - 16:08:45: MCMCglmm performed on tree 22
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1893.887; 1835.676; 2010.071; 89.25742; 41.96515; 1091.961; 2669.859; 2000; 1834.713; 57.7851; 63.404
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.627823; 2.467345; 1.002776; 2.81704; 8.053833; 1.006908
## Individual models saved as: la_run-tree22_chain*.rda
## Convergence diagnosis saved as: la_run-tree22_conv.rda
##
## 2019-05-27 - 16:08:46: MCMCglmm performed on tree 23
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1556.695; 89.58425; 74.29795; 1048.822; 1989.814; 1817.491; 1825.314; 43.69798; 22.33464
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.000962; 1.066844; 1.006462; 1.001241; 1.187936; 1.032513
## Individual models saved as: la_run-tree23_chain*.rda
## Convergence diagnosis saved as: la_run-tree23_conv.rda
##
## 2019-05-27 - 16:08:47: MCMCglmm performed on tree 24
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2093.959; 2000; 1838.906; 46.15251; 39.58505; 1111.45; 2000; 1514.394; 2000; 74.37552; 20.07414; 105
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.060207; 1.275613; 1.005818; 1.246558; 1.965553; 1.027013
## Individual models saved as: la_run-tree24_chain*.rda
## Convergence diagnosis saved as: la_run-tree24_conv.rda
##
## 2019-05-27 - 16:08:48: MCMCglmm performed on tree 25
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 296.6832; 2000; 73.85521; 12.92743; 1011.881; 1786.263; 2000; 1406.893; 77.32195; 22.75445; 10
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.099721; 1.688971; 1.001541; 1.320868; 4.740341; 1.004413
## Individual models saved as: la_run-tree25_chain*.rda
## Convergence diagnosis saved as: la_run-tree25_conv.rda
##
## 2019-05-27 - 16:08:49: MCMCglmm performed on tree 26
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1867.5; 1712.472; 109.4798; 79.08979; 1127.177; 2000; 2000; 2000; 73.34365; 125.9632; 1169.033
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.056918; 1.550432; 1.006236; 1.234095; 2.990071; 1.032147
## Individual models saved as: la_run-tree26_chain*.rda
## Convergence diagnosis saved as: la_run-tree26_conv.rda
##
## 2019-05-27 - 16:08:49: MCMCglmm performed on tree 27
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2150.708; 2000; 1698.187; 100.2526; 104.1208; 894.5314; 2000; 1865.379; 2000; 67.54238; 30.86344; 104
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.076087; 1.136766; 1.007351; 1.296531; 1.49088; 1.03741
## Individual models saved as: la_run-tree27_chain*.rda
## Convergence diagnosis saved as: la_run-tree27_conv.rda
##
## 2019-05-27 - 16:08:50: MCMCglmm performed on tree 28
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1853.936; 64.92236; 65.1281; 974.1295; 2886.741; 1848.214; 1754.985; 49.87212; 85.94605;
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.340358; 1.896742; 0.9998765; 2.054825; 4.428546; 1.001272
## Individual models saved as: la_run-tree28_chain*.rda
## Convergence diagnosis saved as: la_run-tree28_conv.rda
##
## 2019-05-27 - 16:08:51: MCMCglmm performed on tree 29
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1988.524; 1742.37; 1859.635; 72.17548; 55.30899; 1094.746; 2000; 2000; 2000; 83.19092; 49.73657; 116
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: FALSE
## 1.010368; 1.059395; 1.003574; 1.011237; 1.146286; 1.017514
## Individual models saved as: la_run-tree29_chain*.rda
## Convergence diagnosis saved as: la_run-tree29_conv.rda
##
## 2019-05-27 - 16:08:52: MCMCglmm performed on tree 30
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1873.967; 2000; 1802.138; 63.19341; 33.02718; 1010.436; 2716.197; 659.9956; 1803.123; 100.3618; 39.8
## C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.143055; 1.350664; 0.999859; 1.50878; 2.340502; 0.9998856
## Individual models saved as: la_run-tree30_chain*.rda
## Convergence diagnosis saved as: la_run-tree30_conv.rda
##
## 2019-05-27 - 16:08:53: MCMCglmm performed on tree 31
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1870.622; 2000; 66.82206; 21.73995; 1231.188; 2000; 1236.353; 1738.311; 80.30361; 99.79213; 94
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.006849; 1.047664; 0.9995365; 1.016795; 1.201381; 0.9996736
## Individual models saved as: la_run-tree31_chain*.rda
## Convergence diagnosis saved as: la_run-tree31_conv.rda
##
## 2019-05-27 - 16:08:54: MCMCglmm performed on tree 32
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1615.059; 1750.469; 56.02005; 22.12437; 965.9283; 2315.631; 1046.13; 1536.44; 95.86126; 52.938
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.020986; 1.060316; 1.000899; 1.027856; 1.203752; 1.006387
## Individual models saved as: la_run-tree32_chain*.rda
## Convergence diagnosis saved as: la_run-tree32_conv.rda
##
## 2019-05-27 - 16:08:54: MCMCglmm performed on tree 33
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2110.532; 2222.513; 1826.468; 124.8918; 62.31971; 1176.647; 2000; 2000; 1740.515; 140.1629; 41.22834
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.039256; 1.14758; 1.004165; 1.14347; 1.521738; 1.00956
## Individual models saved as: la_run-tree33_chain*.rda
## Convergence diagnosis saved as: la_run-tree33_conv.rda
##
## 2019-05-27 - 16:08:55: MCMCglmm performed on tree 34
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1478.842; 1698.848; 110.7192; 55.95125; 1083.629; 2000; 2000; 1719.259; 106.0474; 38.88012; 96
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: TRUE
## 1.005404; 1.011396; 1.005968; 1.013393; 1.032486; 1.007699
## Individual models saved as: la_run-tree34_chain*.rda
## Convergence diagnosis saved as: la_run-tree34_conv.rda
```

```
##
## 2019-05-27 - 16:08:56: MCMCglmm performed on tree 35
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1993.77; 2000; 1678.192; 59.33271; 10.63481; 879.2394; 2000; 2196.618; 2000; 109.2077; 58.50468; 982
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.016005; 1.112388; 1.001205; 1.047824; 1.347384; 1.006815
## Individual models saved as: la_run-tree35_chain*.rda
## Convergence diagnosis saved as: la_run-tree35_conv.rda
##
## 2019-05-27 - 16:08:57: MCMCglmm performed on tree 36
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1794.86; 67.888; 73.37884; 1093.408; 2000; 2000; 1699.171; 87.75014; 60.73059; 1126.498
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.055973; 1.072754; 0.9995023; 1.230784; 1.271936; 0.9995049
## Individual models saved as: la_run-tree36_chain*.rda
## Convergence diagnosis saved as: la_run-tree36_conv.rda
##
## 2019-05-27 - 16:08:58: MCMCglmm performed on tree 37
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1257.443; 80.61454; 20.65961; 1218.095; 2000; 1499.304; 2000; 72.36159; 21.10805; 1086.33
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.051989; 1.02667; 1.000584; 1.063383; 1.042223; 1.00247
## Individual models saved as: la_run-tree37_chain*.rda
## Convergence diagnosis saved as: la_run-tree37_conv.rda
##
## 2019-05-27 - 16:08:59: MCMCglmm performed on tree 38
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1391.669; 58.73895; 33.56832; 1171.491; 2000; 2000; 1613; 95.52864; 24.43579; 1092.945
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.048714; 1.119829; 1.002458; 1.204663; 1.380934; 1.011198
## Individual models saved as: la_run-tree38_chain*.rda
## Convergence diagnosis saved as: la_run-tree38_conv.rda
##
## 2019-05-27 - 16:09:00: MCMCglmm performed on tree 39
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2169.926; 2000; 1760.502; 121.2149; 78.06678; 1074.551; 2000; 1867.061; 1824.006; 103.1906; 62.03473
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.012318; 1.009787; 1.000689; 1.052374; 1.033364; 1.000998
## Individual models saved as: la_run-tree39_chain*.rda
## Convergence diagnosis saved as: la_run-tree39_conv.rda
##
## 2019-05-27 - 16:09:01: MCMCglmm performed on tree 40
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2587.787; 2151.76; 1522.8; 129.276; 59.86859; 1099.365; 2149.747; 2000; 2000; 75.86869; 27.9084; 117
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.019308; 1.094197; 1.003436; 1.021344; 1.337372; 1.010767
## Individual models saved as: la_run-tree40_chain*.rda
## Convergence diagnosis saved as: la_run-tree40_conv.rda
##
## 2019-05-27 - 16:09:01: MCMCglmm performed on tree 41
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2097.991; 1743.699; 1651.376; 116.7967; 40.94537; 1120.152; 1980.777; 1851.029; 1461.14; 76.53228; 3
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.266258; 1.824037; 1.000419; 1.870915; 4.561858; 1.003999
## Individual models saved as: la_run-tree41_chain*.rda
## Convergence diagnosis saved as: la_run-tree41_conv.rda
##
## 2019-05-27 - 16:09:02: MCMCglmm performed on tree 42
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1741.079; 2000; 1259.742; 58.58541; 35.09425; 967.4422; 1762.946; 1744.568; 2000; 101.1473; 89.33232
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.005523; 1.040249; 1.005801; 1.005528; 1.082054; 1.018837
## Individual models saved as: la_run-tree42_chain*.rda
## Convergence diagnosis saved as: la_run-tree42_conv.rda
##
## 2019-05-27 - 16:09:03: MCMCglmm performed on tree 43
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1810.853; 1604.153; 1646.093; 47.8111; 25.54899; 1116.171; 2000; 2000; 1223.931; 88.06249; 38.51847;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.129585; 1.287849; 0.9997597; 1.467562; 2.206368; 1.000765
## Individual models saved as: la_run-tree43_chain*.rda
## Convergence diagnosis saved as: la_run-tree43_conv.rda
##
## 2019-05-27 - 16:09:04: MCMCglmm performed on tree 44
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2134.354; 1810.771; 98.17687; 57.16927; 1024.411; 2143.202; 1799.408; 1628.286; 92.63281; 107.
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.125126; 1.61916; 1.001661; 1.455689; 3.064602; 1.008095
## Individual models saved as: la_run-tree44_chain*.rda
## Convergence diagnosis saved as: la_run-tree44_conv.rda
##
## 2019-05-27 - 16:09:05: MCMCglmm performed on tree 45
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1977.166; 1626.826; 80.05181; 49.83097; 1244.182; 2000; 1740.934; 1750.527; 73.84444; 70.75222
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.064519; 1.84727; 1.004587; 1.230469; 4.272746; 1.022948
```

```
## Individual models saved as: la_run-tree45_chain*.rda
## Convergence diagnosis saved as: la_run-tree45_conv.rda
##
## 2019-05-27 - 16:09:05: MCMCglmm performed on tree 46
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2312.056; 1490.388; 1687.318; 68.10864; 39.21026; 913.8068; 2000; 2076.789; 2000; 98.20338; 35.14911
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.023254; 1.110759; 1.007443; 1.063237; 1.411875; 1.023345
## Individual models saved as: la_run-tree46_chain*.rda
## Convergence diagnosis saved as: la_run-tree46_conv.rda
##
## 2019-05-27 - 16:09:06: MCMCglmm performed on tree 47
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2312.516; 975.5631; 2005.031; 62.64913; 30.74019; 1031.592; 2000; 2000; 1651.603; 85.9355; 123.004;
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.00388; 1.000453; 0.9997985; 1.020266; 1.00307; 1.00019
## Individual models saved as: la_run-tree47_chain*.rda
## Convergence diagnosis saved as: la_run-tree47_conv.rda
##
## 2019-05-27 - 16:09:07: MCMCglmm performed on tree 48
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1685.076; 96.83745; 26.76732; 1143.498; 2136.722; 1117.763; 2000; 84.62356; 8.659149; 11
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.096661; 1.272753; 1.000251; 1.361763; 1.976183; 1.002995
## Individual models saved as: la_run-tree48_chain*.rda
## Convergence diagnosis saved as: la_run-tree48_conv.rda
##
## 2019-05-27 - 16:09:08: MCMCglmm performed on tree 49
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1781.462; 96.38812; 57.18682; 1188.627; 1608.909; 1153.128; 1651.836; 73.97788; 44.84632
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.006263; 1.082045; 1.000821; 1.027532; 1.31926; 1.005714
## Individual models saved as: la_run-tree49_chain*.rda
## Convergence diagnosis saved as: la_run-tree49_conv.rda
##
## 2019-05-27 - 16:09:09: MCMCglmm performed on tree 50
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2168.018; 1668.217; 2000; 68.29045; 32.70889; 1157.464; 2000; 1018.092; 1749.483; 70.6047; 26.41922;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.083565; 1.272996; 1.004245; 1.286684; 2.155748; 1.016596
## Individual models saved as: la_run-tree50_chain*.rda
## Convergence diagnosis saved as: la_run-tree50_conv.rda
##
## 2019-05-27 - 16:09:10: MCMCglmm performed on tree 51
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2987.471; 1399.685; 1565.989; 53.81943; 9.530101; 1061.371; 1961.718; 2000; 1841.757; 85.10033; 49.6
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.040628; 1.025712; 1.000372; 1.096106; 1.032115; 1.003766
## Individual models saved as: la_run-tree51_chain*.rda
## Convergence diagnosis saved as: la_run-tree51_conv.rda
##
## 2019-05-27 - 16:09:10: MCMCglmm performed on tree 52
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1817.054; 2000; 1830.305; 84.59017; 46.14636; 1010.026; 2000; 2000; 1606.252; 89.28321; 57.08827; 11
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 0.999639; 1.003016; 1.006578; 0.9999488; 1.005812; 1.025999
## Individual models saved as: la_run-tree52_chain*.rda
## Convergence diagnosis saved as: la_run-tree52_conv.rda
##
## 2019-05-27 - 16:09:11: MCMCglmm performed on tree 53
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 726.4296; 2000; 64.40265; 57.04446; 1037.514; 1847.398; 1147.572; 1820.97; 83.34848; 46.98767;
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.069253; 1.326382; 1.003194; 1.245137; 2.338056; 1.007639
## Individual models saved as: la_run-tree53_chain*.rda
## Convergence diagnosis saved as: la_run-tree53_conv.rda
##
## 2019-05-27 - 16:09:12: MCMCglmm performed on tree 54
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1628.744; 81.72066; 30.8976; 1061.427; 2000; 2000; 1764.371; 75.81238; 69.38304; 1124.42
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.014487; 1.122609; 1.000311; 1.064831; 1.417514; 1.000811
## Individual models saved as: la_run-tree54_chain*.rda
## Convergence diagnosis saved as: la_run-tree54_conv.rda
##
## 2019-05-27 - 16:09:13: MCMCglmm performed on tree 55
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1754.798; 90.77415; 27.80891; 1053.007; 2357.662; 2000; 1207.26; 78.21724; 48.52499; 974
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.002271; 1.028787; 1.002764; 1.010618; 1.124933; 1.007528
## Individual models saved as: la_run-tree55_chain*.rda
## Convergence diagnosis saved as: la_run-tree55_conv.rda
##
## 2019-05-27 - 16:09:13: MCMCglmm performed on tree 56
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 2000; 95.02566; 54.83251; 1065.997; 2147.689; 1773.066; 2000; 84.86769; 59.77171; 1057.9
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: TRUE
## 1.001125; 1.023408; 1.000964; 1.006048; 1.052932; 1.002581
## Individual models saved as: la_run-tree56_chain*.rda
## Convergence diagnosis saved as: la_run-tree56_conv.rda
##
## 2019-05-27 - 16:09:14: MCMCglmm performed on tree 57
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1834.517; 1543.541; 1425.617; 62.8186; 61.37455; 1103.179; 2000; 2000; 1847.265; 92.80289; 31.5485;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.024513; 1.397777; 0.9996871; 1.063189; 2.706165; 0.9996875
## Individual models saved as: la_run-tree57_chain*.rda
## Convergence diagnosis saved as: la_run-tree57_conv.rda
##
## 2019-05-27 - 16:09:15: MCMCglmm performed on tree 58
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1836.835; 2000; 2000; 105.1359; 27.74021; 1001.622; 2000; 1848.691; 1863.414; 97.0467; 90.51437; 114
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.126932; 1.051479; 1.00125; 1.461424; 1.212613; 1.005984
## Individual models saved as: la_run-tree58_chain*.rda
## Convergence diagnosis saved as: la_run-tree58_conv.rda
##
## 2019-05-27 - 16:09:16: MCMCglmm performed on tree 59
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1596.402; 79.11361; 25.13653; 1180.556; 2000; 2270.582; 2000; 71.48795; 84.83245; 1283.6
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.046217; 1.031105; 1.00222; 1.165364; 1.112549; 1.002354
## Individual models saved as: la_run-tree59_chain*.rda
## Convergence diagnosis saved as: la_run-tree59_conv.rda
##
## 2019-05-27 - 16:09:16: MCMCglmm performed on tree 60
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2357.165; 1625.18; 2000; 67.72416; 23.34251; 1079.128; 2000; 2000; 2000; 69.52674; 30.66558; 1165.90
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.003957; 1.05974; 1.00157; 1.006742; 1.226934; 1.009392
## Individual models saved as: la_run-tree60_chain*.rda
## Convergence diagnosis saved as: la_run-tree60_conv.rda
##
## 2019-05-27 - 16:09:17: MCMCglmm performed on tree 61
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2247.557; 1654.679; 89.8538; 65.52416; 1133.246; 1866.809; 1606.636; 1771.406; 38.92636; 9.633
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.131825; 1.275889; 0.9999491; 1.475051; 1.980479; 1.000438
## Individual models saved as: la_run-tree61_chain*.rda
## Convergence diagnosis saved as: la_run-tree61_conv.rda
```

```
##
## 2019-05-27 - 16:09:18: MCMCglmm performed on tree 62
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1755.135; 1952.11; 1275.912; 89.03213; 56.49235; 1033.531; 2137.757; 2000; 1641.096; 56.19179; 80.019
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.161333; 1.080411; 0.9996851; 1.569105; 1.312499; 0.9998613
## Individual models saved as: la_run-tree62_chain*.rda
## Convergence diagnosis saved as: la_run-tree62_conv.rda
##
## 2019-05-27 - 16:09:19: MCMCglmm performed on tree 63
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2175.175; 2000; 1355.824; 82.20599; 30.71081; 1226.295; 2317.266; 1525.761; 1768.178; 83.14855; 59.23
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.020259; 1.010134; 1.000478; 1.085195; 1.041432; 1.002104
## Individual models saved as: la_run-tree63_chain*.rda
## Convergence diagnosis saved as: la_run-tree63_conv.rda
##
## 2019-05-27 - 16:09:20: MCMCglmm performed on tree 64
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 2000; 71.55887; 24.96699; 1049.562; 2000; 2000; 1733.613; 63.49541; 78.65966; 1163.819
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.274487; 1.614755; 1.00424; 1.8862; 3.790672; 1.016256
## Individual models saved as: la_run-tree64_chain*.rda
## Convergence diagnosis saved as: la_run-tree64_conv.rda
##
## 2019-05-27 - 16:09:20: MCMCglmm performed on tree 65
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2244.736; 1688.604; 2274.521; 55.99801; 38.61104; 886.8957; 2000; 2000; 1741.462; 75.39063; 70.48254
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.023215; 1.001658; 1.006622; 1.064232; 1.007636; 1.027763
## Individual models saved as: la_run-tree65_chain*.rda
## Convergence diagnosis saved as: la_run-tree65_conv.rda
##
## 2019-05-27 - 16:09:21: MCMCglmm performed on tree 66
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1233.148; 1713.799; 2000; 70.85968; 20.96859; 1228.926; 1994.931; 1586.511; 1843.125; 68.07146; 18.35
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.001274; 1.014069; 1.006072; 1.004744; 1.027078; 1.027468
## Individual models saved as: la_run-tree66_chain*.rda
## Convergence diagnosis saved as: la_run-tree66_conv.rda
##
## 2019-05-27 - 16:09:22: MCMCglmm performed on tree 67
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2067.602; 1829.992; 1814.051; 69.082; 37.003; 1102.289; 2000; 1872.404; 2000; 70.68499; 11.19539; 105
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.503136; 2.013211; 0.9999526; 2.72631; 4.576781; 0.999979
## Individual models saved as: la_run-tree67_chain*.rda
## Convergence diagnosis saved as: la_run-tree67_conv.rda
##
## 2019-05-27 - 16:09:23: MCMCglmm performed on tree 68
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2075.369; 2020.849; 1535.832; 97.68569; 18.07766; 1102.439; 1931.634; 1813.674; 1655.827; 86.28308; 8
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.028686; 1.357114; 0.9996638; 1.129146; 2.263704; 0.9997054
## Individual models saved as: la_run-tree68_chain*.rda
## Convergence diagnosis saved as: la_run-tree68_conv.rda
##
## 2019-05-27 - 16:09:23: MCMCglmm performed on tree 69
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1774.814; 2000; 82.24293; 14.94228; 1103.799; 2000; 1469.45; 2000; 75.91208; 64.49407; 1107.461
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.000344; 1.069567; 1.004798; 1.003063; 1.234097; 1.025344
## Individual models saved as: la_run-tree69_chain*.rda
## Convergence diagnosis saved as: la_run-tree69_conv.rda
##
## 2019-05-27 - 16:09:24: MCMCglmm performed on tree 70
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2093.175; 944.1611; 1808.163; 33.27205; 18.41405; 1125.44; 2000; 2000; 2000; 62.03772; 58.05053; 1057
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.024893; 1.168927; 1.00291; 1.071642; 1.587375; 1.011762
## Individual models saved as: la_run-tree70_chain*.rda
## Convergence diagnosis saved as: la_run-tree70_conv.rda
##
## 2019-05-27 - 16:09:25: MCMCglmm performed on tree 71
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1714.137; 1867.226; 105.5118; 34.06627; 1030.991; 2000; 1305.452; 1458.003; 108.924; 48.20113;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.029326; 1.074323; 0.9995377; 1.10932; 1.262139; 0.9995454
## Individual models saved as: la_run-tree71_chain*.rda
## Convergence diagnosis saved as: la_run-tree71_conv.rda
##
## 2019-05-27 - 16:09:26: MCMCglmm performed on tree 72
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1981.128; 82.39888; 42.76985; 1013.494; 2000; 2000; 2000; 101.1398; 65.40168; 1086.485
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.019573; 1.049555; 1.000402; 1.089711; 1.132293; 1.002578
```

```
## Individual models saved as: la_run-tree72_chain*.rda
## Convergence diagnosis saved as: la_run-tree72_conv.rda
##
## 2019-05-27 - 16:09:26: MCMCglmm performed on tree 73
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2167.433; 2000; 2000; 73.25906; 60.41457; 954.3735; 2000; 2000; 2000; 117.1482; 40.90475; 1055.035
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.024029; 1.177639; 1.001023; 1.044574; 1.622816; 1.006505
## Individual models saved as: la_run-tree73_chain*.rda
## Convergence diagnosis saved as: la_run-tree73_conv.rda
##
## 2019-05-27 - 16:09:27: MCMCglmm performed on tree 74
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2312.088; 1527.563; 2000; 61.43488; 28.99735; 1074.899; 2008.756; 696.545; 1346.542; 61.4206; 18.447
## C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.081854; 1.264865; 1.000231; 1.318008; 2.110346; 1.003022
## Individual models saved as: la_run-tree74_chain*.rda
## Convergence diagnosis saved as: la_run-tree74_conv.rda
##
## 2019-05-27 - 16:09:28: MCMCglmm performed on tree 75
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1009.987; 1582.979; 81.05498; 60.26989; 1096.514; 2000; 925.2757; 1578.174; 58.54017; 48.38245
## C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.090317; 1.018076; 1.003022; 1.28579; 1.073205; 1.016151
## Individual models saved as: la_run-tree75_chain*.rda
## Convergence diagnosis saved as: la_run-tree75_conv.rda
##
## 2019-05-27 - 16:09:29: MCMCglmm performed on tree 76
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 611.7145; 1800.024; 45.16753; 45.29266; 841.1929; 2000; 2000; 2000; 100.8243; 49.18245; 1213.3
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 2.324847; 2.298989; 0.9999087; 4.546515; 8.937551; 1.001315
## Individual models saved as: la_run-tree76_chain*.rda
## Convergence diagnosis saved as: la_run-tree76_conv.rda
##
## 2019-05-27 - 16:09:30: MCMCglmm performed on tree 77
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1473.37; 89.98272; 43.35167; 1175.107; 2000; 2000; 1718.67; 101.8666; 66.56967; 1048.3
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.00198; 1.004468; 1.002551; 1.002845; 1.004907; 1.01159
## Individual models saved as: la_run-tree77_chain*.rda
## Convergence diagnosis saved as: la_run-tree77_conv.rda
##
## 2019-05-27 - 16:09:30: MCMCglmm performed on tree 78
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1818.574; 1410.823; 81.66383; 53.14425; 1071.062; 1922.859; 1149.494; 1738.993; 60.95529; 23.3
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.084247; 1.160265; 1.000554; 1.319535; 1.552182; 1.004071
## Individual models saved as: la_run-tree78_chain*.rda
## Convergence diagnosis saved as: la_run-tree78_conv.rda
##
## 2019-05-27 - 16:09:31: MCMCglmm performed on tree 79
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1751.531; 1850.417; 88.71463; 13.76436; 1133.192; 2000; 2000; 1796.583; 60.45586; 30.35172; 100
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.530776; 2.251205; 1.0016; 2.584756; 8.32393; 1.009524
## Individual models saved as: la_run-tree79_chain*.rda
## Convergence diagnosis saved as: la_run-tree79_conv.rda
##
## 2019-05-27 - 16:09:32: MCMCglmm performed on tree 80
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2139.871; 2000; 2000; 103.7404; 16.86655; 1031.793; 2000; 2134.349; 1525.632; 66.65066; 11.08078; 118
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.662269; 3.523669; 1.000244; 2.878081; 15.33693; 1.001316
## Individual models saved as: la_run-tree80_chain*.rda
## Convergence diagnosis saved as: la_run-tree80_conv.rda
##
## 2019-05-27 - 16:09:33: MCMCglmm performed on tree 81
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 2000; 108.9576; 45.96213; 1127.385; 2000; 2000; 1734.428; 67.81842; 21.12561; 1102.697
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.229317; 1.927294; 0.9997255; 1.755809; 6.204099; 1.000439
## Individual models saved as: la_run-tree81_chain*.rda
## Convergence diagnosis saved as: la_run-tree81_conv.rda
##
## 2019-05-27 - 16:09:33: MCMCglmm performed on tree 82
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1785.067; 118.9694; 34.48266; 1128.742; 2000; 2000; 1786.081; 56.53685; 38.55201; 1055.97
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.022647; 1.102292; 1.003593; 1.092309; 1.381484; 1.018501
## Individual models saved as: la_run-tree82_chain*.rda
## Convergence diagnosis saved as: la_run-tree82_conv.rda
##
## 2019-05-27 - 16:09:34: MCMCglmm performed on tree 83
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1377.832; 63.22803; 23.35655; 894.9976; 2158.925; 2000; 2000; 85.54459; 55.51918; 1020.80
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: TRUE
## 1.005716; 1.001106; 1.001881; 1.026462; 1.007119; 1.010558
## Individual models saved as: la_run-tree83_chain*.rda
## Convergence diagnosis saved as: la_run-tree83_conv.rda
##
## 2019-05-27 - 16:09:35: MCMCglmm performed on tree 84
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1106.427; 1509.611; 69.027; 28.54949; 1064.402; 2000; 1091.109; 1593.713; 76.0978; 31.86001; 1
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.037624; 1.025874; 1.007445; 1.121365; 1.079432; 1.027915
## Individual models saved as: la_run-tree84_chain*.rda
## Convergence diagnosis saved as: la_run-tree84_conv.rda
##
## 2019-05-27 - 16:09:36: MCMCglmm performed on tree 85
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1808.141; 104.1387; 60.68072; 1124.302; 2000; 2000; 1843.386; 74.5307; 54.28482; 1136.514
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.197565; 2.394059; 0.9999825; 1.680802; 8.838791; 1.001913
## Individual models saved as: la_run-tree85_chain*.rda
## Convergence diagnosis saved as: la_run-tree85_conv.rda
##
## 2019-05-27 - 16:09:36: MCMCglmm performed on tree 86
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1873.615; 1761.41; 56.14022; 123.5248; 1080.885; 2000; 1864.318; 1862.562; 77.09231; 45.51952;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.097427; 1.592968; 1.003089; 1.368712; 2.904867; 1.01688
## Individual models saved as: la_run-tree86_chain*.rda
## Convergence diagnosis saved as: la_run-tree86_conv.rda
##
## 2019-05-27 - 16:09:37: MCMCglmm performed on tree 87
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2164.69; 991.6071; 73.0315; 33.39239; 1036.806; 2000; 2000; 1571.724; 71.12494; 29.18549; 1043
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.066415; 1.748501; 1.00504; 1.26805; 4.258543; 1.00577
## Individual models saved as: la_run-tree87_chain*.rda
## Convergence diagnosis saved as: la_run-tree87_conv.rda
##
## 2019-05-27 - 16:09:38: MCMCglmm performed on tree 88
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2206.769; 1991.659; 2000; 77.32484; 55.64973; 1031.726; 2000; 1761.696; 2000; 44.35437; 60.90215; 10
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.002926; 1.019817; 1.000087; 1.013601; 1.029471; 1.002438
## Individual models saved as: la_run-tree88_chain*.rda
## Convergence diagnosis saved as: la_run-tree88_conv.rda
```

```
##
## 2019-05-27 - 16:09:39: MCMCglmm performed on tree 89
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1941.647; 2000; 98.49769; 36.47972; 1031.768; 2160.496; 2000; 1727.501; 77.46934; 77.32714; 114
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.13502; 1.05763; 1.002637; 1.473451; 1.23128; 1.008826
## Individual models saved as: la_run-tree89_chain*.rda
## Convergence diagnosis saved as: la_run-tree89_conv.rda
##
## 2019-05-27 - 16:09:39: MCMCglmm performed on tree 90
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1787.448; 99.43939; 23.13436; 1095.518; 2000; 2000; 2000; 85.23646; 82.25941; 1063.524
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.009616; 1.056495; 1.014633; 1.009633; 1.209768; 1.064164
## Individual models saved as: la_run-tree90_chain*.rda
## Convergence diagnosis saved as: la_run-tree90_conv.rda
##
## 2019-05-27 - 16:09:40: MCMCglmm performed on tree 91
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 2000; 74.76887; 45.59416; 916.8521; 2000; 1500.707; 1531.79; 43.1098; 19.85803; 1027.698
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.030933; 1.036603; 1.000054; 1.097874; 1.156323; 1.001945
## Individual models saved as: la_run-tree91_chain*.rda
## Convergence diagnosis saved as: la_run-tree91_conv.rda
##
## 2019-05-27 - 16:09:41: MCMCglmm performed on tree 92
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1954.799; 2000; 1742.782; 74.05941; 58.12287; 1072.814; 2000; 2000; 1818.355; 98.25523; 78.48039; 110
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.068619; 1.022435; 1.002727; 1.259072; 1.061351; 1.015446
## Individual models saved as: la_run-tree92_chain*.rda
## Convergence diagnosis saved as: la_run-tree92_conv.rda
##
## 2019-05-27 - 16:09:42: MCMCglmm performed on tree 93
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1724.187; 2000; 67.42776; 15.92625; 1045.012; 2028.19; 1822.752; 1442.554; 92.13078; 60.59777;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.063452; 1.045411; 0.9998545; 1.177907; 1.045414; 1.00083
## Individual models saved as: la_run-tree93_chain*.rda
## Convergence diagnosis saved as: la_run-tree93_conv.rda
##
## 2019-05-27 - 16:09:43: MCMCglmm performed on tree 94
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 1850.972; 1646.939; 96.48427; 21.4261; 972.5061; 2000; 2000; 1383.283; 60.68943; 29.51051; 1025
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.027101; 1.071601; 1.000347; 1.053447; 1.188578; 1.003732
## Individual models saved as: la_run-tree94_chain*.rda
## Convergence diagnosis saved as: la_run-tree94_conv.rda
##
## 2019-05-27 - 16:09:43: MCMCglmm performed on tree 95
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2136.095; 2000; 1591.596; 91.25963; 33.60991; 1013.693; 2160.856; 2000; 2000; 110.6592; 22.45028; 100
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.064752; 1.387905; 0.9997979; 1.262185; 2.478314; 0.9998295
## Individual models saved as: la_run-tree95_chain*.rda
## Convergence diagnosis saved as: la_run-tree95_conv.rda
##
## 2019-05-27 - 16:09:44: MCMCglmm performed on tree 96
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 2000; 72.44498; 67.65154; 1174.58; 1861.196; 1561.01; 1309.532; 91.30604; 41.16515; 1054
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.008935; 1.225509; 0.9999839; 1.042167; 1.833641; 1.000935
## Individual models saved as: la_run-tree96_chain*.rda
## Convergence diagnosis saved as: la_run-tree96_conv.rda
##
## 2019-05-27 - 16:09:45: MCMCglmm performed on tree 97
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1891.753; 1630.833; 92.47996; 31.74953; 1136.097; 2000; 2139.809; 2000; 100.0299; 54.92007; 110
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.023733; 1.07148; 1.000494; 1.106013; 1.18364; 1.000818
## Individual models saved as: la_run-tree97_chain*.rda
## Convergence diagnosis saved as: la_run-tree97_conv.rda
##
## 2019-05-27 - 16:09:46: MCMCglmm performed on tree 98
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1140.614; 1620.789; 56.22518; 38.14557; 1089.852; 2000; 2037.178; 1665.658; 105.7151; 45.99213
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.02184; 1.263997; 1.000805; 1.086769; 2.089317; 1.002472
## Individual models saved as: la_run-tree98_chain*.rda
## Convergence diagnosis saved as: la_run-tree98_conv.rda
##
## 2019-05-27 - 16:09:46: MCMCglmm performed on tree 99
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 952.7115; 1692.576; 61.77165; 54.35016; 1294.653; 1708.715; 2000; 1766.955; 95.80689; 43.47942
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.489292; 1.617551; 1.001107; 2.482411; 2.915201; 1.001174
```

```
## Individual models saved as: la_run-tree99_chain*.rda
## Convergence diagnosis saved as: la_run-tree99_conv.rda
##
## 2019-05-27 - 16:09:47: MCMCglmm performed on tree 100
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1317.719; 1355.98; 40.79083; 18.73549; 1034.219; 2000; 1842.35; 2000; 96.75834; 84.43334; 952.
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.410101; 1.656286; 1.000194; 2.285003; 3.360298; 1.000748
## Individual models saved as: la_run-tree100_chain*.rda
## Convergence diagnosis saved as: la_run-tree100_conv.rda
##
## 2019-05-27 - 16:09:47: MCMCglmm successfully performed on 100 trees.
## Total execution time: 1.332806 mins.
## Use read.mulTree() to read the data as 'mulTree' data.
## Use summary.mulTree() and plot.mulTree() for plotting or summarizing the 'mulTree' data.
```

Mean reproductive rate with the population at a stable state distribution.

```
formula_mean_repo_rate <- mean_repo_rate_stable_state ~ mass_g + matrix_size

mulTree(mulTree.data = pop_multree,
        formula = formula_mean_repo_rate,
        priors = prior,
        parameters = parameters,
        output = "mean_repo_rate_run",
        ESS = 1000,
        chains = 2)
```

```
## Output chain name "mean_repo_rate_run" already exists!
## Press [enter] if you wish to overwrite the models or [esc] to cancel.
```

```
## Models will be overwritten...
```

```
##
## 2019-05-27 - 16:09:48: MCMCglmm performed on tree 1
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1009.367; 188.4181; 24.51293; 22.05054; 1070.585; 2000; 1628.933; 726.2079; 27.49457; 28.43766
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.018392; 1.031192; 1.000089; 1.020659; 1.034454; 1.00025
## Individual models saved as: mean_repo_rate_run-tree1_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree1_conv.rda
##
## 2019-05-27 - 16:09:49: MCMCglmm performed on tree 2
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1754.457; 1833.771; 523.1935; 21.58987; 30.34459; 1007.223; 2000; 776.2632; 1595.312; 12.26514; 20.6
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 10
## All levels converged < 1.1: FALSE
```

```
## 1.693856; 1.612514; 1.003458; 3.029779; 2.99079; 1.013953
## Individual models saved as: mean_repo_rate_run-tree2_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree2_conv.rda
##
## 2019-05-27 - 16:09:50: MCMCglmm performed on tree 3
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1810.042; 1749.6; 873.0934; 22.76178; 30.74957; 873.9067; 2018.105; 2000; 1310.605; 33.85797; 32.5225
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.163599; 1.002252; 1.000981; 1.573909; 1.003588; 1.001102
## Individual models saved as: mean_repo_rate_run-tree3_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree3_conv.rda
##
## 2019-05-27 - 16:09:50: MCMCglmm performed on tree 4
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2171.15; 2000; 326.1758; 19.06446; 8.358564; 1003.486; 2000; 492.5653; 813.7904; 23.26532; 28.64128;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 2.376547; 2.366866; 1.005322; 5.710411; 5.338185; 1.027377
## Individual models saved as: mean_repo_rate_run-tree4_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree4_conv.rda
##
## 2019-05-27 - 16:09:51: MCMCglmm performed on tree 5
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1991.141; 380.6687; 37.06354; 63.89623; 1028.625; 2000; 820.1753; 738.0361; 32.05165; 41.12675
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.062266; 1.007108; 1.000512; 1.22044; 1.01468; 1.00201
## Individual models saved as: mean_repo_rate_run-tree5_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree5_conv.rda
##
## 2019-05-27 - 16:09:52: MCMCglmm performed on tree 6
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1947.107; 200.9714; 197.8925; 12.62074; 8.676277; 1119.681; 2000; 1372.266; 395.3214; 24.20069; 29.29
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.430258; 1.36718; 1.00937; 2.363447; 2.202322; 1.040876
## Individual models saved as: mean_repo_rate_run-tree6_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree6_conv.rda
##
## 2019-05-27 - 16:09:53: MCMCglmm performed on tree 7
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2384.016; 700.1742; 460.6574; 18.41235; 17.90015; 1097.873; 2000; 203.9158; 252.3661; 20.74896; 15.20
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.001473; 1.010039; 1.002689; 1.005723; 1.028403; 1.0141
## Individual models saved as: mean_repo_rate_run-tree7_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree7_conv.rda
##
```

```
## 2019-05-27 - 16:09:54: MCMCglmm performed on tree 8
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1801.896; 739.7513; 32.43333; 50.92886; 1014.304; 2000; 2000; 880.1932; 72.72404; 95.22654; 10
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.142648; 1.035329; 0.9996074; 1.508304; 1.133123; 0.9997685
## Individual models saved as: mean_repo_rate_run-tree8_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree8_conv.rda
##
## 2019-05-27 - 16:09:54: MCMCglmm performed on tree 9
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 467.5357; 321.9066; 20.10121; 20.50086; 914.6124; 2067.86; 415.5016; 373.5559; 16.19964; 17.20
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.243427; 1.266181; 1.00035; 1.796968; 1.92087; 1.000826
## Individual models saved as: mean_repo_rate_run-tree9_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree9_conv.rda
##
## 2019-05-27 - 16:09:55: MCMCglmm performed on tree 10
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1160.006; 373.9685; 28.15274; 64.7598; 1014.216; 2000; 1350.24; 722.5048; 33.49559; 32.83669; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.021393; 1.043615; 1.006154; 1.09703; 1.154051; 1.011278
## Individual models saved as: mean_repo_rate_run-tree10_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree10_conv.rda
##
## 2019-05-27 - 16:09:56: MCMCglmm performed on tree 11
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 600.0851; 43.95173; 29.20813; 1057.048; 1643.651; 981.3225; 1526.975; 27.30671; 42.96328
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 100
## All levels converged < 1.1: FALSE
## 1.759047; 1.291257; 0.9998329; 3.126035; 1.971741; 1.00027
## Individual models saved as: mean_repo_rate_run-tree11_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree11_conv.rda
##
## 2019-05-27 - 16:09:57: MCMCglmm performed on tree 12
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1776.002; 285.7824; 46.33823; 52.8632; 1020.335; 2191.76; 232.1137; 610.9463; 9.857019; 36.4504
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.452571; 1.343002; 1.000364; 2.358967; 2.101944; 1.003182
## Individual models saved as: mean_repo_rate_run-tree12_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree12_conv.rda
##
## 2019-05-27 - 16:09:57: MCMCglmm performed on tree 13
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1875.514; 839.9829; 44.33919; 60.64082; 987.8934; 2440.705; 969.6664; 439.974; 27.60117; 14.948
```

```
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 1.354149; 1.439209; 0.9996335; 2.129308; 2.838012; 1.000044
## Individual models saved as: mean_repo_rate_run-tree13_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree13_conv.rda
##
## 2019-05-27 - 16:09:58: MCMCglmm performed on tree 14
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 839.9868; 485.9109; 27.84593; 24.14354; 1078.112; 2000; 1033.664; 960.3732; 11.59547; 39.93588
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.027043; 1.013626; 1.000602; 1.119453; 1.065798; 1.0026
## Individual models saved as: mean_repo_rate_run-tree14_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree14_conv.rda
##
## 2019-05-27 - 16:09:59: MCMCglmm performed on tree 15
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1833.273; 557.7585; 361.6658; 10.76625; 22.13129; 1052.289; 2000; 2371.313; 311.3395; 41.59125; 45.19
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.348583; 1.472237; 1.003116; 2.093701; 2.534822; 1.017198
## Individual models saved as: mean_repo_rate_run-tree15_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree15_conv.rda
##
## 2019-05-27 - 16:10:00: MCMCglmm performed on tree 16
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2158.584; 669.7708; 541.0714; 35.14885; 26.28304; 1018.773; 2698.409; 1298.056; 944.2206; 23.50461; 5
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.06398; 1.039409; 1.006393; 1.259712; 1.160043; 1.01793
## Individual models saved as: mean_repo_rate_run-tree16_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree16_conv.rda
##
## 2019-05-27 - 16:10:01: MCMCglmm performed on tree 17
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2189.764; 1181.773; 270.7953; 15.92293; 20.37858; 966.8089; 2661.559; 1616.376; 631.0186; 15.71516; 3
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.082845; 1.027654; 1.005694; 1.240546; 1.069; 1.019263
## Individual models saved as: mean_repo_rate_run-tree17_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree17_conv.rda
##
## 2019-05-27 - 16:10:01: MCMCglmm performed on tree 18
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2181.784; 2000; 493.5818; 39.24332; 60.11158; 1017.419; 2000; 1850.033; 312.2678; 29.51643; 29.02996
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.544489; 1.422185; 1.001214; 3.297676; 2.269176; 1.006762
## Individual models saved as: mean_repo_rate_run-tree18_chain*.rda
```

```
## Convergence diagnosis saved as: mean_repo_rate_run-tree18_conv.rda
##
## 2019-05-27 - 16:10:02: MCMCglmm performed on tree 19
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 474.9219; 302.8143; 17.76607; 26.3665; 1015.135; 2000; 2000; 1044.505; 43.02357; 71.02963; 1008
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 10
## All levels converged < 1.1: FALSE
## 1.287712; 1.031434; 0.9996407; 1.964459; 1.094171; 1.000057
## Individual models saved as: mean_repo_rate_run-tree19_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree19_conv.rda
##
## 2019-05-27 - 16:10:03: MCMCglmm performed on tree 20
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 731.7117; 67.94816; 68.09644; 852.2883; 2000; 490.6558; 1253.156; 26.17225; 33.4813; 109
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.VCV.animal, C2.VC
## All levels converged < 1.1: FALSE
## 2.138499; 1.82836; 1.003262; 4.842211; 3.528136; 1.008012
## Individual models saved as: mean_repo_rate_run-tree20_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree20_conv.rda
##
## 2019-05-27 - 16:10:04: MCMCglmm performed on tree 21
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2168.737; 334.4973; 22.70591; 20.95786; 1142.002; 1999.277; 152.0629; 696.2951; 12.08674; 17.3
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.120814; 1.008666; 1.001852; 1.337945; 1.040783; 1.011137
## Individual models saved as: mean_repo_rate_run-tree21_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree21_conv.rda
##
## 2019-05-27 - 16:10:04: MCMCglmm performed on tree 22
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2274.719; 1709.923; 718.764; 27.99673; 37.68759; 1112.605; 2120.841; 1431.321; 430.4724; 27.13718; 2
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.024311; 1.159569; 1.002495; 1.110527; 1.564357; 1.014313
## Individual models saved as: mean_repo_rate_run-tree22_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree22_conv.rda
##
## 2019-05-27 - 16:10:05: MCMCglmm performed on tree 23
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1765.888; 608.8904; 933.8384; 17.72663; 24.4284; 968.7877; 2213.721; 2000; 796.6399; 12.04452; 26.03
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 2.647201; 2.644705; 1.000617; 9.233373; 6.395497; 1.002635
## Individual models saved as: mean_repo_rate_run-tree23_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree23_conv.rda
##
## 2019-05-27 - 16:10:06: MCMCglmm performed on tree 24
## Convergence diagnosis:
```

```
## Effective sample size is > 1000: FALSE
## 2000; 698.6976; 800.4821; 17.35395; 34.37625; 1132.421; 3994.675; 613.9962; 263.3389; 12.00492; 13.18
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.03086; 1.134877; 1.005352; 1.137929; 1.485274; 1.012829
## Individual models saved as: mean_repo_rate_run-tree24_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree24_conv.rda
##
## 2019-05-27 - 16:10:07: MCMCglmm performed on tree 25
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1944.073; 2000; 514.1655; 26.66697; 37.26861; 1116.127; 2000; 1391.525; 554.6867; 23.29673; 23.52984
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.016099; 1.007295; 0.9997592; 1.038989; 1.029079; 1.000675
## Individual models saved as: mean_repo_rate_run-tree25_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree25_conv.rda
##
## 2019-05-27 - 16:10:08: MCMCglmm performed on tree 26
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1535.921; 474.455; 203.1371; 11.55066; 16.58151; 1065.311; 2661.745; 2000; 1034.87; 26.78715; 61.4779
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 100
## All levels converged < 1.1: FALSE
## 1.23002; 1.104997; 1.006842; 1.757802; 1.391813; 1.019499
## Individual models saved as: mean_repo_rate_run-tree26_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree26_conv.rda
##
## 2019-05-27 - 16:10:08: MCMCglmm performed on tree 27
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1794.354; 2000; 505.125; 28.19694; 26.55167; 937.754; 2000; 2000; 537.5178; 22.87961; 29.53973; 1104
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: TRUE
## 1.008192; 1.007529; 1.000066; 1.020366; 1.025482; 1.002324
## Individual models saved as: mean_repo_rate_run-tree27_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree27_conv.rda
##
## 2019-05-27 - 16:10:09: MCMCglmm performed on tree 28
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1477.989; 1572.475; 1677.394; 23.54345; 66.88042; 1085.712; 2312.844; 695.6189; 791.6948; 22.72674; 3
## C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.V
## All levels converged < 1.1: FALSE
## 1.032675; 1.05336; 0.9998908; 1.039662; 1.199004; 1.000028
## Individual models saved as: mean_repo_rate_run-tree28_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree28_conv.rda
##
## 2019-05-27 - 16:10:10: MCMCglmm performed on tree 29
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2096.439; 1337.996; 453.9673; 22.84803; 42.19616; 1020.877; 1853.122; 2000; 699.628; 52.15514; 69.711
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
```

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## 1.457175; 1.404157; 1.00309; 2.386187; 2.418059; 1.0081
## Individual models saved as: mean_repo_rate_run-tree29_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree29_conv.rda
##
## 2019-05-27 - 16:10:11: MCMCglmm performed on tree 30
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2694.453; 1054.4; 315.8302; 10.81684; 16.71163; 1094.709; 2000; 1869.394; 1024.444; 41.00715; 78.4318
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.216206; 1.172503; 0.9996048; 1.73414; 1.605934; 0.9996776
## Individual models saved as: mean_repo_rate_run-tree30_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree30_conv.rda
##
## 2019-05-27 - 16:10:11: MCMCglmm performed on tree 31
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 752.345; 523.0536; 16.82573; 23.90003; 1313.939; 1816.853; 219.01; 155.9023; 20.14469; 14.27775
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.292628; 1.182133; 1.000242; 2.027572; 1.622598; 1.003211
## Individual models saved as: mean_repo_rate_run-tree31_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree31_conv.rda
##
## 2019-05-27 - 16:10:12: MCMCglmm performed on tree 32
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1881.251; 279.6797; 294.0286; 17.9681; 19.04433; 1006.165; 1602.695; 2000; 1124.259; 47.21289; 87.843
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.V
## All levels converged < 1.1: FALSE
## 1.185201; 1.140364; 1.000753; 1.653451; 1.50013; 1.000887
## Individual models saved as: mean_repo_rate_run-tree32_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree32_conv.rda
##
## 2019-05-27 - 16:10:13: MCMCglmm performed on tree 33
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1488.353; 385.1552; 20.24912; 20.71231; 1080.353; 1832.431; 1760.142; 1020.646; 18.79539; 66.67
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.003963; 1.075165; 1.001775; 1.013015; 1.298053; 1.010651
## Individual models saved as: mean_repo_rate_run-tree33_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree33_conv.rda
##
## 2019-05-27 - 16:10:14: MCMCglmm performed on tree 34
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 158.9177; 328.3069; 8.514152; 9.385197; 1075.791; 2092.557; 1809.507; 1070.381; 35.01347; 37.41
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 100
## All levels converged < 1.1: FALSE
## 1.48249; 1.364712; 1.000212; 2.546885; 2.117261; 1.00263
## Individual models saved as: mean_repo_rate_run-tree34_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree34_conv.rda
##
```

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## 2019-05-27 - 16:10:15: MCMCglmm performed on tree 35
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2150.544; 2000; 713.8181; 56.7321; 28.96609; 1112.519; 1422.255; 281.6111; 260.2705; 4.71164; 5.4770
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.145481; 1.187829; 1.000973; 1.516628; 1.673759; 1.00286
## Individual models saved as: mean_repo_rate_run-tree35_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree35_conv.rda
##
## 2019-05-27 - 16:10:15: MCMCglmm performed on tree 36
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 124.2739; 605.8584; 19.52872; 13.16897; 1164.838; 2000; 943.5434; 1835.905; 34.75673; 30.90958
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.V
## All levels converged < 1.1: FALSE
## 1.143209; 1.143354; 1.000358; 1.51017; 1.511017; 1.002005
## Individual models saved as: mean_repo_rate_run-tree36_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree36_conv.rda
##
## 2019-05-27 - 16:10:16: MCMCglmm performed on tree 37
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1121.598; 614.1033; 27.29795; 50.75505; 1001.478; 2101.017; 517.2579; 266.7259; 19.72504; 20.5
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.008512; 1.044124; 1.010837; 1.042827; 1.173175; 1.05245
## Individual models saved as: mean_repo_rate_run-tree37_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree37_conv.rda
##
## 2019-05-27 - 16:10:17: MCMCglmm performed on tree 38
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1804.509; 2000; 1024.011; 32.47704; 43.80966; 1173.577; 1816.154; 1037.855; 524.0621; 38.80904; 16.8
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.023751; 1.008959; 1.00014; 1.029749; 1.012332; 1.000932
## Individual models saved as: mean_repo_rate_run-tree38_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree38_conv.rda
##
## 2019-05-27 - 16:10:18: MCMCglmm performed on tree 39
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2081.208; 142.4884; 361.7884; 10.58116; 31.85571; 1120.854; 2143.361; 783.9064; 998.0719; 23.79766; 5
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.138353; 1.014456; 1.002105; 1.357388; 1.059632; 1.01166
## Individual models saved as: mean_repo_rate_run-tree39_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree39_conv.rda
##
## 2019-05-27 - 16:10:18: MCMCglmm performed on tree 40
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1509.676; 2000; 452.8065; 32.67583; 25.96976; 1133.474; 1232.398; 596.4511; 462.6906; 18.10811; 26.0
```

```
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: TRUE
## 1.010293; 1.045469; 1.003789; 1.044366; 1.046783; 1.020282
## Individual models saved as: mean_repo_rate_run-tree40_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree40_conv.rda
##
## 2019-05-27 - 16:10:19: MCMCglmm performed on tree 41
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1716.53; 626.6053; 590.6639; 14.59838; 18.50401; 770.7734; 2000; 1864.711; 672.1206; 18.26407; 32.01
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 1.596818; 1.572308; 1.000929; 2.888414; 3.021934; 1.004651
## Individual models saved as: mean_repo_rate_run-tree41_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree41_conv.rda
##
## 2019-05-27 - 16:10:20: MCMCglmm performed on tree 42
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 539.2709; 241.5192; 11.55737; 13.27668; 1062.911; 2000; 682.807; 394.2233; 26.71324; 33.12068;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.388492; 1.377127; 1.000544; 2.22097; 2.281306; 1.004653
## Individual models saved as: mean_repo_rate_run-tree42_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree42_conv.rda
##
## 2019-05-27 - 16:10:21: MCMCglmm performed on tree 43
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1422.621; 1287.541; 827.3131; 20.83255; 45.21047; 1035.848; 2137.476; 912.1125; 282.0444; 12.96684; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.93822; 1.465244; 1.000861; 3.571476; 2.464221; 1.004723
## Individual models saved as: mean_repo_rate_run-tree43_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree43_conv.rda
##
## 2019-05-27 - 16:10:21: MCMCglmm performed on tree 44
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 876.433; 937.4641; 22.12852; 42.16414; 1104.664; 2000; 1651.752; 672.2038; 32.14204; 32.29062;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.142019; 1.052444; 1.001507; 1.481687; 1.205536; 1.006988
## Individual models saved as: mean_repo_rate_run-tree44_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree44_conv.rda
##
## 2019-05-27 - 16:10:22: MCMCglmm performed on tree 45
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2224.961; 565.9641; 673.5467; 17.17993; 14.10322; 1092.254; 1977.734; 392.1482; 505.9957; 22.33834; 1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.1515; 1.095423; 1.000636; 1.537868; 1.34986; 1.00501
## Individual models saved as: mean_repo_rate_run-tree45_chain*.rda
```

```
## Convergence diagnosis saved as: mean_repo_rate_run-tree45_conv.rda
##
## 2019-05-27 - 16:10:23: MCMCglmm performed on tree 46
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 875.2952; 476.1453; 33.58027; 25.51917; 993.4735; 2000; 2000; 550.4093; 26.93279; 24.89906; 10
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C
## All levels converged < 1.1: TRUE
## 1.007909; 1.002508; 1.000048; 1.023281; 1.002803; 1.002242
## Individual models saved as: mean_repo_rate_run-tree46_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree46_conv.rda
##
## 2019-05-27 - 16:10:24: MCMCglmm performed on tree 47
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 826.8149; 33.92243; 29.83793; 1048.386; 2000; 418.3193; 259.5789; 21.33233; 22.45312; 10
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.782744; 1.612576; 0.9996098; 3.716455; 3.029524; 0.9999793
## Individual models saved as: mean_repo_rate_run-tree47_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree47_conv.rda
##
## 2019-05-27 - 16:10:25: MCMCglmm performed on tree 48
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 272.7824; 356.1898; 10.53456; 11.92392; 1019.682; 1753.492; 1677.611; 568.7144; 44.2061; 52.30
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 2.560852; 2.106906; 1.002005; 9.272539; 4.144; 1.004596
## Individual models saved as: mean_repo_rate_run-tree48_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree48_conv.rda
##
## 2019-05-27 - 16:10:25: MCMCglmm performed on tree 49
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1708.165; 1082.645; 177.3868; 9.225214; 11.76522; 1039.909; 1841.819; 1803.207; 787.9878; 16.69405; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.02971; 1.033298; 1.000375; 1.074704; 1.127278; 1.001418
## Individual models saved as: mean_repo_rate_run-tree49_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree49_conv.rda
##
## 2019-05-27 - 16:10:26: MCMCglmm performed on tree 50
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 858.5271; 1638.439; 31.48799; 50.19852; 1409.861; 3503.265; 494.9103; 598.8472; 12.63225; 17.09
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal, C2.V
## All levels converged < 1.1: FALSE
## 1.570995; 1.101657; 1.000117; 3.101939; 1.376709; 1.002463
## Individual models saved as: mean_repo_rate_run-tree50_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree50_conv.rda
##
## 2019-05-27 - 16:10:27: MCMCglmm performed on tree 51
## Convergence diagnosis:
```

```
## Effective sample size is > 1000: FALSE
## 1907.173; 2000; 878.2435; 15.47245; 63.98993; 1056.422; 2131.345; 560.5807; 507.4603; 12.97103; 13.4
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.696913; 1.579391; 1.001958; 3.487846; 3.188642; 1.009297
## Individual models saved as: mean_repo_rate_run-tree51_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree51_conv.rda
##
## 2019-05-27 - 16:10:28: MCMCglmm performed on tree 52
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2225.326; 1274.12; 240.5638; 10.72243; 10.7843; 1026.029; 2110.973; 2000; 996.8802; 40.30533; 71.740
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.098495; 1.098149; 1.000401; 1.179672; 1.221614; 1.003921
## Individual models saved as: mean_repo_rate_run-tree52_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree52_conv.rda
##
## 2019-05-27 - 16:10:28: MCMCglmm performed on tree 53
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 791.8593; 23.96951; 29.97886; 1065.47; 1688.565; 509.1418; 639.2499; 18.65537; 8.335407;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.164259; 1.091996; 1.00208; 1.571305; 1.324601; 1.005747
## Individual models saved as: mean_repo_rate_run-tree53_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree53_conv.rda
##
## 2019-05-27 - 16:10:29: MCMCglmm performed on tree 54
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2116.554; 2000; 401.0479; 36.18061; 48.48581; 1053.65; 2248.986; 808.2768; 1527.737; 22.18464; 32.01
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 10
## All levels converged < 1.1: TRUE
## 1.025402; 1.002889; 1.005349; 1.037893; 1.015951; 1.025736
## Individual models saved as: mean_repo_rate_run-tree54_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree54_conv.rda
##
## 2019-05-27 - 16:10:30: MCMCglmm performed on tree 55
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1448.572; 515.5304; 26.5088; 20.58062; 959.1776; 1806.544; 329.0612; 264.4874; 11.29465; 12.11
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 1.223332; 1.308; 1.013118; 1.763428; 1.97093; 1.050295
## Individual models saved as: mean_repo_rate_run-tree55_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree55_conv.rda
##
## 2019-05-27 - 16:10:31: MCMCglmm performed on tree 56
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1549.092; 762.7946; 35.75882; 50.08737; 1080.22; 2137.349; 319.4085; 442.9207; 20.41376; 24.49
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
```

```
## 1.063181; 1.007435; 1.004289; 1.248905; 1.020504; 1.019559
## Individual models saved as: mean_repo_rate_run-tree56_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree56_conv.rda
##
## 2019-05-27 - 16:10:31: MCMCglmm performed on tree 57
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2038.529; 1858.188; 559.7848; 35.05673; 18.5998; 796.9087; 2940.548; 237.9327; 612.1071; 15.69811; 14
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 1.891738; 1.795201; 1.002292; 3.656849; 3.516404; 1.007191
## Individual models saved as: mean_repo_rate_run-tree57_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree57_conv.rda
##
## 2019-05-27 - 16:10:32: MCMCglmm performed on tree 58
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1607.033; 1274.612; 276.5915; 17.24212; 28.83868; 1137.237; 2289.669; 336.2398; 628.1805; 19.12668; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.131902; 1.071476; 0.9998265; 1.42658; 1.276714; 0.9998646
## Individual models saved as: mean_repo_rate_run-tree58_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree58_conv.rda
##
## 2019-05-27 - 16:10:33: MCMCglmm performed on tree 59
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 831.7803; 52.24722; 66.2266; 773.0834; 2000; 2000; 605.8333; 15.69976; 36.3694; 1000.621
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.047516; 1.038278; 0.9998182; 1.066639; 1.141707; 0.9998494
## Individual models saved as: mean_repo_rate_run-tree59_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree59_conv.rda
##
## 2019-05-27 - 16:10:34: MCMCglmm performed on tree 60
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 520.6176; 623.8829; 22.42794; 17.10396; 960.3819; 2000; 2000; 369.9588; 34.28996; 20.76357; 104
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 2.359035; 1.750192; 1.002045; 4.661784; 3.590196; 1.006719
## Individual models saved as: mean_repo_rate_run-tree60_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree60_conv.rda
##
## 2019-05-27 - 16:10:34: MCMCglmm performed on tree 61
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2303.076; 1113.001; 635.9317; 20.31219; 31.97843; 1055.494; 4702.588; 239.0661; 540.0816; 18.28678; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.327975; 1.2899; 1.002706; 2.042956; 2.043881; 1.005667
## Individual models saved as: mean_repo_rate_run-tree61_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree61_conv.rda
##
```

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## 2019-05-27 - 16:10:35: MCMCglmm performed on tree 62
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2170.828; 2000; 1066.351; 40.83144; 42.21858; 1058.608; 2163.683; 2000; 674.7719; 28.83275; 33.9008;
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.085052; 1.139081; 1.000242; 1.321262; 1.498052; 1.002753
## Individual models saved as: mean_repo_rate_run-tree62_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree62_conv.rda
##
## 2019-05-27 - 16:10:36: MCMCglmm performed on tree 63
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1550.254; 221.6384; 25.92127; 20.71331; 1027.901; 2000; 245.1412; 277.9826; 8.409797; 8.332046
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.099173; 1.04975; 1.004507; 1.130334; 1.049795; 1.01757
## Individual models saved as: mean_repo_rate_run-tree63_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree63_conv.rda
##
## 2019-05-27 - 16:10:37: MCMCglmm performed on tree 64
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2137.049; 388.9028; 121.7197; 15.53837; 15.9231; 1023.696; 1759.32; 828.8887; 549.007; 29.72151; 14.
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.249454; 1.270905; 1.000839; 1.811704; 1.94414; 1.00618
## Individual models saved as: mean_repo_rate_run-tree64_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree64_conv.rda
##
## 2019-05-27 - 16:10:38: MCMCglmm performed on tree 65
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1775.397; 898.3869; 32.21992; 33.78027; 1101.385; 1908.651; 1210.497; 753.7552; 21.59166; 30.13
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.106661; 1.042258; 1.002937; 1.365582; 1.133762; 1.014282
## Individual models saved as: mean_repo_rate_run-tree65_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree65_conv.rda
##
## 2019-05-27 - 16:10:38: MCMCglmm performed on tree 66
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1801.699; 786.8331; 1487.36; 18.49203; 35.51067; 1037.6; 1922.577; 721.5135; 337.6277; 18.83393; 19.5
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal, C2.VC
## All levels converged < 1.1: FALSE
## 1.998539; 1.567185; 1.002974; 4.403736; 2.819269; 1.012597
## Individual models saved as: mean_repo_rate_run-tree66_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree66_conv.rda
##
## 2019-05-27 - 16:10:39: MCMCglmm performed on tree 67
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2210.758; 2000; 849.7888; 40.70503; 40.1915; 1249.006; 2000; 1591.528; 330.8782; 33.9188; 56.05256;
```

```
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.263485; 1.348218; 0.9997989; 1.848821; 2.139693; 1.000992
## Individual models saved as: mean_repo_rate_run-tree67_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree67_conv.rda
##
## 2019-05-27 - 16:10:40: MCMCglmm performed on tree 68
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 569.6028; 36.38393; 38.71664; 965.2176; 1790.643; 1060.647; 678.2681; 26.90888; 36.85452
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.023092; 1.006441; 1.002619; 1.10618; 1.01338; 1.011574
## Individual models saved as: mean_repo_rate_run-tree68_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree68_conv.rda
##
## 2019-05-27 - 16:10:41: MCMCglmm performed on tree 69
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1615.139; 1050.333; 29.29884; 44.86311; 1004.655; 2000; 595.0085; 329.2166; 14.12551; 8.409643
## C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.V
## All levels converged < 1.1: FALSE
## 1.852699; 1.660047; 1.00161; 3.448757; 2.955861; 1.00625
## Individual models saved as: mean_repo_rate_run-tree69_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree69_conv.rda
##
## 2019-05-27 - 16:10:41: MCMCglmm performed on tree 70
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1267.593; 171.7415; 596.4055; 12.38497; 9.219028; 1056.21; 2000; 624.2901; 1030.896; 8.849646; 14.368
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VC
## All levels converged < 1.1: FALSE
## 1.273522; 1.469253; 1.002687; 1.873954; 2.696954; 1.005796
## Individual models saved as: mean_repo_rate_run-tree70_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree70_conv.rda
##
## 2019-05-27 - 16:10:42: MCMCglmm performed on tree 71
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1878.709; 1973.347; 441.7141; 21.22474; 35.84239; 1063.302; 2000; 2000; 1000.827; 42.94019; 63.38764
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.103646; 1.092049; 1.004615; 1.387433; 1.343645; 1.023651
## Individual models saved as: mean_repo_rate_run-tree71_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree71_conv.rda
##
## 2019-05-27 - 16:10:43: MCMCglmm performed on tree 72
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 640.5908; 24.66502; 67.04092; 1084.551; 1895.111; 313.4594; 327.9572; 16.30203; 22.57796
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.375404; 1.080031; 1.000669; 2.162556; 1.314088; 1.005334
## Individual models saved as: mean_repo_rate_run-tree72_chain*.rda
```

```
## Convergence diagnosis saved as: mean_repo_rate_run-tree72_conv.rda
##
## 2019-05-27 - 16:10:44: MCMCglmm performed on tree 73
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1713.503; 467.3964; 988.3541; 16.07303; 23.99138; 1063.6; 2357.472; 849.6572; 552.4062; 16.54662; 24
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.384328; 1.250217; 1.000249; 2.190958; 1.832973; 1.002612
## Individual models saved as: mean_repo_rate_run-tree73_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree73_conv.rda
##
## 2019-05-27 - 16:10:45: MCMCglmm performed on tree 74
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 254.9073; 13.48992; 16.42462; 1046.169; 2000; 2049.197; 538.053; 41.23096; 30.2167; 1049
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 2.619068; 2.27005; 1.001754; 7.454228; 5.288436; 1.010142
## Individual models saved as: mean_repo_rate_run-tree74_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree74_conv.rda
##
## 2019-05-27 - 16:10:45: MCMCglmm performed on tree 75
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 830.7872; 271.6789; 14.46646; 20.96547; 809.2859; 1955.332; 802.6878; 572.4114; 27.48225; 12.9
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.546475; 1.203577; 1.000864; 3.046466; 1.690387; 1.005267
## Individual models saved as: mean_repo_rate_run-tree75_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree75_conv.rda
##
## 2019-05-27 - 16:10:46: MCMCglmm performed on tree 76
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 753.4032; 33.29931; 96.45012; 1069.221; 2000; 1874.456; 1482.739; 17.08261; 30.91752; 999
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.090286; 1.053894; 1.003584; 1.32739; 1.121599; 1.018416
## Individual models saved as: mean_repo_rate_run-tree76_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree76_conv.rda
##
## 2019-05-27 - 16:10:47: MCMCglmm performed on tree 77
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2039.979; 294.2741; 303.3569; 4.350512; 8.970521; 1096.176; 1890.928; 991.983; 232.7666; 8.549582; 9
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.066782; 1.068465; 1.000437; 1.247841; 1.219227; 1.000631
## Individual models saved as: mean_repo_rate_run-tree77_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree77_conv.rda
##
## 2019-05-27 - 16:10:48: MCMCglmm performed on tree 78
## Convergence diagnosis:
```

```
## Effective sample size is > 1000: FALSE
## 2396.7; 462.3859; 420.4521; 16.35828; 17.46267; 1020.12; 2000; 1317.143; 663.9; 19.58288; 29.37169;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: TRUE
## 1.009058; 1.012496; 1.000025; 1.041155; 1.0393; 1.00033
## Individual models saved as: mean_repo_rate_run-tree78_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree78_conv.rda
##
## 2019-05-27 - 16:10:49: MCMCglmm performed on tree 79
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1665.56; 356.9015; 906.2385; 11.79705; 14.89153; 1058.307; 2000; 1257.088; 314.3945; 24.8929; 25.195
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 3.831223; 3.300099; 1.003451; 11.18467; 8.74545; 1.007597
## Individual models saved as: mean_repo_rate_run-tree79_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree79_conv.rda
##
## 2019-05-27 - 16:10:49: MCMCglmm performed on tree 80
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1368.646; 701.8484; 240.0517; 14.19907; 19.84005; 990.1186; 1729.743; 1564.752; 309.0941; 15.39334;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.117352; 1.155948; 1.000203; 1.251797; 1.542859; 1.000898
## Individual models saved as: mean_repo_rate_run-tree80_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree80_conv.rda
##
## 2019-05-27 - 16:10:50: MCMCglmm performed on tree 81
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2003.571; 354.8806; 211.9601; 13.6905; 12.78153; 956.573; 2000; 448.5288; 539.6338; 16.24628; 32.004
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.So
## All levels converged < 1.1: FALSE
## 1.552167; 1.373909; 0.9996145; 2.708595; 2.219473; 0.9999689
## Individual models saved as: mean_repo_rate_run-tree81_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree81_conv.rda
##
## 2019-05-27 - 16:10:51: MCMCglmm performed on tree 82
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1738.158; 269.8225; 687.6022; 11.1883; 11.3052; 1092.462; 2137.944; 1396.206; 297.4046; 29.0947; 30.
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.382203; 1.607474; 1.006544; 2.165031; 2.942069; 1.029797
## Individual models saved as: mean_repo_rate_run-tree82_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree82_conv.rda
##
## 2019-05-27 - 16:10:52: MCMCglmm performed on tree 83
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1009.865; 1354.053; 16.69697; 24.31984; 960.1981; 1851.617; 841.1606; 431.7641; 20.26218; 28.8
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal, C2.VC
## All levels converged < 1.1: FALSE
```

```
## 1.118375; 1.107826; 1.001538; 1.420759; 1.403084; 1.008208
## Individual models saved as: mean_repo_rate_run-tree83_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree83_conv.rda
##
## 2019-05-27 - 16:10:53: MCMCglmm performed on tree 84
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1315.769; 2000; 527.1061; 17.43898; 35.5259; 999.2218; 2000; 685.5365; 146.6528; 26.95351; 19.30461;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 1.098837; 1.013725; 0.9995914; 1.272271; 1.017267; 0.9996296
## Individual models saved as: mean_repo_rate_run-tree84_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree84_conv.rda
##
## 2019-05-27 - 16:10:53: MCMCglmm performed on tree 85
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1696.685; 267.8286; 644.274; 24.6825; 18.64004; 1042.757; 2006.515; 142.279; 526.7353; 12.22465; 17.5
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.014829; 1.047637; 1.007659; 1.07069; 1.19468; 1.02557
## Individual models saved as: mean_repo_rate_run-tree85_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree85_conv.rda
##
## 2019-05-27 - 16:10:54: MCMCglmm performed on tree 86
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1489.697; 732.7823; 966.0621; 12.50956; 13.12161; 1037.357; 2000; 1347.424; 479.0005; 26.21999; 50.08
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.048965; 1.00459; 1.000194; 1.203834; 1.024322; 1.002931
## Individual models saved as: mean_repo_rate_run-tree86_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree86_conv.rda
##
## 2019-05-27 - 16:10:55: MCMCglmm performed on tree 87
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1864.309; 744.4244; 36.96645; 82.57622; 1207.395; 1916.201; 621.1782; 302.0768; 26.44039; 24.40
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.139579; 1.117512; 1.00337; 1.499668; 1.333914; 1.014797
## Individual models saved as: mean_repo_rate_run-tree87_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree87_conv.rda
##
## 2019-05-27 - 16:10:56: MCMCglmm performed on tree 88
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1799.142; 337.3071; 1057.262; 28.88376; 52.24525; 1065.813; 2000; 165.128; 716.3747; 10.11945; 25.513
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal, C2.VC
## All levels converged < 1.1: FALSE
## 1.008595; 1.035361; 1.0013; 1.036695; 1.128738; 1.007015
## Individual models saved as: mean_repo_rate_run-tree88_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree88_conv.rda
##
```

```
## 2019-05-27 - 16:10:57: MCMCglmm performed on tree 89
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1839.241; 435.934; 33.96088; 31.85744; 976.0193; 2000; 786.1844; 615.2686; 23.0688; 37.45807;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.027915; 1.004356; 1.000326; 1.030104; 1.006527; 1.003623
## Individual models saved as: mean_repo_rate_run-tree89_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree89_conv.rda
##
## 2019-05-27 - 16:10:57: MCMCglmm performed on tree 90
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 604.7134; 933.6128; 11.651; 25.237; 1080.871; 2000; 318.2472; 581.7812; 12.41085; 26.31036; 104
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.00372; 1.033844; 1.002395; 1.018772; 1.10746; 1.008836
## Individual models saved as: mean_repo_rate_run-tree90_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree90_conv.rda
##
## 2019-05-27 - 16:10:58: MCMCglmm performed on tree 91
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2283.21; 550.8134; 398.0534; 9.349039; 14.45592; 1101.9; 2340.073; 1193.075; 932.9092; 13.96923; 55.4
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.249232; 1.127995; 1.000255; 2.014821; 1.454464; 1.000442
## Individual models saved as: mean_repo_rate_run-tree91_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree91_conv.rda
##
## 2019-05-27 - 16:10:59: MCMCglmm performed on tree 92
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1542.056; 1200.658; 587.4752; 18.05122; 34.08232; 1080.888; 2000; 1569.722; 603.6083; 20.44806; 27.95
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.725769; 1.441778; 1.003111; 3.311396; 2.494811; 1.016078
## Individual models saved as: mean_repo_rate_run-tree92_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree92_conv.rda
##
## 2019-05-27 - 16:11:00: MCMCglmm performed on tree 93
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1720.827; 341.5735; 324.525; 14.30878; 15.5054; 1023.027; 1771.592; 2000; 546.6848; 35.60149; 37.6794
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.233987; 1.161617; 1.002706; 1.766449; 1.566492; 1.012844
## Individual models saved as: mean_repo_rate_run-tree93_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree93_conv.rda
##
## 2019-05-27 - 16:11:00: MCMCglmm performed on tree 94
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2457.022; 2000; 1052.623; 38.15198; 65.92393; 919.1404; 2000; 1874.728; 999.0743; 37.18212; 30.10158
```

```
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 100
## All levels converged < 1.1: FALSE
## 1.060587; 1.101055; 1.000129; 1.248263; 1.381354; 1.002081
## Individual models saved as: mean_repo_rate_run-tree94_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree94_conv.rda
##
## 2019-05-27 - 16:11:01: MCMCglmm performed on tree 95
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1309.787; 569.0927; 555.0853; 9.761315; 28.438; 1019.667; 2385.976; 324.5873; 1211.18; 20.73072; 25.7
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VC
## All levels converged < 1.1: FALSE
## 1.19898; 1.027456; 1.000162; 1.718455; 1.083118; 1.001507
## Individual models saved as: mean_repo_rate_run-tree95_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree95_conv.rda
##
## 2019-05-27 - 16:11:02: MCMCglmm performed on tree 96
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2311.583; 621.9145; 1339.178; 12.96863; 19.3687; 1128.35; 2000; 2009.714; 419.7375; 25.28134; 49.9423
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 100
## All levels converged < 1.1: FALSE
## 1.103915; 1.081295; 1.002093; 1.38422; 1.317114; 1.002119
## Individual models saved as: mean_repo_rate_run-tree96_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree96_conv.rda
##
## 2019-05-27 - 16:11:03: MCMCglmm performed on tree 97
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1677.776; 821.8023; 26.29188; 51.40548; 855.6994; 2301.229; 2000; 564.3399; 20.18388; 52.358; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.241902; 1.115184; 1.005726; 1.849115; 1.425073; 1.014388
## Individual models saved as: mean_repo_rate_run-tree97_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree97_conv.rda
##
## 2019-05-27 - 16:11:04: MCMCglmm performed on tree 98
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2193.522; 2000; 583.9226; 24.28064; 42.66649; 1026.813; 1827.11; 373.9655; 368.5552; 21.25361; 20.342
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.151959; 1.102637; 1.001224; 1.535532; 1.362531; 1.001288
## Individual models saved as: mean_repo_rate_run-tree98_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree98_conv.rda
##
## 2019-05-27 - 16:11:04: MCMCglmm performed on tree 99
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2316.79; 1304.389; 223.3018; 34.60273; 19.34871; 1132.689; 2169.914; 2000; 479.3095; 43.4527; 32.8153
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.195954; 1.102528; 1.000227; 1.680371; 1.383884; 1.002258
## Individual models saved as: mean_repo_rate_run-tree99_chain*.rda
```

```
## Convergence diagnosis saved as: mean_repo_rate_run-tree99_conv.rda
##
## 2019-05-27 - 16:11:05: MCMCglmm performed on tree 100
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2123.669; 1728.202; 813.1464; 21.8292; 50.76777; 956.4114; 2000; 2000; 444.6385; 23.26387; 21.32635;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.169551; 1.198142; 1.004877; 1.587308; 1.674572; 1.016105
## Individual models saved as: mean_repo_rate_run-tree100_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_run-tree100_conv.rda
##
## 2019-05-27 - 16:11:05: MCMCglmm successfully performed on 100 trees.
## Total execution time: 1.299822 mins.
## Use read.mulTree() to read the data as 'mulTree' data.
## Use summary.mulTree() and plot.mulTree() for plotting or summarizing the 'mulTree' data.
```

Mean reproductive rate with the population not at a stable state distribution.

```
formula_mean_repo_rate_nst <- mean_repo_rate ~ mass_g + matrix_size

mulTree(mulTree.data = pop_multree,
        formula = formula_mean_repo_rate_nst,
        priors = prior,
        parameters = parameters,
        output = "mean_repo_rate_nst_run",
        ESS = 1000,
        chains = 2)
```

```
## Output chain name "mean_repo_rate_nst_run" already exists!
## Press [enter] if you wish to overwrite the models or [esc] to cancel.
```

```
## Models will be overwritten...
```

```
##
## 2019-05-27 - 16:11:06: MCMCglmm performed on tree 1
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1742.276; 1798.077; 653.1019; 55.05355; 21.00223; 942.0756; 2000; 2000; 574.4596; 52.02119; 37.49377
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: TRUE
## 1.001159; 1.007176; 0.9999122; 1.007755; 1.03504; 1.001567
## Individual models saved as: mean_repo_rate_nst_run-tree1_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree1_conv.rda
##
## 2019-05-27 - 16:11:07: MCMCglmm performed on tree 2
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2177.37; 2000; 258.2896; 43.83085; 27.17212; 1106.867; 2000; 1756.144; 1156.369; 62.41599; 94.61921;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.292637; 1.214851; 1.000061; 2.153146; 1.803935; 1.000202
```

```
## Individual models saved as: mean_repo_rate_nst_run-tree2_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree2_conv.rda
##
## 2019-05-27 - 16:11:07: MCMCglmm performed on tree 3
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1853.719; 1855.855; 467.5942; 54.08774; 23.39656; 1107.388; 2000; 1560.329; 660.3; 25.53662; 32.4269
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.209127; 1.166093; 1.003178; 1.697711; 1.584028; 1.016297
## Individual models saved as: mean_repo_rate_nst_run-tree3_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree3_conv.rda
##
## 2019-05-27 - 16:11:08: MCMCglmm performed on tree 4
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1652.57; 858.254; 39.28645; 24.33673; 1149.526; 2000; 1740.909; 700.4592; 52.35871; 43.1988; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.17234; 1.032453; 0.999575; 1.595761; 1.081374; 0.9998438
## Individual models saved as: mean_repo_rate_nst_run-tree4_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree4_conv.rda
##
## 2019-05-27 - 16:11:09: MCMCglmm performed on tree 5
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1931.949; 2000; 312.4558; 78.87111; 47.01882; 1035.162; 2000; 2000; 439.3017; 54.78496; 26.85098; 108
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.034302; 1.017599; 1.00114; 1.151541; 1.05628; 1.00751
## Individual models saved as: mean_repo_rate_nst_run-tree5_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree5_conv.rda
##
## 2019-05-27 - 16:11:10: MCMCglmm performed on tree 6
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1769.8; 1085.782; 447.5713; 50.44697; 21.99521; 1080.926; 2000; 1768.311; 711.5963; 35.51989; 47.564
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.19059; 1.138289; 1.000098; 1.650103; 1.487516; 1.001259
## Individual models saved as: mean_repo_rate_nst_run-tree6_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree6_conv.rda
##
## 2019-05-27 - 16:11:11: MCMCglmm performed on tree 7
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1808.9; 361.7796; 40.06591; 14.10997; 1081.752; 2000; 1626.891; 450.8587; 76.41952; 61.33897; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.11679; 1.018376; 1.000244; 1.424846; 1.080317; 1.000505
## Individual models saved as: mean_repo_rate_nst_run-tree7_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree7_conv.rda
##
## 2019-05-27 - 16:11:11: MCMCglmm performed on tree 8
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 742.3686; 2000; 374.0622; 18.07947; 4.980097; 1077.982; 1741.772; 2000; 343.4592; 19.51225; 13.95331
## C1.Sol.(Intercept), C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.an
## All levels converged < 1.1: FALSE
## 1.840381; 1.649886; 1.002255; 3.473914; 3.174526; 1.002395
## Individual models saved as: mean_repo_rate_nst_run-tree8_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree8_conv.rda
##
## 2019-05-27 - 16:11:12: MCMCglmm performed on tree 9
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 338.9023; 42.11292; 27.17188; 1085.73; 1431.147; 1197.042; 649.3831; 58.25386; 39.23036;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.05942; 1.031043; 1.004167; 1.209374; 1.123352; 1.014762
## Individual models saved as: mean_repo_rate_nst_run-tree9_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree9_conv.rda
##
## 2019-05-27 - 16:11:13: MCMCglmm performed on tree 10
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 488.2188; 86.49459; 42.33579; 1116.706; 1731.851; 1780.985; 347.906; 42.30247; 21.36822;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.226851; 1.454485; 0.9996243; 1.761466; 3.082418; 1.000031
## Individual models saved as: mean_repo_rate_nst_run-tree10_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree10_conv.rda
##
## 2019-05-27 - 16:11:14: MCMCglmm performed on tree 11
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1213.687; 918.2375; 36.46963; 42.78399; 1046.816; 2000; 2000; 857.9849; 36.44453; 35.30968; 11
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.167327; 1.039447; 1.002622; 1.582572; 1.15818; 1.003688
## Individual models saved as: mean_repo_rate_nst_run-tree11_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree11_conv.rda
##
## 2019-05-27 - 16:11:14: MCMCglmm performed on tree 12
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2172.999; 2000; 716.6302; 51.72682; 61.39152; 1053.283; 1586.204; 2111.035; 424.4699; 59.36724; 28.08
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.001766; 1.017961; 1.001959; 1.002479; 1.01864; 1.010543
## Individual models saved as: mean_repo_rate_nst_run-tree12_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree12_conv.rda
##
## 2019-05-27 - 16:11:15: MCMCglmm performed on tree 13
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1040.248; 83.65885; 78.24669; 1125.774; 2000; 2000; 509.7435; 52.7142; 43.54243; 1247.923
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: TRUE
## 1.01943; 1.040079; 0.9996608; 1.052383; 1.047202; 1.000303
## Individual models saved as: mean_repo_rate_nst_run-tree13_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree13_conv.rda
##
## 2019-05-27 - 16:11:16: MCMCglmm performed on tree 14
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 717.8498; 78.44964; 65.92604; 1040.314; 2000; 2000; 802.7546; 76.84504; 73.17795; 1135.1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.00555; 1.042161; 1.001809; 1.005747; 1.133702; 1.007511
## Individual models saved as: mean_repo_rate_nst_run-tree14_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree14_conv.rda
##
## 2019-05-27 - 16:11:17: MCMCglmm performed on tree 15
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1824.167; 817.5089; 53.6473; 48.64373; 1175.431; 2000; 1865.325; 1020.318; 90.42149; 55.26057;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.373415; 1.161025; 1.000038; 2.141783; 1.557638; 1.001018
## Individual models saved as: mean_repo_rate_nst_run-tree15_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree15_conv.rda
##
## 2019-05-27 - 16:11:17: MCMCglmm performed on tree 16
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2178.346; 2000; 386.5114; 55.63916; 24.18239; 1109.622; 2000; 2000; 491.3425; 40.64827; 32.32216; 11
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.101386; 1.104112; 1.000555; 1.283929; 1.326604; 1.002672
## Individual models saved as: mean_repo_rate_nst_run-tree16_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree16_conv.rda
##
## 2019-05-27 - 16:11:18: MCMCglmm performed on tree 17
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2150.84; 1633.777; 288.4049; 32.03545; 26.56413; 1201.23; 1927.297; 2000; 450.9738; 49.02137; 21.323
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.000172; 1.033394; 1.001185; 1.002708; 1.065476; 1.006895
## Individual models saved as: mean_repo_rate_nst_run-tree17_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree17_conv.rda
##
## 2019-05-27 - 16:11:19: MCMCglmm performed on tree 18
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1799.311; 330.7381; 31.49616; 47.92051; 1023.856; 2000; 1656.611; 452.4168; 54.16109; 33.85512
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.078477; 1.033112; 0.9995123; 1.196657; 1.122349; 0.9995562
## Individual models saved as: mean_repo_rate_nst_run-tree18_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree18_conv.rda
```

```
##
## 2019-05-27 - 16:11:20: MCMCglmm performed on tree 19
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1126.411; 69.94908; 106.9272; 1140.129; 1993.208; 2000; 758.8473; 89.54136; 106.7195; 11
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.003972; 0.999649; 1.00419; 1.021028; 0.9997303; 1.022503
## Individual models saved as: mean_repo_rate_nst_run-tree19_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree19_conv.rda
##
## 2019-05-27 - 16:11:21: MCMCglmm performed on tree 20
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1599.309; 1567.114; 569.0243; 37.78831; 37.99903; 1093.126; 2000; 2141.25; 528.3654; 20.69368; 20.51
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.189489; 1.401087; 1.007251; 1.646702; 2.50389; 1.035703
## Individual models saved as: mean_repo_rate_nst_run-tree20_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree20_conv.rda
##
## 2019-05-27 - 16:11:21: MCMCglmm performed on tree 21
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 717.844; 23.60317; 28.62335; 1142.847; 2000; 2000; 778.1444; 63.82561; 71.6995; 956.8607
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.192304; 1.037879; 1.005249; 1.65732; 1.138002; 1.00526
## Individual models saved as: mean_repo_rate_nst_run-tree21_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree21_conv.rda
##
## 2019-05-27 - 16:11:22: MCMCglmm performed on tree 22
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 826.3153; 51.64996; 41.02046; 1031.481; 2000; 2000; 829.766; 59.17162; 43.52516; 1162.50
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.047904; 1.037875; 1.000249; 1.185405; 1.154204; 1.003249
## Individual models saved as: mean_repo_rate_nst_run-tree22_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree22_conv.rda
##
## 2019-05-27 - 16:11:23: MCMCglmm performed on tree 23
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 569.9782; 66.15816; 30.06148; 1102.003; 2138.28; 2000; 759.3185; 61.02023; 47.52866; 115
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.115792; 1.146397; 1.000069; 1.427565; 1.475282; 1.002178
## Individual models saved as: mean_repo_rate_nst_run-tree23_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree23_conv.rda
##
## 2019-05-27 - 16:11:24: MCMCglmm performed on tree 24
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 2000; 648.3228; 43.53985; 51.62002; 1050.495; 2000; 2000; 989.1805; 44.7978; 46.86103; 1161.49
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.050855; 1.067081; 1.008808; 1.213488; 1.240803; 1.0407
## Individual models saved as: mean_repo_rate_nst_run-tree24_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree24_conv.rda
##
## 2019-05-27 - 16:11:24: MCMCglmm performed on tree 25
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1800.033; 2091.783; 366.2741; 50.46289; 47.9918; 859.2431; 2000; 2000; 601.4093; 78.35093; 23.86899;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.076308; 1.001331; 1.003685; 1.284871; 1.002459; 1.005684
## Individual models saved as: mean_repo_rate_nst_run-tree25_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree25_conv.rda
##
## 2019-05-27 - 16:11:25: MCMCglmm performed on tree 26
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1836.825; 1442.944; 566.8104; 52.14677; 18.51587; 1022.833; 2180.648; 2000; 315.8535; 52.41284; 59.65
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.021766; 1.027544; 1.005038; 1.024351; 1.043944; 1.008877
## Individual models saved as: mean_repo_rate_nst_run-tree26_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree26_conv.rda
##
## 2019-05-27 - 16:11:26: MCMCglmm performed on tree 27
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1857.638; 636.1571; 58.82104; 72.53331; 970.129; 1300.207; 1972.369; 244.285; 25.94804; 15.0903
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.09315; 1.062722; 0.9995169; 1.352025; 1.178473; 0.9995176
## Individual models saved as: mean_repo_rate_nst_run-tree27_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree27_conv.rda
##
## 2019-05-27 - 16:11:27: MCMCglmm performed on tree 28
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 830.6615; 75.60832; 47.76819; 1067.153; 2000; 1730.14; 743.3868; 53.95862; 79.31822; 972
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004955; 1.009779; 1.007675; 1.026091; 1.048656; 1.034694
## Individual models saved as: mean_repo_rate_nst_run-tree28_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree28_conv.rda
##
## 2019-05-27 - 16:11:27: MCMCglmm performed on tree 29
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1753.257; 2000; 214.9349; 32.96892; 18.29817; 1040.228; 1565.598; 2125.957; 604.1807; 44.46815; 29.01
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.42536; 1.327372; 1.00666; 2.271642; 2.222759; 1.026943
```

```
## Individual models saved as: mean_repo_rate_nst_run-tree29_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree29_conv.rda
##
## 2019-05-27 - 16:11:28: MCMCglmm performed on tree 30
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 680.6809; 52.18685; 68.64881; 1127.09; 2000; 1681.568; 860.6956; 53.04015; 25.51675; 908
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.088903; 1.040616; 1.000602; 1.204928; 1.044006; 1.004532
## Individual models saved as: mean_repo_rate_nst_run-tree30_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree30_conv.rda
##
## 2019-05-27 - 16:11:29: MCMCglmm performed on tree 31
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2316.798; 1759.94; 572.9411; 46.07702; 28.75445; 1136.368; 2000; 2000; 826.5091; 64.69091; 47.2837;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.355326; 1.258224; 0.9995386; 2.090595; 1.966749; 0.9996518
## Individual models saved as: mean_repo_rate_nst_run-tree31_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree31_conv.rda
##
## 2019-05-27 - 16:11:30: MCMCglmm performed on tree 32
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1580.567; 1028.629; 67.40904; 73.73087; 1128.551; 2000; 1776.161; 393.4269; 46.35425; 48.70312
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 100
## All levels converged < 1.1: FALSE
## 1.039717; 1.024984; 1.006503; 1.170186; 1.088986; 1.029567
## Individual models saved as: mean_repo_rate_nst_run-tree32_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree32_conv.rda
##
## 2019-05-27 - 16:11:31: MCMCglmm performed on tree 33
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1584.808; 2000; 228.8732; 34.29076; 17.43987; 1287.146; 2000; 1230.503; 590.6457; 42.93895; 28.37474
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.608259; 1.510087; 1.006003; 2.744086; 3.30914; 1.024444
## Individual models saved as: mean_repo_rate_nst_run-tree33_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree33_conv.rda
##
## 2019-05-27 - 16:11:31: MCMCglmm performed on tree 34
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1841.144; 2000; 500.9818; 94.2287; 71.58109; 1081.264; 1688.241; 2000; 911.5638; 90.83273; 70.14071;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.048961; 1.044201; 1.00402; 1.19878; 1.168064; 1.021583
## Individual models saved as: mean_repo_rate_nst_run-tree34_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree34_conv.rda
##
## 2019-05-27 - 16:11:32: MCMCglmm performed on tree 35
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 403.6463; 48.92585; 25.35104; 1047.272; 2000; 2097.669; 397.6472; 41.97667; 43.12635; 118
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.00218; 1.00151; 1.001814; 1.005545; 1.005758; 1.010802
## Individual models saved as: mean_repo_rate_nst_run-tree35_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree35_conv.rda
##
## 2019-05-27 - 16:11:33: MCMCglmm performed on tree 36
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 894.6678; 72.38813; 65.42978; 1242.577; 2000; 2000; 661.1841; 58.50999; 42.94335; 1116.43
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.242396; 1.098885; 1.000024; 1.790378; 1.352202; 1.000057
## Individual models saved as: mean_repo_rate_nst_run-tree36_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree36_conv.rda
##
## 2019-05-27 - 16:11:34: MCMCglmm performed on tree 37
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1856.633; 1808.179; 879.4005; 37.80674; 41.84756; 1262.511; 1804.483; 797.5122; 426.9882; 20.65328; 9
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.172835; 1.262576; 1.000303; 1.608542; 2.057984; 1.000971
## Individual models saved as: mean_repo_rate_nst_run-tree37_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree37_conv.rda
##
## 2019-05-27 - 16:11:34: MCMCglmm performed on tree 38
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1385.837; 533.5853; 48.19396; 38.39189; 967.0298; 2000; 2000; 329.8233; 40.84459; 21.27626; 109
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.0271; 1.140032; 1.000262; 1.104555; 1.500041; 1.000289
## Individual models saved as: mean_repo_rate_nst_run-tree38_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree38_conv.rda
##
## 2019-05-27 - 16:11:35: MCMCglmm performed on tree 39
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 312.3385; 30.67632; 23.73209; 1031.316; 4201.144; 2000; 319.5004; 39.50292; 15.62043; 118
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.079757; 1.114156; 1.003857; 1.289539; 1.378361; 1.020888
## Individual models saved as: mean_repo_rate_nst_run-tree39_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree39_conv.rda
##
## 2019-05-27 - 16:11:36: MCMCglmm performed on tree 40
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2577.722; 2000; 726.5768; 63.68881; 53.70695; 1082.541; 1930.439; 1694.07; 741.5537; 37.01504; 40.69
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: FALSE
## 1.189979; 1.289336; 0.9996806; 1.644584; 2.106449; 0.9998963
## Individual models saved as: mean_repo_rate_nst_run-tree40_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree40_conv.rda
##
## 2019-05-27 - 16:11:37: MCMCglmm performed on tree 41
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1442.447; 674.533; 41.65248; 30.3965; 1222.786; 2191.995; 1850.93; 956.4673; 35.39984; 42.7014
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002452; 1.019924; 0.9997618; 1.005605; 1.049171; 0.9999894
## Individual models saved as: mean_repo_rate_nst_run-tree41_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree41_conv.rda
##
## 2019-05-27 - 16:11:38: MCMCglmm performed on tree 42
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 683.7169; 81.71557; 29.56967; 1048.248; 2317.865; 1767.924; 727.0136; 72.1349; 80.97348;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.050192; 1.132183; 0.9996751; 1.208631; 1.427301; 1.000076
## Individual models saved as: mean_repo_rate_nst_run-tree42_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree42_conv.rda
##
## 2019-05-27 - 16:11:38: MCMCglmm performed on tree 43
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1856.395; 415.1057; 43.63738; 104.6794; 1278.595; 2000; 1834.829; 780.8784; 64.93112; 52.01329
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.31806; 1.445901; 0.9995306; 2.075835; 2.38755; 0.999627
## Individual models saved as: mean_repo_rate_nst_run-tree43_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree43_conv.rda
##
## 2019-05-27 - 16:11:39: MCMCglmm performed on tree 44
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 429.4146; 48.03942; 26.79475; 1092.923; 2337.836; 1477.113; 520.1166; 76.37994; 49.22212
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.063074; 1.031118; 0.9998704; 1.255154; 1.121853; 1.000856
## Individual models saved as: mean_repo_rate_nst_run-tree44_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree44_conv.rda
##
## 2019-05-27 - 16:11:40: MCMCglmm performed on tree 45
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 587.2781; 81.40151; 44.09788; 1056.302; 2613.447; 1840.022; 568.1591; 55.22608; 57.76662
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.108468; 1.002282; 1.001324; 1.394185; 1.002572; 1.001403
## Individual models saved as: mean_repo_rate_nst_run-tree45_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree45_conv.rda
```

```
##
## 2019-05-27 - 16:11:41: MCMCglmm performed on tree 46
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 309.9512; 69.94535; 62.64405; 1070.45; 2000; 1739.679; 735.0721; 73.68631; 50.87179; 126
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.295393; 1.099967; 0.9996853; 1.971603; 1.345943; 1.000023
## Individual models saved as: mean_repo_rate_nst_run-tree46_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree46_conv.rda
##
## 2019-05-27 - 16:11:41: MCMCglmm performed on tree 47
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2178.64; 2000; 936.7443; 94.07796; 104.9698; 1222.637; 2000; 1442.16; 492.7229; 43.90736; 31.67789;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.194773; 1.196972; 1.000573; 1.658561; 1.688689; 1.000575
## Individual models saved as: mean_repo_rate_nst_run-tree47_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree47_conv.rda
##
## 2019-05-27 - 16:11:42: MCMCglmm performed on tree 48
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1866.4; 2000; 418.769; 54.113; 31.77727; 1068.141; 2000; 2000; 636.1595; 68.885; 43.78566; 1107.244
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.009012; 1.148061; 1.001466; 1.009122; 1.515737; 1.001499
## Individual models saved as: mean_repo_rate_nst_run-tree48_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree48_conv.rda
##
## 2019-05-27 - 16:11:43: MCMCglmm performed on tree 49
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 446.4995; 63.57788; 43.6474; 994.1928; 2218.887; 2000; 288.5064; 54.32999; 21.29482; 103
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: TRUE
## 1.019633; 1.013046; 1.004899; 1.067009; 1.054867; 1.025279
## Individual models saved as: mean_repo_rate_nst_run-tree49_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree49_conv.rda
##
## 2019-05-27 - 16:11:44: MCMCglmm performed on tree 50
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1138.609; 81.72104; 104.5927; 1069.22; 2174.704; 2000; 792.0443; 91.23785; 54.69868; 109
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.018507; 1.037613; 1.003253; 1.022895; 1.15412; 1.018001
## Individual models saved as: mean_repo_rate_nst_run-tree50_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree50_conv.rda
##
## 2019-05-27 - 16:11:44: MCMCglmm performed on tree 51
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 1547.176; 1133.619; 62.4551; 62.84931; 1089.69; 2000; 1517.09; 219.3368; 36.03466; 13.64053; 98
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 100
## All levels converged < 1.1: FALSE
## 1.029672; 1.094422; 1.005068; 1.133309; 1.285062; 1.023649
## Individual models saved as: mean_repo_rate_nst_run-tree51_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree51_conv.rda
##
## 2019-05-27 - 16:11:45: MCMCglmm performed on tree 52
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1916.317; 1600.382; 385.848; 51.25661; 29.34289; 1089.294; 2000; 1577.984; 951.5476; 75.93862; 42.115
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.213295; 1.054982; 0.9995321; 1.712815; 1.198074; 0.9996527
## Individual models saved as: mean_repo_rate_nst_run-tree52_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree52_conv.rda
##
## 2019-05-27 - 16:11:46: MCMCglmm performed on tree 53
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 246.8061; 41.96883; 20.34566; 1129.801; 2000; 1818.588; 441.7744; 51.29714; 35.72822; 108
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.018715; 1.086094; 1.000263; 1.045165; 1.282792; 1.001121
## Individual models saved as: mean_repo_rate_nst_run-tree53_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree53_conv.rda
##
## 2019-05-27 - 16:11:47: MCMCglmm performed on tree 54
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1824.563; 285.9307; 54.45599; 25.94759; 1171.02; 2000; 1827.951; 805.0186; 68.37742; 90.06557;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.202118; 1.145341; 1.00034; 1.67848; 1.514174; 1.003561
## Individual models saved as: mean_repo_rate_nst_run-tree54_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree54_conv.rda
##
## 2019-05-27 - 16:11:48: MCMCglmm performed on tree 55
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 4626.137; 1664.602; 829.8276; 51.09859; 43.17137; 1087.06; 2000; 2000; 199.1584; 21.76773; 14.14853;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.702146; 1.757813; 1.00011; 3.004819; 4.277935; 1.001432
## Individual models saved as: mean_repo_rate_nst_run-tree55_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree55_conv.rda
##
## 2019-05-27 - 16:11:48: MCMCglmm performed on tree 56
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1720.337; 1565.86; 349.3438; 60.3616; 37.498; 1038.216; 1743.251; 2000; 538.8259; 35.95989; 38.93338
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.015548; 1.024331; 1.000077; 1.070284; 1.109634; 1.002232
```

```
## Individual models saved as: mean_repo_rate_nst_run-tree56_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree56_conv.rda
##
## 2019-05-27 - 16:11:49: MCMCglmm performed on tree 57
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1863.32; 542.8698; 66.67389; 34.88166; 972.8951; 2691.094; 1851.838; 597.429; 58.64036; 44.158
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: TRUE
## 1.016506; 1.015113; 1.001464; 1.077764; 1.02451; 1.005766
## Individual models saved as: mean_repo_rate_nst_run-tree57_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree57_conv.rda
##
## 2019-05-27 - 16:11:50: MCMCglmm performed on tree 58
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3099.418; 1324.805; 811.817; 40.12305; 44.91605; 1147.833; 2000; 2000; 307.7008; 27.2851; 22.94484; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.02808; 1.016149; 1.000058; 1.100903; 1.044387; 1.002166
## Individual models saved as: mean_repo_rate_nst_run-tree58_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree58_conv.rda
##
## 2019-05-27 - 16:11:51: MCMCglmm performed on tree 59
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1780.425; 2000; 601.5002; 63.71859; 41.18768; 1185.492; 1556.605; 2000; 834.6756; 33.93025; 18.2971;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.056594; 1.03169; 1.000302; 1.22745; 1.134178; 1.001457
## Individual models saved as: mean_repo_rate_nst_run-tree59_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree59_conv.rda
##
## 2019-05-27 - 16:11:52: MCMCglmm performed on tree 60
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2150.804; 2000; 348.709; 52.81835; 23.40515; 1050.689; 2000; 1859.627; 115.4442; 26.0304; 11.7601; 8
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 2.782507; 2.091202; 0.9995568; 5.942447; 5.629018; 0.9995593
## Individual models saved as: mean_repo_rate_nst_run-tree60_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree60_conv.rda
##
## 2019-05-27 - 16:11:52: MCMCglmm performed on tree 61
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 479.7331; 53.923; 34.73063; 988.0016; 2000; 1870.668; 445.6519; 53.37215; 28.56138; 1124
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.056259; 1.026915; 1.000421; 1.225337; 1.062883; 1.001582
## Individual models saved as: mean_repo_rate_nst_run-tree61_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree61_conv.rda
##
## 2019-05-27 - 16:11:53: MCMCglmm performed on tree 62
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 293.4741; 68.42837; 35.40757; 1147.838; 2000; 2628.628; 1039.467; 95.06956; 50.09224; 10
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.174863; 1.015124; 0.9999624; 1.602502; 1.059257; 1.001222
## Individual models saved as: mean_repo_rate_nst_run-tree62_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree62_conv.rda
##
## 2019-05-27 - 16:11:54: MCMCglmm performed on tree 63
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1830.446; 348.2281; 59.73129; 31.7567; 1015.569; 2198.98; 2000; 1141.49; 83.13312; 64.45829; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.000818; 1.003849; 1.002678; 1.003679; 1.020359; 1.009228
## Individual models saved as: mean_repo_rate_nst_run-tree63_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree63_conv.rda
##
## 2019-05-27 - 16:11:55: MCMCglmm performed on tree 64
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2029.84; 1866.756; 650.8468; 51.74176; 45.84108; 1123.073; 2000; 2000; 416.041; 81.22608; 21.25433; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.008917; 1.045016; 1.003755; 1.01222; 1.146096; 1.011222
## Individual models saved as: mean_repo_rate_nst_run-tree64_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree64_conv.rda
##
## 2019-05-27 - 16:11:55: MCMCglmm performed on tree 65
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1084.398; 94.98999; 81.48948; 1066; 2239.257; 2000; 599.3136; 48.05244; 34.21121; 1049.49
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.233499; 1.432983; 1.000327; 1.768362; 3.064066; 1.003557
## Individual models saved as: mean_repo_rate_nst_run-tree65_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree65_conv.rda
##
## 2019-05-27 - 16:11:56: MCMCglmm performed on tree 66
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1791.067; 398.1214; 39.65852; 49.66891; 1020.62; 2000; 1842.484; 201.9256; 22.42806; 28.8429; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.001627; 1.012921; 1.000025; 1.009897; 1.019248; 1.000928
## Individual models saved as: mean_repo_rate_nst_run-tree66_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree66_conv.rda
##
## 2019-05-27 - 16:11:57: MCMCglmm performed on tree 67
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1817.689; 803.8977; 67.56846; 55.81583; 927.7965; 2303.406; 2184.161; 553.9472; 30.97704; 65.7
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
```

```
## All levels converged < 1.1: FALSE
## 1.822768; 1.410751; 1.000198; 3.475938; 2.371716; 1.002735
## Individual models saved as: mean_repo_rate_nst_run-tree67_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree67_conv.rda
##
## 2019-05-27 - 16:11:58: MCMCglmm performed on tree 68
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1874.075; 607.1099; 66.07129; 49.67298; 1097.593; 1858.672; 2000; 255.5104; 28.92317; 13.99313
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.007462; 1.023549; 1.00038; 1.008249; 1.053519; 1.003449
## Individual models saved as: mean_repo_rate_nst_run-tree68_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree68_conv.rda
##
## 2019-05-27 - 16:11:58: MCMCglmm performed on tree 69
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2601.5; 1708.604; 466.0053; 41.74641; 8.880962; 1131.437; 2325.787; 1454.122; 1419.29; 39.74819; 35.1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.236371; 1.356506; 0.9997173; 1.811197; 2.338413; 1.000106
## Individual models saved as: mean_repo_rate_nst_run-tree69_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree69_conv.rda
##
## 2019-05-27 - 16:11:59: MCMCglmm performed on tree 70
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2193.892; 2000; 685.5107; 52.79807; 58.2709; 1141.903; 2000; 2251.765; 204.8056; 44.80492; 34.88456;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.080784; 1.058349; 1.000886; 1.308687; 1.192305; 1.004802
## Individual models saved as: mean_repo_rate_nst_run-tree70_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree70_conv.rda
##
## 2019-05-27 - 16:12:00: MCMCglmm performed on tree 71
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 998.6758; 45.887; 39.23386; 1171.512; 2000; 1185.472; 289.1825; 29.7305; 15.82288; 1094.9
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.056869; 1.064076; 1.000984; 1.234982; 1.148509; 1.001007
## Individual models saved as: mean_repo_rate_nst_run-tree71_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree71_conv.rda
##
## 2019-05-27 - 16:12:01: MCMCglmm performed on tree 72
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 683.3916; 81.92248; 30.78772; 926.9962; 2000; 2000; 510.936; 61.89481; 43.25341; 970.0650
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.137452; 1.232461; 1.001932; 1.493011; 1.868157; 1.003603
## Individual models saved as: mean_repo_rate_nst_run-tree72_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree72_conv.rda
```

```
##
## 2019-05-27 - 16:12:02: MCMCglmm performed on tree 73
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2928.347; 2000; 868.1649; 51.01839; 52.99674; 1109.88; 2000; 1295.671; 750.0399; 29.44396; 26.25776;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.042638; 1.031676; 0.9995272; 1.18006; 1.095793; 0.9995818
## Individual models saved as: mean_repo_rate_nst_run-tree73_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree73_conv.rda
##
## 2019-05-27 - 16:12:02: MCMCglmm performed on tree 74
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 951.0413; 762.165; 36.95968; 29.74401; 1173.358; 2000; 1855.928; 521.0976; 36.40826; 35.50398;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.247317; 1.284166; 1.001012; 1.803221; 2.053632; 1.00702
## Individual models saved as: mean_repo_rate_nst_run-tree74_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree74_conv.rda
##
## 2019-05-27 - 16:12:03: MCMCglmm performed on tree 75
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 918.8739; 43.03037; 66.59666; 1132.974; 2000; 2000; 340.9058; 37.51612; 26.19221; 998.49
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.161591; 1.152999; 1.002163; 1.563737; 1.52453; 1.009911
## Individual models saved as: mean_repo_rate_nst_run-tree75_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree75_conv.rda
##
## 2019-05-27 - 16:12:04: MCMCglmm performed on tree 76
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 849.0455; 25.76586; 32.87944; 1129.561; 2000; 2000; 429.5346; 52.88813; 34.70475; 1105.25
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.007822; 1.006622; 1.001627; 1.033342; 1.018744; 1.004986
## Individual models saved as: mean_repo_rate_nst_run-tree76_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree76_conv.rda
##
## 2019-05-27 - 16:12:05: MCMCglmm performed on tree 77
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1897.286; 2000; 738.7096; 46.58705; 64.1177; 1033.309; 2143.071; 2000; 501.2987; 48.8447; 45.24617; 9
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.080161; 1.062478; 0.9995843; 1.304441; 1.231255; 0.9998461
## Individual models saved as: mean_repo_rate_nst_run-tree77_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree77_conv.rda
##
## 2019-05-27 - 16:12:05: MCMCglmm performed on tree 78
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 1482.831; 568.9668; 75.33529; 52.65882; 1053.278; 2000; 2000; 895.5125; 36.50135; 31.05827; 125
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.596737; 1.338996; 0.9999081; 2.77909; 2.070018; 1.00013
## Individual models saved as: mean_repo_rate_nst_run-tree78_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree78_conv.rda
##
## 2019-05-27 - 16:12:06: MCMCglmm performed on tree 79
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 616.6633; 68.75283; 33.31102; 1101.762; 2000; 2000; 318.7762; 88.23894; 46.53793; 1128.84
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.013949; 1.021368; 1.006283; 1.066723; 1.094567; 1.01933
## Individual models saved as: mean_repo_rate_nst_run-tree79_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree79_conv.rda
##
## 2019-05-27 - 16:12:07: MCMCglmm performed on tree 80
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1811.327; 1719.217; 230.7033; 48.01794; 14.74276; 1142.188; 2000; 1856.495; 808.8049; 98.42384; 91.75
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.490023; 1.372053; 1.000168; 2.451546; 2.526808; 1.002058
## Individual models saved as: mean_repo_rate_nst_run-tree80_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree80_conv.rda
##
## 2019-05-27 - 16:12:08: MCMCglmm performed on tree 81
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1853.669; 2131.239; 960.5502; 45.40613; 33.73819; 1197.249; 2149.508; 2064.13; 584.0366; 67.49942; 57
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.070348; 1.037159; 1.001166; 1.281847; 1.104538; 1.00238
## Individual models saved as: mean_repo_rate_nst_run-tree81_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree81_conv.rda
##
## 2019-05-27 - 16:12:08: MCMCglmm performed on tree 82
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 432.8234; 61.05505; 40.28948; 1026.569; 2000; 1540.381; 316.2857; 68.51452; 37.14272; 119
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.06577; 1.204182; 1.001379; 1.238297; 1.745055; 1.008499
## Individual models saved as: mean_repo_rate_nst_run-tree82_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree82_conv.rda
##
## 2019-05-27 - 16:12:09: MCMCglmm performed on tree 83
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1849.563; 695.6388; 57.49877; 44.64137; 993.897; 2011.738; 2000; 1088.805; 53.614; 66.73572; 10
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.009722; 1.012388; 1.001988; 1.020323; 1.060127; 1.011814
```

```
## Individual models saved as: mean_repo_rate_nst_run-tree83_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree83_conv.rda
##
## 2019-05-27 - 16:12:10: MCMCglmm performed on tree 84
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2175.452; 301.959; 65.97912; 19.56697; 958.1326; 2000; 1746.064; 343.4656; 72.90157; 61.76554;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: TRUE
## 1.020034; 1.004365; 0.9998548; 1.028437; 1.00495; 0.9999835
## Individual models saved as: mean_repo_rate_nst_run-tree84_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree84_conv.rda
##
## 2019-05-27 - 16:12:11: MCMCglmm performed on tree 85
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 472.3664; 21.82628; 17.47305; 1032.807; 2000; 2000; 521.3569; 51.81614; 52.97357; 1164.1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.029865; 1.092835; 1.001256; 1.03808; 1.326938; 1.003124
## Individual models saved as: mean_repo_rate_nst_run-tree85_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree85_conv.rda
##
## 2019-05-27 - 16:12:12: MCMCglmm performed on tree 86
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 732.65; 50.23902; 65.20775; 1100.99; 2220.358; 2000; 570.3989; 56.92459; 57.35027; 958.2
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.317205; 1.219948; 1.003703; 1.990645; 1.805735; 1.010494
## Individual models saved as: mean_repo_rate_nst_run-tree86_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree86_conv.rda
##
## 2019-05-27 - 16:12:12: MCMCglmm performed on tree 87
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 420.9777; 57.21248; 14.24549; 1008.3; 2170.532; 2000; 457.7273; 33.90025; 24.95576; 1021
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.260682; 1.47494; 1.000158; 1.838716; 2.759031; 1.000902
## Individual models saved as: mean_repo_rate_nst_run-tree87_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree87_conv.rda
##
## 2019-05-27 - 16:12:13: MCMCglmm performed on tree 88
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1917.433; 2000; 262.0868; 40.76541; 30.2678; 1044.164; 2000; 1766.173; 1215.118; 47.74946; 28.58648;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.110206; 1.190287; 1.000426; 1.410346; 1.655766; 1.002716
## Individual models saved as: mean_repo_rate_nst_run-tree88_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree88_conv.rda
##
## 2019-05-27 - 16:12:14: MCMCglmm performed on tree 89
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2173.124; 411.9297; 64.07757; 29.69557; 1272.143; 1744.501; 1712.877; 300.237; 30.66547; 12.83
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.077021; 1.084856; 1.002445; 1.304181; 1.313731; 1.003581
## Individual models saved as: mean_repo_rate_nst_run-tree89_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree89_conv.rda
##
## 2019-05-27 - 16:12:15: MCMCglmm performed on tree 90
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 447.8558; 59.87901; 45.21701; 1058.489; 2000; 2000; 639.1136; 49.7596; 27.03197; 1077.00
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.001293; 1.019576; 1.001004; 1.001299; 1.070679; 1.003642
## Individual models saved as: mean_repo_rate_nst_run-tree90_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree90_conv.rda
##
## 2019-05-27 - 16:12:15: MCMCglmm performed on tree 91
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1873.605; 748.0675; 67.15111; 61.73937; 1050.571; 1959.589; 2000; 345.5685; 42.75262; 15.98948
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.064539; 1.097242; 1.001683; 1.075973; 1.229182; 1.00962
## Individual models saved as: mean_repo_rate_nst_run-tree91_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree91_conv.rda
##
## 2019-05-27 - 16:12:16: MCMCglmm performed on tree 92
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1483.855; 1807.751; 321.8069; 31.4818; 13.40145; 1157.775; 2000; 2000; 302.8833; 49.67372; 30.51649;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.129284; 1.202893; 1.004606; 1.468503; 1.727671; 1.013542
## Individual models saved as: mean_repo_rate_nst_run-tree92_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree92_conv.rda
##
## 2019-05-27 - 16:12:17: MCMCglmm performed on tree 93
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 519.0234; 58.86048; 33.55891; 1100.591; 2000; 2000; 818.7293; 79.35102; 67.17229; 1083.09
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.023094; 1.035351; 1.002354; 1.100527; 1.072335; 1.006107
## Individual models saved as: mean_repo_rate_nst_run-tree93_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree93_conv.rda
##
## 2019-05-27 - 16:12:18: MCMCglmm performed on tree 94
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1641.828; 637.7413; 74.95901; 49.1324; 1112.768; 2000; 2000; 332.1233; 41.62965; 28.96158; 103
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: FALSE
## 1.279586; 1.210258; 1.002346; 1.89832; 1.778404; 1.00236
## Individual models saved as: mean_repo_rate_nst_run-tree94_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree94_conv.rda
##
## 2019-05-27 - 16:12:19: MCMCglmm performed on tree 95
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1738.242; 1089.03; 106.3137; 44.40273; 1074.872; 2000; 1399.443; 440.6455; 45.28899; 54.62167;
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.026974; 1.079665; 1.000295; 1.038685; 1.29714; 1.00075
## Individual models saved as: mean_repo_rate_nst_run-tree95_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree95_conv.rda
##
## 2019-05-27 - 16:12:19: MCMCglmm performed on tree 96
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1752.93; 450.0272; 57.35035; 32.99934; 1054.784; 2194.219; 2000; 369.4775; 55.50051; 31.33171;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.060057; 1.300583; 1.00512; 1.244261; 2.079156; 1.026705
## Individual models saved as: mean_repo_rate_nst_run-tree96_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree96_conv.rda
##
## 2019-05-27 - 16:12:20: MCMCglmm performed on tree 97
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2017.635; 1639.783; 745.0059; 54.64954; 32.28316; 1135.044; 2000; 1501.127; 338.3675; 21.69392; 11.19
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.047858; 1.033028; 0.9999197; 1.170315; 1.068236; 1.000547
## Individual models saved as: mean_repo_rate_nst_run-tree97_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree97_conv.rda
##
## 2019-05-27 - 16:12:21: MCMCglmm performed on tree 98
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 738.1796; 53.7683; 52.10192; 1075.065; 2000; 1840.409; 370.6662; 38.67143; 27.33484; 1025
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.017833; 1.008806; 0.9998638; 1.048111; 1.010719; 1.000538
## Individual models saved as: mean_repo_rate_nst_run-tree98_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree98_conv.rda
##
## 2019-05-27 - 16:12:22: MCMCglmm performed on tree 99
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1759.024; 2000; 263.0053; 28.08301; 25.50554; 1006.934; 1941.106; 1643.068; 395.7404; 27.18395; 31.24
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.040489; 1.004521; 1.000605; 1.141233; 1.010495; 1.005005
## Individual models saved as: mean_repo_rate_nst_run-tree99_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree99_conv.rda
```

```
##
## 2019-05-27 - 16:12:22: MCMCglmm performed on tree 100
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1854.048; 2000; 579.4329; 45.79703; 51.122; 1065.67; 1730.697; 1473.036; 668.7415; 67.6474; 25.03182
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.029343; 1.057854; 1.00323; 1.127578; 1.206409; 1.009886
## Individual models saved as: mean_repo_rate_nst_run-tree100_chain*.rda
## Convergence diagnosis saved as: mean_repo_rate_nst_run-tree100_conv.rda
##
## 2019-05-27 - 16:12:22: MCMCglmm successfully performed on 100 trees.
## Total execution time: 1.286722 mins.
## Use read.mulTree() to read the data as 'mulTree' data.
## Use summary.mulTree() and plot.mulTree() for plotting or summarizing the 'mulTree' data.
```

Generation Time

```
formula_gen_time <- gen_time ~ mass_g + matrix_size

mulTree(mulTree.data = pop_multree,
        formula = formula_gen_time,
        priors = prior,
        parameters = parameters,
        output = "gen_time_run",
        ESS = 1000,
        chains = 2)
```

```
## Output chain name "gen_time_run" already exists!
## Press [enter] if you wish to overwrite the models or [esc] to cancel.
```

```
## Models will be overwritten...
```

```
##
## 2019-05-27 - 16:12:23: MCMCglmm performed on tree 1
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1859.038; 1779.43; 940.318; 127.8383; 21.1833; 1015.988; 2000; 2056.964; 1165.28; 120.9126; 45.57587
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.023396; 1.152019; 1.003441; 1.093393; 1.473068; 1.018856
## Individual models saved as: gen_time_run-tree1_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree1_conv.rda
##
## 2019-05-27 - 16:12:24: MCMCglmm performed on tree 2
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2075.753; 1078.406; 120.2478; 101.4092; 1048.373; 1817.911; 2000; 675.9724; 71.02624; 58.75081
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.076095; 1.265134; 1.000482; 1.301138; 2.126506; 1.000617
## Individual models saved as: gen_time_run-tree2_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree2_conv.rda
```

```
##
## 2019-05-27 - 16:12:25: MCMCglmm performed on tree 3
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1850.593; 1278.97; 103.352; 76.57867; 978.5869; 1984.651; 1501.575; 1139.532; 115.3055; 56.201
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: TRUE
## 1.002781; 1.021333; 0.9995303; 1.002838; 1.06678; 0.9996339
## Individual models saved as: gen_time_run-tree3_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree3_conv.rda
##
## 2019-05-27 - 16:12:26: MCMCglmm performed on tree 4
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2150.739; 2000; 930.1869; 109.8143; 47.80363; 1142.674; 2000; 2000; 1226.528; 105.9889; 48.72847; 10
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.025204; 1.144266; 1.000164; 1.112735; 1.38476; 1.000897
## Individual models saved as: gen_time_run-tree4_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree4_conv.rda
##
## 2019-05-27 - 16:12:26: MCMCglmm performed on tree 5
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1008.672; 138.7212; 91.21648; 973.4657; 2113.255; 1855.218; 1328.797; 95.67856; 47.79316
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.07695; 1.073545; 0.9996539; 1.300618; 1.192637; 1.000251
## Individual models saved as: gen_time_run-tree5_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree5_conv.rda
##
## 2019-05-27 - 16:12:27: MCMCglmm performed on tree 6
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1825.662; 2000; 1309.846; 135.5789; 152.5025; 1058.976; 2000; 1863.909; 1218.729; 119.0789; 128.732;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.009978; 1.013668; 1.000533; 1.018012; 1.02069; 1.00379
## Individual models saved as: gen_time_run-tree6_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree6_conv.rda
##
## 2019-05-27 - 16:12:28: MCMCglmm performed on tree 7
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2249.357; 2000; 1201.199; 94.19898; 68.42234; 1005.158; 1839.035; 2000; 1309.376; 77.23822; 72.57049
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.004186; 1.004655; 1.000553; 1.017048; 1.023377; 1.00371
## Individual models saved as: gen_time_run-tree7_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree7_conv.rda
##
## 2019-05-27 - 16:12:29: MCMCglmm performed on tree 8
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 1836.184; 1337.055; 118.5586; 82.63778; 1103.416; 2000; 2000; 820.3167; 124.9372; 99.68718; 104
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.019091; 1.005227; 1.001329; 1.089343; 1.027089; 1.007356
## Individual models saved as: gen_time_run-tree8_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree8_conv.rda
##
## 2019-05-27 - 16:12:29: MCMCglmm performed on tree 9
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1982.873; 2000; 1119.808; 129.3536; 24.07692; 1087.277; 2000; 2000; 1326.436; 148.4637; 31.78907; 108
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.005855; 1.085176; 1.001522; 1.020569; 1.232398; 1.001634
## Individual models saved as: gen_time_run-tree9_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree9_conv.rda
##
## 2019-05-27 - 16:12:30: MCMCglmm performed on tree 10
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1818.764; 2492.457; 684.6998; 120.1139; 92.44375; 1163.993; 2000; 2000; 1398.036; 151.3231; 89.13036
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.00969; 1.002107; 0.9999669; 1.04772; 1.010957; 1.000732
## Individual models saved as: gen_time_run-tree10_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree10_conv.rda
##
## 2019-05-27 - 16:12:31: MCMCglmm performed on tree 11
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1636.387; 2000; 691.4428; 101.132; 38.77049; 1028.148; 2000; 2000; 738.2333; 104.875; 96.74394; 1166
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.034717; 1.208206; 1.004218; 1.149741; 1.723545; 1.006657
## Individual models saved as: gen_time_run-tree11_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree11_conv.rda
##
## 2019-05-27 - 16:12:32: MCMCglmm performed on tree 12
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1912.905; 2000; 857.3135; 100.5721; 77.4001; 1223.144; 2102.819; 1597.885; 834.1829; 95.34516; 44.049
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.001853; 1.029495; 1.00084; 1.002161; 1.131664; 1.005686
## Individual models saved as: gen_time_run-tree12_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree12_conv.rda
##
## 2019-05-27 - 16:12:32: MCMCglmm performed on tree 13
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1705.639; 915.9679; 108.3617; 91.36812; 1022.983; 2000; 1633.857; 737.6075; 94.83184; 60.1867;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.106996; 1.091865; 1.000201; 1.39677; 1.152836; 1.00297
```

```
## Individual models saved as: gen_time_run-tree13_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree13_conv.rda
##
## 2019-05-27 - 16:12:33: MCMCglmm performed on tree 14
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 993.1375; 110.494; 37.3626; 1061.771; 2000; 2000; 1474.122; 134.4615; 77.43322; 1148.804
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.032256; 1.034068; 1.000473; 1.137296; 1.062061; 1.004344
## Individual models saved as: gen_time_run-tree14_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree14_conv.rda
##
## 2019-05-27 - 16:12:34: MCMCglmm performed on tree 15
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1476.127; 104.205; 82.26008; 938.9872; 2000; 2000; 1582.034; 113.4317; 83.2233; 1069.901
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.03166; 1.031355; 1.000115; 1.102268; 1.092454; 1.002494
## Individual models saved as: gen_time_run-tree15_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree15_conv.rda
##
## 2019-05-27 - 16:12:35: MCMCglmm performed on tree 16
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1850.456; 676.0015; 82.9497; 87.15814; 1046.855; 2155.702; 2000; 838.2762; 114.5749; 80.62854;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.017173; 1.003016; 0.999516; 1.067244; 1.012455; 0.9995805
## Individual models saved as: gen_time_run-tree16_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree16_conv.rda
##
## 2019-05-27 - 16:12:36: MCMCglmm performed on tree 17
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1063.195; 110.3181; 90.22597; 1081.887; 2000; 2000; 1165.002; 83.87251; 120.7656; 1066.5
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.002626; 1.19152; 1.001311; 1.007548; 1.639289; 1.005014
## Individual models saved as: gen_time_run-tree17_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree17_conv.rda
##
## 2019-05-27 - 16:12:36: MCMCglmm performed on tree 18
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1769.392; 1800.091; 943.8028; 104.1407; 86.51057; 942.0195; 2000; 1640.727; 1588.615; 109.2656; 85.5
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 100
## All levels converged < 1.1: FALSE
## 1.033801; 1.021296; 1.000092; 1.148508; 1.068807; 1.000117
## Individual models saved as: gen_time_run-tree18_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree18_conv.rda
##
## 2019-05-27 - 16:12:37: MCMCglmm performed on tree 19
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 846.1668; 89.97088; 62.63973; 873.2263; 2000; 2100.548; 1541.005; 93.26961; 39.50476; 113
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.069615; 1.017326; 1.00573; 1.252849; 1.050428; 1.019975
## Individual models saved as: gen_time_run-tree19_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree19_conv.rda
##
## 2019-05-27 - 16:12:38: MCMCglmm performed on tree 20
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1863.742; 850.8434; 74.76169; 91.33832; 1090.487; 2000; 459.7978; 539.2411; 22.44055; 3.552059
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.094856; 1.120762; 1.000013; 1.358975; 1.434034; 1.001799
## Individual models saved as: gen_time_run-tree20_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree20_conv.rda
##
## 2019-05-27 - 16:12:39: MCMCglmm performed on tree 21
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2176.313; 2000; 694.9338; 81.43212; 47.4743; 968.1814; 2000; 2021.375; 782.7903; 87.74876; 24.39657;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: TRUE
## 1.004065; 1.020158; 1.000481; 1.004499; 1.022298; 1.001464
## Individual models saved as: gen_time_run-tree21_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree21_conv.rda
##
## 2019-05-27 - 16:12:39: MCMCglmm performed on tree 22
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 539.9494; 82.19391; 61.34858; 994.7818; 2000; 2000; 1208.024; 115.9919; 107.2543; 987.201
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species, C2.VC
## All levels converged < 1.1: FALSE
## 1.009126; 1.090987; 0.9995361; 1.034643; 1.207984; 0.9996724
## Individual models saved as: gen_time_run-tree22_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree22_conv.rda
##
## 2019-05-27 - 16:12:40: MCMCglmm performed on tree 23
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1384.922; 116.2765; 48.47799; 1116.634; 2000; 2000; 1419.204; 95.19254; 90.27083; 1134.85
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.039112; 1.000574; 1.000647; 1.15177; 1.004864; 1.004278
## Individual models saved as: gen_time_run-tree23_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree23_conv.rda
##
## 2019-05-27 - 16:12:41: MCMCglmm performed on tree 24
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1965.466; 1368.049; 111.218; 121.7351; 1038.074; 2170.241; 1607.669; 1197.697; 128.6646; 75.430
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: TRUE
## 1.004346; 1.017106; 0.9999847; 1.016552; 1.019771; 1.000795
## Individual models saved as: gen_time_run-tree24_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree24_conv.rda
##
## 2019-05-27 - 16:12:42: MCMCglmm performed on tree 25
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2219.905; 1178.258; 111.7579; 51.99327; 1032.998; 1804.415; 1710.91; 1431.533; 115.2982; 92.627
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 0.9996033; 1.076198; 1.005325; 0.9999116; 1.220117; 1.010123
## Individual models saved as: gen_time_run-tree25_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree25_conv.rda
##
## 2019-05-27 - 16:12:43: MCMCglmm performed on tree 26
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1529.229; 112.9398; 116.6015; 1077.172; 2000; 2000; 947.1876; 88.768; 43.12654; 1084.291
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.049562; 1.05107; 1.005748; 1.169838; 1.163486; 1.019339
## Individual models saved as: gen_time_run-tree26_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree26_conv.rda
##
## 2019-05-27 - 16:12:43: MCMCglmm performed on tree 27
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 682.6648; 91.49236; 48.2933; 1113.963; 1850.88; 1856.746; 1196.486; 107.5373; 30.13002;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.022505; 1.105871; 1.003301; 1.038923; 1.268523; 1.017179
## Individual models saved as: gen_time_run-tree27_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree27_conv.rda
##
## 2019-05-27 - 16:12:44: MCMCglmm performed on tree 28
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1904.683; 2000; 654.8856; 114.5496; 74.76363; 1114.426; 2000; 1697.071; 1152.106; 146.1818; 58.13143
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.02575; 1.109056; 0.9995945; 1.117373; 1.349747; 0.9998696
## Individual models saved as: gen_time_run-tree28_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree28_conv.rda
##
## 2019-05-27 - 16:12:45: MCMCglmm performed on tree 29
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1214.748; 111.1774; 63.30701; 835.3819; 2000; 1786.348; 878.0532; 116.4333; 91.60308; 10
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 100
## All levels converged < 1.1: FALSE
## 1.793775; 1.353555; 1.000904; 3.252053; 2.705485; 1.00171
## Individual models saved as: gen_time_run-tree29_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree29_conv.rda
```

```
##
## 2019-05-27 - 16:12:46: MCMCglmm performed on tree 30
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2389.498; 1314.352; 137.6671; 96.11174; 1086.052; 1795.735; 1698.09; 581.4515; 103.0302; 75.963
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.080577; 1.102612; 1.000425; 1.314421; 1.286324; 1.003625
## Individual models saved as: gen_time_run-tree30_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree30_conv.rda
##
## 2019-05-27 - 16:12:46: MCMCglmm performed on tree 31
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1903.287; 1310.874; 127.6277; 73.35103; 1132.755; 2000; 2000; 1219.878; 117.7442; 64.77407; 100
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.044449; 1.031213; 1.000148; 1.186981; 1.093673; 1.002001
## Individual models saved as: gen_time_run-tree31_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree31_conv.rda
##
## 2019-05-27 - 16:12:47: MCMCglmm performed on tree 32
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 710.205; 66.17841; 79.06691; 1056.903; 2000; 2000; 1048.894; 107.1318; 113.7175; 1322.564
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.031568; 1.031429; 0.9995188; 1.12607; 1.135425; 0.9995858
## Individual models saved as: gen_time_run-tree32_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree32_conv.rda
##
## 2019-05-27 - 16:12:48: MCMCglmm performed on tree 33
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1248.491; 106.9087; 50.67716; 1039.648; 2000; 2000; 1018.987; 82.19325; 16.49885; 902.743
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.046582; 1.270258; 1.001525; 1.144195; 2.090123; 1.009079
## Individual models saved as: gen_time_run-tree33_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree33_conv.rda
##
## 2019-05-27 - 16:12:49: MCMCglmm performed on tree 34
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1355.192; 119.3567; 72.31464; 1014.133; 2000; 2144.609; 834.3621; 116.5337; 119.1792; 110
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.01254; 1.089266; 1.000903; 1.012565; 1.270361; 1.005336
## Individual models saved as: gen_time_run-tree34_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree34_conv.rda
##
## 2019-05-27 - 16:12:50: MCMCglmm performed on tree 35
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2195.842; 1841.864; 1014.069; 98.97221; 111.901; 1059.775; 2000; 2000; 1090.211; 102.4417; 108.1161;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.000149; 1.103464; 1.001291; 1.000195; 1.321801; 1.00607
## Individual models saved as: gen_time_run-tree35_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree35_conv.rda
##
## 2019-05-27 - 16:12:50: MCMCglmm performed on tree 36
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1512.063; 104.8429; 122.3836; 1173.499; 2000; 1806.678; 1054.769; 86.01166; 82.31763; 104
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.081185; 1.024061; 1.003804; 1.302202; 1.095112; 1.019763
## Individual models saved as: gen_time_run-tree36_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree36_conv.rda
##
## 2019-05-27 - 16:12:51: MCMCglmm performed on tree 37
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1159.847; 111.1317; 81.78228; 1082.695; 2000; 2000; 1176.971; 128.2841; 73.33937; 973.383
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.00496; 1.052529; 1.001178; 1.005704; 1.183222; 1.003328
## Individual models saved as: gen_time_run-tree37_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree37_conv.rda
##
## 2019-05-27 - 16:12:52: MCMCglmm performed on tree 38
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1898.876; 1755.752; 84.6624; 68.92069; 1065.692; 2204.087; 1785.425; 710.7487; 69.42534; 50.200
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.034579; 1.184327; 1.003206; 1.135283; 1.660277; 1.017589
## Individual models saved as: gen_time_run-tree38_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree38_conv.rda
##
## 2019-05-27 - 16:12:53: MCMCglmm performed on tree 39
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 973.2663; 79.57483; 44.98462; 1014.781; 2000; 2000; 916.0086; 107.1329; 66.29447; 969.771
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.011745; 1.048191; 1.000251; 1.014852; 1.114935; 1.000385
## Individual models saved as: gen_time_run-tree39_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree39_conv.rda
##
## 2019-05-27 - 16:12:53: MCMCglmm performed on tree 40
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 580.4912; 100.506; 128.7332; 1080.492; 2000; 2000; 930.3182; 104.9762; 83.20012; 1049.184
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.007552; 1.086652; 1.000713; 1.030926; 1.311197; 1.005311
```

```
## Individual models saved as: gen_time_run-tree40_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree40_conv.rda
##
## 2019-05-27 - 16:12:54: MCMCglmm performed on tree 41
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1177.417; 104.4069; 92.21027; 915.8185; 2000; 2000; 917.0374; 105.566; 56.24786; 988.75
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.V
## All levels converged < 1.1: FALSE
## 1.020521; 1.175397; 1.000673; 1.090748; 1.6044; 1.001381
## Individual models saved as: gen_time_run-tree41_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree41_conv.rda
##
## 2019-05-27 - 16:12:55: MCMCglmm performed on tree 42
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2150.212; 2000; 947.0634; 105.8007; 38.79989; 1067.59; 2000; 2000; 647.6286; 76.00299; 113.6481; 995
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.121444; 1.035475; 1.000884; 1.444816; 1.065002; 1.00224
## Individual models saved as: gen_time_run-tree42_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree42_conv.rda
##
## 2019-05-27 - 16:12:56: MCMCglmm performed on tree 43
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 609.6762; 106.685; 69.43593; 1021.286; 1589.845; 2000; 716.0664; 107.4291; 82.74849; 114
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.023689; 1.091009; 1.000458; 1.105073; 1.197522; 1.003513
## Individual models saved as: gen_time_run-tree43_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree43_conv.rda
##
## 2019-05-27 - 16:12:56: MCMCglmm performed on tree 44
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1833.45; 1117.247; 123.2985; 51.44157; 1108.057; 2142.17; 2000; 1125.067; 116.1831; 59.98743;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.023161; 1.010427; 1.005887; 1.104997; 1.013237; 1.008401
## Individual models saved as: gen_time_run-tree44_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree44_conv.rda
##
## 2019-05-27 - 16:12:57: MCMCglmm performed on tree 45
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1611.011; 2000; 1552.894; 118.818; 31.02892; 935.4335; 1865.856; 2000; 1192.804; 124.356; 84.50323;
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.01554; 1.121123; 1.002319; 1.073669; 1.372516; 1.004279
## Individual models saved as: gen_time_run-tree45_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree45_conv.rda
##
## 2019-05-27 - 16:12:58: MCMCglmm performed on tree 46
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2394.776; 1262.137; 100.2447; 57.92967; 1037.5; 2000; 2000; 1157.117; 104.461; 99.2901; 1031.35
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.092624; 1.079308; 0.9995617; 1.347821; 1.26461; 0.9996407
## Individual models saved as: gen_time_run-tree46_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree46_conv.rda
##
## 2019-05-27 - 16:12:59: MCMCglmm performed on tree 47
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1726.866; 997.0376; 107.5995; 119.6504; 1058.049; 2000; 2000; 889.7739; 91.00182; 22.84066; 10
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.032441; 1.062112; 1.002129; 1.120282; 1.102135; 1.004019
## Individual models saved as: gen_time_run-tree47_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree47_conv.rda
##
## 2019-05-27 - 16:13:00: MCMCglmm performed on tree 48
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1521.953; 2000; 953.0392; 117.2892; 65.94247; 1150.93; 2000; 1846.571; 1079.58; 117.5913; 31.74685; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.018435; 1.21131; 1.000946; 1.037954; 1.736328; 1.00527
## Individual models saved as: gen_time_run-tree48_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree48_conv.rda
##
## 2019-05-27 - 16:13:00: MCMCglmm performed on tree 49
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1053.572; 119.259; 76.22371; 1101.772; 2000; 1811.696; 1623.724; 102.404; 119.9072; 1081
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.068246; 1.034603; 1.000461; 1.223565; 1.072578; 1.000642
## Individual models saved as: gen_time_run-tree49_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree49_conv.rda
##
## 2019-05-27 - 16:13:01: MCMCglmm performed on tree 50
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2159.094; 1914.467; 1539.379; 109.0841; 84.72669; 1035.549; 2000; 1701.134; 1013.611; 106.7136; 122.3
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.025714; 1.170972; 1.002894; 1.103855; 1.582208; 1.016207
## Individual models saved as: gen_time_run-tree50_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree50_conv.rda
##
## 2019-05-27 - 16:13:02: MCMCglmm performed on tree 51
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2145.679; 904.8174; 84.15949; 47.85482; 1061.269; 1846.7; 2000; 737.1011; 104.1946; 89.35851; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: FALSE
## 1.011378; 1.216403; 1.000424; 1.014055; 1.738638; 1.002047
## Individual models saved as: gen_time_run-tree51_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree51_conv.rda
##
## 2019-05-27 - 16:13:03: MCMCglmm performed on tree 52
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1999.458; 2151.621; 1064.139; 110.7867; 84.62556; 1078.454; 2000; 2000; 889.9998; 97.79891; 86.65666
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.209535; 1.075342; 1.000301; 1.699339; 1.16072; 1.003207
## Individual models saved as: gen_time_run-tree52_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree52_conv.rda
##
## 2019-05-27 - 16:13:03: MCMCglmm performed on tree 53
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1005.624; 126.9634; 91.81138; 1096.15; 1924.219; 2000; 988.6856; 99.37169; 111.9186; 112
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.017453; 1.260581; 1.003147; 1.034201; 1.965455; 1.016502
## Individual models saved as: gen_time_run-tree53_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree53_conv.rda
##
## 2019-05-27 - 16:13:04: MCMCglmm performed on tree 54
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2538.475; 1363.639; 120.802; 105.3215; 1161.971; 2000; 2000; 975.1938; 113.2615; 71.16691; 109
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.002097; 1.204076; 1.000824; 1.002987; 1.748771; 1.002378
## Individual models saved as: gen_time_run-tree54_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree54_conv.rda
##
## 2019-05-27 - 16:13:05: MCMCglmm performed on tree 55
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1270.759; 926.8621; 119.1497; 43.78579; 1133.717; 2000; 1708.078; 893.9882; 84.16765; 38.78123
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.011624; 1.025401; 0.9995571; 1.044247; 1.085148; 0.9995833
## Individual models saved as: gen_time_run-tree55_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree55_conv.rda
##
## 2019-05-27 - 16:13:06: MCMCglmm performed on tree 56
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2155.899; 2000; 1121.421; 103.7819; 101.1256; 1089.681; 2299.901; 1576.4; 704.0395; 96.60792; 105.07
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.015074; 1.069079; 1.000058; 1.072259; 1.173937; 1.001108
## Individual models saved as: gen_time_run-tree56_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree56_conv.rda
```

```
##
## 2019-05-27 - 16:13:07: MCMCglmm performed on tree 57
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2140.935; 1861.047; 954.4404; 97.11029; 65.6907; 1121.194; 2000; 2000; 910.6031; 100.2127; 92.5615;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.002827; 1.099213; 1.004778; 1.003539; 1.220736; 1.00788
## Individual models saved as: gen_time_run-tree57_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree57_conv.rda
##
## 2019-05-27 - 16:13:07: MCMCglmm performed on tree 58
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2144.038; 2000; 1060.383; 89.31138; 118.8206; 1084.469; 1867.225; 2000; 737.2935; 84.80402; 31.63656
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.005511; 1.012743; 1.003309; 1.021098; 1.060146; 1.003457
## Individual models saved as: gen_time_run-tree58_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree58_conv.rda
##
## 2019-05-27 - 16:13:08: MCMCglmm performed on tree 59
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1850.281; 1161.721; 115.8411; 51.08739; 1111.694; 2000; 2000; 1421.206; 99.28075; 60.95998; 104
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.0277; 1.112419; 1.000423; 1.123691; 1.36962; 1.003879
## Individual models saved as: gen_time_run-tree59_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree59_conv.rda
##
## 2019-05-27 - 16:13:09: MCMCglmm performed on tree 60
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1599.239; 1944.65; 956.6867; 112.2493; 83.04491; 1047.094; 2000; 2000; 1013.264; 101.523; 108.9158;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.032772; 1.026388; 1.000486; 1.10182; 1.035489; 1.003486
## Individual models saved as: gen_time_run-tree60_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree60_conv.rda
##
## 2019-05-27 - 16:13:10: MCMCglmm performed on tree 61
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2058.679; 1099.383; 95.67416; 38.56031; 848.5631; 2131.251; 2000; 1147.483; 111.3443; 33.44622
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.005343; 1.068557; 1.003282; 1.009611; 1.178891; 1.003509
## Individual models saved as: gen_time_run-tree61_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree61_conv.rda
##
## 2019-05-27 - 16:13:10: MCMCglmm performed on tree 62
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 2000; 695.5776; 103.2352; 74.92006; 1046.84; 1781.674; 2000; 1113.654; 90.46333; 82.74675; 933
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 100
## All levels converged < 1.1: FALSE
## 1.022985; 1.169967; 1.000979; 1.079527; 1.596242; 1.006493
## Individual models saved as: gen_time_run-tree62_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree62_conv.rda
##
## 2019-05-27 - 16:13:11: MCMCglmm performed on tree 63
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2133.728; 1265.171; 105.3856; 93.75486; 1102.758; 2000; 2000; 1053.445; 114.2597; 133.8255; 94
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: TRUE
## 1.006409; 1.003567; 1.010616; 1.029096; 1.017957; 1.037625
## Individual models saved as: gen_time_run-tree63_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree63_conv.rda
##
## 2019-05-27 - 16:13:12: MCMCglmm performed on tree 64
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 718.2647; 108.688; 100.6777; 1060.244; 2000; 2000; 852.6502; 96.62647; 94.48; 1044.435
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.005526; 1.046492; 1.003443; 1.006817; 1.185746; 1.003974
## Individual models saved as: gen_time_run-tree64_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree64_conv.rda
##
## 2019-05-27 - 16:13:13: MCMCglmm performed on tree 65
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1827.017; 1608.981; 1066.97; 110.2706; 92.91239; 1009.72; 1617.669; 2000; 699.6935; 97.46863; 40.941
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.010228; 1.007473; 1.01254; 1.048631; 1.012041; 1.055428
## Individual models saved as: gen_time_run-tree65_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree65_conv.rda
##
## 2019-05-27 - 16:13:13: MCMCglmm performed on tree 66
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1942.74; 1467.38; 122.5822; 72.78553; 1091.021; 2000; 2000; 1327.874; 137.6545; 54.56305; 1181
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.012024; 1.003428; 1.001745; 1.057737; 1.017352; 1.009926
## Individual models saved as: gen_time_run-tree66_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree66_conv.rda
##
## 2019-05-27 - 16:13:14: MCMCglmm performed on tree 67
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 681.4391; 108.4865; 63.66738; 1220.416; 1829.056; 1659.476; 733.4959; 98.57448; 53.61787
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.105377; 1.386228; 1.002019; 1.394616; 2.743629; 1.011636
```

```
## Individual models saved as: gen_time_run-tree67_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree67_conv.rda
##
## 2019-05-27 - 16:13:15: MCMCglmm performed on tree 68
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1210.652; 98.12105; 37.2347; 1083.196; 2000; 2000; 1230.762; 107.6359; 43.7907; 1040.246
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.186875; 1.12424; 0.9997597; 1.638988; 1.343713; 0.9997776
## Individual models saved as: gen_time_run-tree68_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree68_conv.rda
##
## 2019-05-27 - 16:13:16: MCMCglmm performed on tree 69
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1132.576; 114.5094; 67.32399; 1027.256; 2000; 1829.845; 1293.676; 133.5242; 96.5186; 999
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.021601; 1.036204; 1.008834; 1.100254; 1.081277; 1.035397
## Individual models saved as: gen_time_run-tree69_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree69_conv.rda
##
## 2019-05-27 - 16:13:17: MCMCglmm performed on tree 70
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 914.6862; 108.6359; 107.3202; 1108.181; 2000; 2000; 1049.957; 91.59986; 37.22358; 983.535
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.013366; 1.054961; 0.9997547; 1.038512; 1.121152; 0.9998812
## Individual models saved as: gen_time_run-tree70_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree70_conv.rda
##
## 2019-05-27 - 16:13:17: MCMCglmm performed on tree 71
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 839.2213; 102.6947; 56.66861; 1036.175; 1498.396; 1848.389; 1035.611; 118.2709; 138.5498
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.019883; 1.025919; 0.9995966; 1.063007; 1.101611; 0.9996014
## Individual models saved as: gen_time_run-tree71_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree71_conv.rda
##
## 2019-05-27 - 16:13:18: MCMCglmm performed on tree 72
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2338.505; 2000; 927.0171; 103.0755; 49.60309; 1090.081; 2191.246; 2000; 668.844; 59.52531; 22.89557;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.156841; 1.388411; 1.006169; 1.554895; 2.80118; 1.007644
## Individual models saved as: gen_time_run-tree72_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree72_conv.rda
##
## 2019-05-27 - 16:13:19: MCMCglmm performed on tree 73
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 897.5546; 117.9472; 75.86491; 1116.505; 2000; 2000; 923.9534; 110.8054; 60.53254; 1075.23
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.016874; 1.058089; 1.004521; 1.017913; 1.141638; 1.024065
## Individual models saved as: gen_time_run-tree73_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree73_conv.rda
##
## 2019-05-27 - 16:13:20: MCMCglmm performed on tree 74
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 585.4124; 101.2008; 89.20845; 884.2919; 2000; 1752.683; 817.301; 124.3843; 31.02369; 109
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.063285; 1.104636; 1.008018; 1.251412; 1.342121; 1.033694
## Individual models saved as: gen_time_run-tree74_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree74_conv.rda
##
## 2019-05-27 - 16:13:20: MCMCglmm performed on tree 75
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1647.398; 1716.984; 667.7958; 102.729; 43.4052; 1127.435; 1665.655; 1540.926; 896.3382; 83.57328; 60
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.008623; 1.062325; 1.000131; 1.016548; 1.197871; 1.002614
## Individual models saved as: gen_time_run-tree75_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree75_conv.rda
##
## 2019-05-27 - 16:13:21: MCMCglmm performed on tree 76
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1289.47; 110.5636; 83.65923; 1101.624; 2000; 1774.466; 1700.029; 109.6093; 100.8884; 103
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.010005; 1.048687; 1.002158; 1.010082; 1.182685; 1.002169
## Individual models saved as: gen_time_run-tree76_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree76_conv.rda
##
## 2019-05-27 - 16:13:22: MCMCglmm performed on tree 77
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2144.096; 2000; 1155.649; 114.701; 47.08701; 1091.438; 2000; 2000; 905.8137; 61.44931; 46.39225; 105
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 0.9998556; 1.030634; 1.000109; 1.001256; 1.108069; 1.002515
## Individual models saved as: gen_time_run-tree77_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree77_conv.rda
##
## 2019-05-27 - 16:13:23: MCMCglmm performed on tree 78
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 812.6179; 82.4894; 55.52939; 1067.867; 2000; 1775.975; 1313.931; 98.13609; 72.44111; 111
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: FALSE
## 1.048848; 1.164291; 1.001318; 1.203883; 1.553912; 1.001345
## Individual models saved as: gen_time_run-tree78_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree78_conv.rda
##
## 2019-05-27 - 16:13:23: MCMCglmm performed on tree 79
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 735.9136; 80.17788; 105.1262; 1053.588; 2298.474; 2000; 418.0124; 89.71764; 58.9585; 112
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.13172; 1.057623; 1.001569; 1.475303; 1.219582; 1.009322
## Individual models saved as: gen_time_run-tree79_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree79_conv.rda
##
## 2019-05-27 - 16:13:24: MCMCglmm performed on tree 80
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 885.2204; 108.6932; 63.05324; 1026.41; 2000; 2000; 466.9358; 91.43936; 51.27349; 1006.72
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.070258; 1.000978; 1.000307; 1.26842; 1.003195; 1.001123
## Individual models saved as: gen_time_run-tree80_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree80_conv.rda
##
## 2019-05-27 - 16:13:25: MCMCglmm performed on tree 81
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1479.367; 1134.169; 129.7016; 26.86155; 1099.097; 2000; 2000; 1207.448; 104.3907; 91.18819; 109
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.049405; 1.080035; 1.000424; 1.156611; 1.226437; 1.000612
## Individual models saved as: gen_time_run-tree81_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree81_conv.rda
##
## 2019-05-27 - 16:13:26: MCMCglmm performed on tree 82
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1988.295; 2000; 1122.201; 93.25976; 51.05858; 1128.374; 2000; 2000; 943.5582; 104.2011; 106.7746; 109
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.0006; 1.1443; 1.001335; 1.003598; 1.427273; 1.006918
## Individual models saved as: gen_time_run-tree82_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree82_conv.rda
##
## 2019-05-27 - 16:13:27: MCMCglmm performed on tree 83
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2229.039; 2000; 1101.956; 140.041; 89.08889; 1111.6; 2000; 2000; 1288.637; 72.96509; 90.66897; 1083.5
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.01501; 1.133894; 1.000302; 1.063222; 1.347014; 1.0023
## Individual models saved as: gen_time_run-tree83_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree83_conv.rda
```

```
##
## 2019-05-27 - 16:13:27: MCMCglmm performed on tree 84
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1952.256; 2000; 1441.425; 79.63005; 44.18318; 1051.653; 2000; 1257.095; 1217.984; 100.1943; 66.85666
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.004957; 1.015241; 0.9996349; 1.023384; 1.030993; 0.9997501
## Individual models saved as: gen_time_run-tree84_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree84_conv.rda
##
## 2019-05-27 - 16:13:28: MCMCglmm performed on tree 85
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1019.849; 88.60265; 29.67794; 943.7126; 2000; 1842.63; 685.214; 95.12; 107.0379; 1178.725
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.009172; 1.065891; 1.00586; 1.037142; 1.196485; 1.021001
## Individual models saved as: gen_time_run-tree85_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree85_conv.rda
##
## 2019-05-27 - 16:13:29: MCMCglmm performed on tree 86
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1573.568; 1865.053; 529.5001; 83.57773; 130.6384; 1034.458; 2000; 1465.905; 1002.652; 101.4696; 40.46
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.11372; 1.159892; 1.000491; 1.41557; 1.482495; 1.001867
## Individual models saved as: gen_time_run-tree86_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree86_conv.rda
##
## 2019-05-27 - 16:13:30: MCMCglmm performed on tree 87
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1738.537; 1286.919; 123.3787; 69.13073; 1106.462; 2000; 2000; 985.9559; 114.46; 70.36752; 1043
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.218846; 1.074277; 0.9997647; 1.747307; 1.198924; 1.000249
## Individual models saved as: gen_time_run-tree87_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree87_conv.rda
##
## 2019-05-27 - 16:13:30: MCMCglmm performed on tree 88
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1261.167; 133.804; 144.7436; 1084.278; 2000; 2062.656; 807.5265; 110.5724; 65.32206; 1048
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.025996; 1.010827; 1.000098; 1.054642; 1.011587; 1.000188
## Individual models saved as: gen_time_run-tree88_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree88_conv.rda
##
## 2019-05-27 - 16:13:31: MCMCglmm performed on tree 89
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2254.567; 2000; 1245.36; 119.3294; 122.9706; 1115.016; 2000; 1796.776; 897.6217; 120.8394; 62.32405;
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 100
## All levels converged < 1.1: FALSE
## 1.002608; 1.129146; 1.003163; 1.003985; 1.289903; 1.003836
## Individual models saved as: gen_time_run-tree89_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree89_conv.rda
##
## 2019-05-27 - 16:13:32: MCMCglmm performed on tree 90
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1793.957; 1138.549; 77.93946; 57.12433; 1077.215; 2000; 2000; 905.0081; 110.2057; 63.48023; 84
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 100
## All levels converged < 1.1: TRUE
## 1.015413; 1.037017; 0.9997904; 1.073829; 1.037284; 1.000957
## Individual models saved as: gen_time_run-tree90_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree90_conv.rda
##
## 2019-05-27 - 16:13:33: MCMCglmm performed on tree 91
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2264.373; 2000; 1007.574; 124.3071; 105.4363; 1013.622; 1831.866; 1529.597; 1095.237; 112.2592; 39.75
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.012175; 1.005334; 0.9996746; 1.044059; 1.027886; 1.000342
## Individual models saved as: gen_time_run-tree91_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree91_conv.rda
##
## 2019-05-27 - 16:13:34: MCMCglmm performed on tree 92
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2300.231; 2104.39; 1566.746; 149.268; 94.14053; 1093.235; 2000; 2000; 1056.641; 109.7218; 27.79353; 1
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.017815; 1.512921; 1.004804; 1.058697; 3.955908; 1.024089
## Individual models saved as: gen_time_run-tree92_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree92_conv.rda
##
## 2019-05-27 - 16:13:34: MCMCglmm performed on tree 93
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1073.531; 104.4284; 84.87575; 1035.583; 2000; 1782.376; 754.9748; 114.0615; 43.69453; 109
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.107671; 1.116603; 0.9995401; 1.394718; 1.402107; 0.9995599
## Individual models saved as: gen_time_run-tree93_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree93_conv.rda
##
## 2019-05-27 - 16:13:35: MCMCglmm performed on tree 94
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2088.361; 2000; 977.0093; 127.088; 159.5608; 1180.893; 2000; 2000; 1239.93; 101.9304; 88.96318; 1136
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.077449; 1.084762; 0.9995035; 1.239812; 1.131125; 0.9995126
```

```
## Individual models saved as: gen_time_run-tree94_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree94_conv.rda
##
## 2019-05-27 - 16:13:36: MCMCglmm performed on tree 95
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 775.6081; 98.66794; 46.24925; 814.5692; 2000; 1449.108; 785.3838; 63.09716; 105.2198; 105
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C2.VCV.animal, C
## All levels converged < 1.1: FALSE
## 1.019464; 1.070172; 1.0028; 1.022797; 1.186092; 1.01575
## Individual models saved as: gen_time_run-tree95_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree95_conv.rda
##
## 2019-05-27 - 16:13:37: MCMCglmm performed on tree 96
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1547.856; 1030.181; 121.7117; 93.16933; 1070.088; 2000; 1492.253; 803.1735; 102.411; 139.4991;
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 0.9998827; 1.0299; 0.9995786; 0.9999284; 1.078188; 0.9998942
## Individual models saved as: gen_time_run-tree96_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree96_conv.rda
##
## 2019-05-27 - 16:13:37: MCMCglmm performed on tree 97
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1700.971; 150.0064; 49.36642; 1084.439; 1874.76; 1439.256; 1022.045; 82.09788; 60.26527;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.059652; 1.001962; 1.006272; 1.242043; 1.005994; 1.02719
## Individual models saved as: gen_time_run-tree97_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree97_conv.rda
##
## 2019-05-27 - 16:13:38: MCMCglmm performed on tree 98
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1637.539; 125.3894; 44.97675; 1047.116; 2000; 1863.364; 1238.762; 99.22414; 90.27405; 103
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.021407; 1.327764; 0.9996831; 1.060313; 2.268584; 1.000419
## Individual models saved as: gen_time_run-tree98_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree98_conv.rda
##
## 2019-05-27 - 16:13:39: MCMCglmm performed on tree 99
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1124.213; 140.6266; 125.6718; 1030.466; 2000; 2000; 735.4847; 90.15294; 60.48523; 1175.1
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.05602; 1.010128; 1.000564; 1.200802; 1.03246; 1.004746
## Individual models saved as: gen_time_run-tree99_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree99_conv.rda
##
## 2019-05-27 - 16:13:40: MCMCglmm performed on tree 100
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1537.359; 995.8099; 94.42474; 79.77677; 993.2832; 2000; 2307.172; 1228.128; 102.2518; 92.48702
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species, C2.V
## All levels converged < 1.1: TRUE
## 1.009944; 1.017163; 1.00598; 1.023461; 1.064832; 1.01915
## Individual models saved as: gen_time_run-tree100_chain*.rda
## Convergence diagnosis saved as: gen_time_run-tree100_conv.rda
##
## 2019-05-27 - 16:13:40: MCMCglmm successfully performed on 100 trees.
## Total execution time: 1.290499 mins.
## Use read.mulTree() to read the data as 'mulTree' data.
## Use summary.mulTree() and plot.mulTree() for plotting or summarizing the 'mulTree' data.
```

Life expectancy conditional on reaching sexual maturity

```
formula_M_rep_lif_exp <- M_rep_lif_exp ~ mass_g + matrix_size

mulTree(mulTree.data = pop_multree,
        formula = formula_M_rep_lif_exp,
        priors = prior,
        parameters = parameters,
        output = "M_rep_lif_exp_run",
        ESS = 1000,
        chains = 2)
```

```
## Output chain name "M_rep_lif_exp_run" already exists!
## Press [enter] if you wish to overwrite the models or [esc] to cancel.

## Models will be overwritten...

##
## 2019-05-27 - 16:13:41: MCMCglmm performed on tree 1
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1707.925; 1805.348; 805.4705; 107.5743; 186.6125; 1205.895; 2253.205; 1643.848; 552.2163; 117.3733;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.012641; 1.011348; 1.002384; 1.015997; 1.030604; 1.007865
## Individual models saved as: M_rep_lif_exp_run-tree1_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree1_conv.rda
##
## 2019-05-27 - 16:13:41: MCMCglmm performed on tree 2
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 644.3677; 125.2601; 136.2616; 1149.604; 2000; 2000; 702.0588; 119.0099; 340.7499; 1353.9
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.028007; 1.090522; 1.000566; 1.104787; 1.251045; 1.003615
## Individual models saved as: M_rep_lif_exp_run-tree2_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree2_conv.rda
##
## 2019-05-27 - 16:13:42: MCMCglmm performed on tree 3
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1433.145; 390.2424; 111.8778; 241.3585; 1245.147; 2156.726; 1820.877; 1149.029; 141.1527; 102.
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.044396; 1.018218; 1.001982; 1.189922; 1.062021; 1.010746
## Individual models saved as: M_rep_lif_exp_run-tree3_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree3_conv.rda
##
## 2019-05-27 - 16:13:43: MCMCglmm performed on tree 4
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1362.067; 486.702; 104.5016; 202.359; 1127.681; 1985.46; 1786.409; 1001.48; 132.2914; 115.4329
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.003744; 1.082682; 0.9996858; 1.018089; 1.15567; 1.000354
## Individual models saved as: M_rep_lif_exp_run-tree4_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree4_conv.rda
##
## 2019-05-27 - 16:13:44: MCMCglmm performed on tree 5
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1734.829; 724.5093; 114.2298; 123.1907; 1193.566; 2000; 1966.924; 657.7966; 119.5312; 253.4177
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.000239; 1.095583; 0.9999327; 1.003099; 1.281722; 1.001148
## Individual models saved as: M_rep_lif_exp_run-tree5_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree5_conv.rda
##
## 2019-05-27 - 16:13:45: MCMCglmm performed on tree 6
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1500.294; 840.2357; 109.8233; 142.1937; 1248.761; 2000; 1686.931; 692.4976; 121.012; 217.8127;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.014094; 1.006492; 1.00093; 1.016975; 1.010655; 1.006566
## Individual models saved as: M_rep_lif_exp_run-tree6_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree6_conv.rda
##
## 2019-05-27 - 16:13:45: MCMCglmm performed on tree 7
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 745.4723; 136.1108; 239.3836; 1203.265; 2000; 2002.408; 655.6149; 120.2543; 249.1684; 12
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004041; 1.014381; 1.002193; 1.009043; 1.025951; 1.008312
## Individual models saved as: M_rep_lif_exp_run-tree7_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree7_conv.rda
##
## 2019-05-27 - 16:13:46: MCMCglmm performed on tree 8
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 824.7312; 124.5026; 230.3108; 1323.106; 2221.652; 1807.916; 464.2409; 108.9504; 201.0081
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: TRUE
## 1.019933; 1.005172; 1.007656; 1.038926; 1.020825; 1.031381
## Individual models saved as: M_rep_lif_exp_run-tree8_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree8_conv.rda
##
## 2019-05-27 - 16:13:47: MCMCglmm performed on tree 9
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 654.8847; 122.3999; 190.7045; 1077.083; 1792.816; 1534.958; 651.6077; 143.5225; 218.5797
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.094335; 1.056287; 1.00223; 1.316032; 1.112883; 1.012832
## Individual models saved as: M_rep_lif_exp_run-tree9_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree9_conv.rda
##
## 2019-05-27 - 16:13:48: MCMCglmm performed on tree 10
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1602.342; 615.8763; 147.1118; 204.3346; 1180.453; 2000; 1281.226; 639.0625; 114.6299; 198.7305
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.019688; 1.002666; 1.000596; 1.080814; 1.014463; 1.004673
## Individual models saved as: M_rep_lif_exp_run-tree10_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree10_conv.rda
##
## 2019-05-27 - 16:13:48: MCMCglmm performed on tree 11
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2837.717; 1537.378; 671.8833; 122.6404; 193.6523; 1203.223; 2000; 2000; 854.7543; 119.778; 284.8239;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.000403; 1.005724; 1.004262; 1.003521; 1.015661; 1.005945
## Individual models saved as: M_rep_lif_exp_run-tree11_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree11_conv.rda
##
## 2019-05-27 - 16:13:49: MCMCglmm performed on tree 12
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1854.303; 687.5566; 115.348; 225.0142; 1167.836; 2164.515; 2000; 587.9324; 84.90689; 211.3653;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002615; 1.02883; 1.001362; 1.010521; 1.091528; 1.001539
## Individual models saved as: M_rep_lif_exp_run-tree12_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree12_conv.rda
##
## 2019-05-27 - 16:13:50: MCMCglmm performed on tree 13
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1433.112; 775.6743; 139.1613; 218.3411; 1363.599; 2539.812; 2000; 567.3003; 127.7392; 197.3782
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.007181; 1.001994; 1.002375; 1.025441; 1.002002; 1.012443
## Individual models saved as: M_rep_lif_exp_run-tree13_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree13_conv.rda
```

```
##
## 2019-05-27 - 16:13:51: MCMCglmm performed on tree 14
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1843.26; 2000; 787.9411; 127.1898; 253.0247; 1221.607; 2000; 1347.894; 658.4457; 159.0889; 250.8971;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.019163; 1.029509; 1.004589; 1.086031; 1.073304; 1.023001
## Individual models saved as: M_rep_lif_exp_run-tree14_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree14_conv.rda
##
## 2019-05-27 - 16:13:51: MCMCglmm performed on tree 15
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1576.293; 557.4178; 144.4636; 204.7462; 1260.055; 2000; 2000; 554.3582; 117.1449; 214.8697; 128
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.007144; 1.000398; 1.001683; 1.035638; 1.002689; 1.009009
## Individual models saved as: M_rep_lif_exp_run-tree15_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree15_conv.rda
##
## 2019-05-27 - 16:13:52: MCMCglmm performed on tree 16
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2479.468; 1779.806; 655.1238; 58.49647; 235.6304; 1124.873; 2000; 2107.092; 973.3459; 184.9583; 146.9
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.042714; 1.010519; 1.002317; 1.168277; 1.014977; 1.011997
## Individual models saved as: M_rep_lif_exp_run-tree16_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree16_conv.rda
##
## 2019-05-27 - 16:13:53: MCMCglmm performed on tree 17
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 637.6081; 117.4744; 208.0671; 1240.469; 2298.019; 2000; 814.4964; 112.4014; 195.6985; 134
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.001797; 1.000031; 1.00031; 1.004373; 1.000677; 1.000522
## Individual models saved as: M_rep_lif_exp_run-tree17_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree17_conv.rda
##
## 2019-05-27 - 16:13:54: MCMCglmm performed on tree 18
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1934.64; 2000; 478.0472; 90.44785; 131.5297; 1015.267; 1826.729; 1646.252; 979.1606; 183.2493; 165.3
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.031034; 1.09227; 0.9996853; 1.083236; 1.158333; 1.000429
## Individual models saved as: M_rep_lif_exp_run-tree18_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree18_conv.rda
##
## 2019-05-27 - 16:13:55: MCMCglmm performed on tree 19
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 1864.245; 482.4081; 101.2687; 213.9623; 1284.539; 1861.664; 2000; 629.5531; 98.55086; 216.1331
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.000106; 1.058995; 1.00114; 1.001771; 1.163488; 1.004543
## Individual models saved as: M_rep_lif_exp_run-tree19_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree19_conv.rda
##
## 2019-05-27 - 16:13:55: MCMCglmm performed on tree 20
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1325.486; 515.7952; 141.5702; 193.4383; 1399.229; 2000; 1860.177; 960.7461; 133.8972; 237.1572
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.113097; 1.015114; 1.004674; 1.397299; 1.028047; 1.020446
## Individual models saved as: M_rep_lif_exp_run-tree20_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree20_conv.rda
##
## 2019-05-27 - 16:13:56: MCMCglmm performed on tree 21
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2267.413; 1507.479; 765.0655; 143.743; 218.7471; 1277.42; 2000; 1256.735; 613.7788; 110.5387; 63.292
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.000793; 1.160226; 1.002336; 1.005949; 1.301175; 1.012939
## Individual models saved as: M_rep_lif_exp_run-tree21_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree21_conv.rda
##
## 2019-05-27 - 16:13:57: MCMCglmm performed on tree 22
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1615.691; 1171.763; 156.7362; 205.588; 1227.496; 1832.989; 1383.395; 788.7937; 124.2988; 196.14
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.005625; 1.03757; 1.002802; 1.015844; 1.060939; 1.015344
## Individual models saved as: M_rep_lif_exp_run-tree22_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree22_conv.rda
##
## 2019-05-27 - 16:13:58: MCMCglmm performed on tree 23
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 991.2961; 121.0374; 123.1718; 1261.748; 2000; 1567.666; 692.3671; 137.3545; 191.4338; 127
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.018412; 1.005224; 1.001264; 1.072087; 1.017922; 1.001682
## Individual models saved as: M_rep_lif_exp_run-tree23_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree23_conv.rda
##
## 2019-05-27 - 16:13:59: MCMCglmm performed on tree 24
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 524.3709; 128.8639; 182.6972; 1238.362; 2000; 1872.069; 803.9541; 180.1407; 278.7822; 113
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.033657; 1.030215; 1.006177; 1.055762; 1.086907; 1.016197
```

```
## Individual models saved as: M_rep_lif_exp_run-tree24_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree24_conv.rda
##
## 2019-05-27 - 16:13:59: MCMCglmm performed on tree 25
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1688.996; 746.0965; 119.2639; 75.51941; 1254.641; 2322.661; 2000; 813.4558; 128.8326; 258.6384
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.053935; 1.010049; 1.001376; 1.197074; 1.041985; 1.002709
## Individual models saved as: M_rep_lif_exp_run-tree25_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree25_conv.rda
##
## 2019-05-27 - 16:14:00: MCMCglmm performed on tree 26
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1424.119; 493.9091; 129.8185; 120.5747; 1090.606; 2000; 1766.061; 738.8071; 134.2847; 260.1863
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.026653; 1.044649; 1.001141; 1.121096; 1.115562; 1.002164
## Individual models saved as: M_rep_lif_exp_run-tree26_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree26_conv.rda
##
## 2019-05-27 - 16:14:01: MCMCglmm performed on tree 27
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2066.622; 1814.927; 687.2424; 119.9387; 197.1243; 1240.282; 1764.818; 2000; 590.1484; 97.306; 274.07
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.027025; 1.011093; 1.002011; 1.082273; 1.031977; 1.006641
## Individual models saved as: M_rep_lif_exp_run-tree27_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree27_conv.rda
##
## 2019-05-27 - 16:14:02: MCMCglmm performed on tree 28
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1574.244; 433.5897; 135.967; 235.5597; 1259.509; 2000; 1507.664; 441.2328; 118.8974; 138.544; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 0.9997635; 1.013484; 1.000398; 1.000706; 1.01742; 1.003429
## Individual models saved as: M_rep_lif_exp_run-tree28_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree28_conv.rda
##
## 2019-05-27 - 16:14:02: MCMCglmm performed on tree 29
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 731.5237; 107.5111; 226.7866; 1259.808; 2000; 1792.686; 685.391; 148.6426; 168.3761; 1213
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.039812; 1.014222; 1.003357; 1.113959; 1.016263; 1.01623
## Individual models saved as: M_rep_lif_exp_run-tree29_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree29_conv.rda
##
## 2019-05-27 - 16:14:03: MCMCglmm performed on tree 30
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2191.374; 708.2959; 123.4725; 132.4439; 1260.043; 2369.094; 1641.098; 353.6101; 77.667; 251.509
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.047689; 1.008346; 0.9998495; 1.121609; 1.008502; 1.001035
## Individual models saved as: M_rep_lif_exp_run-tree30_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree30_conv.rda
##
## 2019-05-27 - 16:14:04: MCMCglmm performed on tree 31
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1640.344; 727.6065; 109.4661; 207.5744; 1260.733; 2000; 2000; 792.6498; 143.3539; 176.4004; 127
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.045846; 1.001165; 1.001709; 1.162193; 1.003825; 1.008419
## Individual models saved as: M_rep_lif_exp_run-tree31_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree31_conv.rda
##
## 2019-05-27 - 16:14:05: MCMCglmm performed on tree 32
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2060.161; 2000; 778.3; 117.7377; 225.1806; 1195.884; 2000; 2000; 755.1419; 115.5; 124.2164; 1242.741
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.000573; 1.005866; 1.000095; 1.000948; 1.007863; 1.000102
## Individual models saved as: M_rep_lif_exp_run-tree32_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree32_conv.rda
##
## 2019-05-27 - 16:14:06: MCMCglmm performed on tree 33
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 773.5064; 154.5947; 263.8342; 1180.056; 1841.332; 1649.345; 644.9852; 112.7421; 145.3874
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.035869; 1.015548; 0.9996591; 1.157364; 1.035317; 1.00022
## Individual models saved as: M_rep_lif_exp_run-tree33_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree33_conv.rda
##
## 2019-05-27 - 16:14:06: MCMCglmm performed on tree 34
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1469.696; 693.003; 129.9538; 251.6336; 1267.126; 2000; 1634.928; 779.4082; 146.7504; 176.542; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002685; 1.041528; 1.000801; 1.007159; 1.091528; 1.005885
## Individual models saved as: M_rep_lif_exp_run-tree34_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree34_conv.rda
##
## 2019-05-27 - 16:14:07: MCMCglmm performed on tree 35
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2205.031; 1719.974; 799.5817; 135.7217; 179.7117; 1141.571; 2000; 2000; 764.6404; 107.0686; 227.4014
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: FALSE
## 1.165475; 1.033025; 1.005103; 1.586481; 1.098024; 1.02459
## Individual models saved as: M_rep_lif_exp_run-tree35_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree35_conv.rda
##
## 2019-05-27 - 16:14:08: MCMCglmm performed on tree 36
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1460.266; 535.6409; 104.4213; 166.5771; 1233.713; 2000; 1426.929; 495.2641; 69.23282; 29.53815
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002393; 1.000723; 0.9997696; 1.007054; 1.004559; 1.000214
## Individual models saved as: M_rep_lif_exp_run-tree36_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree36_conv.rda
##
## 2019-05-27 - 16:14:09: MCMCglmm performed on tree 37
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1923.451; 1923.072; 720.1293; 114.2374; 209.8238; 1266.948; 2000; 1785.377; 493.3301; 116.9488; 218.3
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.029724; 1.005049; 1.000282; 1.131041; 1.006189; 1.002918
## Individual models saved as: M_rep_lif_exp_run-tree37_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree37_conv.rda
##
## 2019-05-27 - 16:14:09: MCMCglmm performed on tree 38
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1706.717; 763.3413; 112.3045; 132.5557; 1184.025; 2000; 1650.622; 808.5295; 106.6618; 272.5476
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.018997; 1.034675; 0.9995088; 1.057238; 1.061634; 0.9995448
## Individual models saved as: M_rep_lif_exp_run-tree38_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree38_conv.rda
##
## 2019-05-27 - 16:14:10: MCMCglmm performed on tree 39
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 810.8489; 124.453; 203.7263; 1189.892; 2000; 1876.41; 667.1219; 118.3691; 199.9852; 1298
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.126582; 1.001064; 1.006049; 1.460341; 1.003278; 1.024299
## Individual models saved as: M_rep_lif_exp_run-tree39_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree39_conv.rda
##
## 2019-05-27 - 16:14:11: MCMCglmm performed on tree 40
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1876.31; 1828.024; 1033.603; 128.2209; 222.3581; 1101.222; 2272.372; 1524.26; 994.4132; 152.806; 184
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.010707; 1.000044; 1.009717; 1.030889; 1.000486; 1.041669
## Individual models saved as: M_rep_lif_exp_run-tree40_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree40_conv.rda
```

```
##
## 2019-05-27 - 16:14:12: MCMCglmm performed on tree 41
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2164.18; 1533.989; 605.9015; 124.5417; 170.1616; 1377.382; 2000; 1525.891; 600.0117; 107.8706; 212.0
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.04959; 1.027612; 0.9996851; 1.196106; 1.060357; 1.000177
## Individual models saved as: M_rep_lif_exp_run-tree41_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree41_conv.rda
##
## 2019-05-27 - 16:14:13: MCMCglmm performed on tree 42
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 815.2925; 148.5511; 146.1351; 1304.864; 2000; 2000; 351.3244; 90.91789; 205.9357; 1271.8
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002876; 1.003246; 1.001022; 1.011785; 1.01136; 1.00584
## Individual models saved as: M_rep_lif_exp_run-tree42_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree42_conv.rda
##
## 2019-05-27 - 16:14:14: MCMCglmm performed on tree 43
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2131.922; 1610.018; 928.5996; 131.4328; 337.3454; 1089.791; 2000; 1372.325; 800.3853; 62.79767; 193.5
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.115557; 1.00628; 0.9999801; 1.364346; 1.009406; 1.000742
## Individual models saved as: M_rep_lif_exp_run-tree43_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree43_conv.rda
##
## 2019-05-27 - 16:14:15: MCMCglmm performed on tree 44
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2160.771; 1763.416; 429.6661; 102.1308; 137.648; 1174.523; 2000; 1584.976; 535.3668; 99.76883; 289.0
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.2712; 1.069458; 1.008032; 1.896457; 1.156395; 1.03486
## Individual models saved as: M_rep_lif_exp_run-tree44_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree44_conv.rda
##
## 2019-05-27 - 16:14:16: MCMCglmm performed on tree 45
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 962.7255; 85.86252; 190.1158; 1339.478; 2000; 1701.212; 601.8669; 102.1652; 221.5043; 128
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.200414; 1.02912; 1.002929; 1.719676; 1.0295; 1.014666
## Individual models saved as: M_rep_lif_exp_run-tree45_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree45_conv.rda
##
## 2019-05-27 - 16:14:16: MCMCglmm performed on tree 46
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 1167.83; 381.0759; 103.3594; 207.9185; 1127.122; 1900.28; 1871.451; 537.981; 126.0554; 161.589
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.094904; 1.020165; 1.004205; 1.361884; 1.044755; 1.019129
## Individual models saved as: M_rep_lif_exp_run-tree46_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree46_conv.rda
##
## 2019-05-27 - 16:14:17: MCMCglmm performed on tree 47
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1874.414; 596.6342; 104.5667; 68.43231; 1211.821; 2000; 1881.508; 536.8826; 135.5381; 270.3151
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.029806; 1.010991; 1.002948; 1.132437; 1.04795; 1.016505
## Individual models saved as: M_rep_lif_exp_run-tree47_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree47_conv.rda
##
## 2019-05-27 - 16:14:18: MCMCglmm performed on tree 48
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 551.6138; 97.31335; 91.7791; 1226.159; 2000; 1556.231; 486.0275; 92.11649; 154.4405; 124
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.057541; 1.08811; 1.00054; 1.210229; 1.243875; 1.003776
## Individual models saved as: M_rep_lif_exp_run-tree48_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree48_conv.rda
##
## 2019-05-27 - 16:14:19: MCMCglmm performed on tree 49
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1870.573; 814.2708; 134.6273; 159.6245; 1250.685; 1638.13; 1626.62; 669.5566; 130.4189; 269.838
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.006975; 1.024814; 0.9995852; 1.028773; 1.030517; 0.9999273
## Individual models saved as: M_rep_lif_exp_run-tree49_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree49_conv.rda
##
## 2019-05-27 - 16:14:20: MCMCglmm performed on tree 50
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1603.724; 710.1724; 116.2929; 200.9868; 1278.164; 2000; 1687.263; 552.5725; 118.4256; 327.0432
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004496; 1.003978; 1.001477; 1.019311; 1.009682; 1.009046
## Individual models saved as: M_rep_lif_exp_run-tree50_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree50_conv.rda
##
## 2019-05-27 - 16:14:21: MCMCglmm performed on tree 51
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1572.021; 763.8696; 109.2631; 249.3891; 1236.102; 2000; 1851.395; 918.4628; 126.9695; 229.6633
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.007125; 1.006721; 1.004391; 1.030056; 1.014723; 1.018143
```

```
## Individual models saved as: M_rep_lif_exp_run-tree51_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree51_conv.rda
##
## 2019-05-27 - 16:14:21: MCMCglmm performed on tree 52
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1501.734; 913.8142; 134.9506; 243.7564; 1285.805; 2128.484; 1621.533; 825.1861; 107.4466; 193.3
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 0.9998462; 1.004466; 0.9996831; 1.000807; 1.004828; 0.9996895
## Individual models saved as: M_rep_lif_exp_run-tree52_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree52_conv.rda
##
## 2019-05-27 - 16:14:22: MCMCglmm performed on tree 53
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1556.713; 1263.735; 474.6692; 108.283; 208.7795; 1090.65; 1875.955; 1729.105; 613.1803; 121.4483; 249
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.006411; 1.001783; 1.0003; 1.028658; 1.009613; 1.000654
## Individual models saved as: M_rep_lif_exp_run-tree53_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree53_conv.rda
##
## 2019-05-27 - 16:14:23: MCMCglmm performed on tree 54
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 897.3631; 143.9343; 252.6472; 1252.119; 2000; 2000; 899.6059; 141.1944; 174.9043; 1179.95
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.101239; 1.023943; 1.004321; 1.343276; 1.049941; 1.015012
## Individual models saved as: M_rep_lif_exp_run-tree54_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree54_conv.rda
##
## 2019-05-27 - 16:14:24: MCMCglmm performed on tree 55
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1595.127; 740.7575; 125.6024; 249.2442; 1340.303; 2147.127; 2000; 517.2764; 121.17; 247.717; 12
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.0063; 1.008108; 1.000981; 1.024597; 1.027382; 1.006265
## Individual models saved as: M_rep_lif_exp_run-tree55_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree55_conv.rda
##
## 2019-05-27 - 16:14:25: MCMCglmm performed on tree 56
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1398.604; 842.1693; 123.3342; 156.5761; 1082.02; 2000; 1779.364; 545.1333; 87.44473; 204.4076;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.031174; 0.9998833; 1.001775; 1.055373; 1.000762; 1.010707
## Individual models saved as: M_rep_lif_exp_run-tree56_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree56_conv.rda
##
## 2019-05-27 - 16:14:26: MCMCglmm performed on tree 57
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1814.801; 581.8517; 91.66337; 229.0865; 1284.164; 2000; 2000; 631.397; 104.3548; 225.2459; 108
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.00754; 1.000774; 1.001266; 1.01515; 1.005226; 1.006609
## Individual models saved as: M_rep_lif_exp_run-tree57_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree57_conv.rda
##
## 2019-05-27 - 16:14:26: MCMCglmm performed on tree 58
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2180.726; 2000; 645.9954; 105.5963; 194.1152; 1233.48; 2000; 1687.653; 713.1177; 148.1227; 175.4673;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 0.9998171; 1.012733; 0.9997516; 0.9998241; 1.044638; 1.000267
## Individual models saved as: M_rep_lif_exp_run-tree58_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree58_conv.rda
##
## 2019-05-27 - 16:14:27: MCMCglmm performed on tree 59
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 639.4463; 105.8553; 188.387; 1223.796; 2000; 2000; 772.44; 106.0246; 101.3117; 1179.272
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.023785; 1.027306; 1.001083; 1.104779; 1.058975; 1.004443
## Individual models saved as: M_rep_lif_exp_run-tree59_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree59_conv.rda
##
## 2019-05-27 - 16:14:28: MCMCglmm performed on tree 60
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1770.447; 635.1954; 123.0822; 183.1588; 1369.572; 2161.354; 1827.639; 861.6028; 169.1591; 106.1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.287553; 1.046977; 1.004524; 1.992031; 1.078537; 1.023599
## Individual models saved as: M_rep_lif_exp_run-tree60_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree60_conv.rda
##
## 2019-05-27 - 16:14:29: MCMCglmm performed on tree 61
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1405.705; 462.7374; 84.08791; 219.0548; 1275.556; 2000; 1857.155; 705.7304; 114.6782; 214.8889
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.078501; 1.030579; 1.000007; 1.215046; 1.055875; 1.000701
## Individual models saved as: M_rep_lif_exp_run-tree61_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree61_conv.rda
##
## 2019-05-27 - 16:14:30: MCMCglmm performed on tree 62
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1598.312; 696.9625; 107.8651; 209.0539; 1183.296; 2000; 1448.441; 495.5416; 91.20713; 224.4043
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: FALSE
## 1.144062; 1.012958; 0.9996508; 1.498195; 1.043756; 1.000248
## Individual models saved as: M_rep_lif_exp_run-tree62_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree62_conv.rda
##
## 2019-05-27 - 16:14:31: MCMCglmm performed on tree 63
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1609.304; 684.0676; 109.9697; 349.7277; 1302.376; 2000; 1616.188; 517.493; 108.615; 152.25; 109
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.012806; 1.030321; 0.9997325; 1.062049; 1.031398; 0.9999818
## Individual models saved as: M_rep_lif_exp_run-tree63_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree63_conv.rda
##
## 2019-05-27 - 16:14:31: MCMCglmm performed on tree 64
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1855.221; 702.428; 121.309; 248.1137; 1213.384; 2000; 2000; 823.2307; 110.7322; 165.2772; 1205
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.02656; 1.021287; 1.0001; 1.064849; 1.055929; 1.000876
## Individual models saved as: M_rep_lif_exp_run-tree64_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree64_conv.rda
##
## 2019-05-27 - 16:14:32: MCMCglmm performed on tree 65
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1867.403; 1853.943; 847.6216; 116.7277; 112.0936; 1110.26; 2000; 1523.05; 1059.574; 134.182; 137.404
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.019105; 1.060832; 0.9999739; 1.080753; 1.156988; 1.000883
## Individual models saved as: M_rep_lif_exp_run-tree65_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree65_conv.rda
##
## 2019-05-27 - 16:14:33: MCMCglmm performed on tree 66
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1857.891; 696.5313; 100.4266; 81.20793; 1144.908; 2000; 2000; 778.5568; 129.2092; 214.1295; 10
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.055605; 1.073213; 1.002562; 1.228583; 1.116916; 1.013045
## Individual models saved as: M_rep_lif_exp_run-tree66_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree66_conv.rda
##
## 2019-05-27 - 16:14:34: MCMCglmm performed on tree 67
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2168.612; 2000; 706.8549; 134.9846; 245.483; 1256.107; 2167.756; 1796.313; 567.1648; 105.6249; 258.5
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.061359; 1.005145; 1.001717; 1.216868; 1.009699; 1.002149
## Individual models saved as: M_rep_lif_exp_run-tree67_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree67_conv.rda
```

```
##
## 2019-05-27 - 16:14:35: MCMCglmm performed on tree 68
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1848.087; 2000; 696.3139; 153.7508; 183.1664; 1226.969; 2000; 2000; 777.4704; 117.1026; 221.5291; 12
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.033862; 1.004754; 1.001108; 1.10189; 1.005416; 1.004825
## Individual models saved as: M_rep_lif_exp_run-tree68_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree68_conv.rda
##
## 2019-05-27 - 16:14:35: MCMCglmm performed on tree 69
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1514.301; 494.2275; 110.7573; 296.6501; 1241.132; 2000; 1329.616; 527.8803; 113.029; 77.7593; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.030884; 1.14793; 1.001709; 1.137939; 1.441212; 1.003645
## Individual models saved as: M_rep_lif_exp_run-tree69_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree69_conv.rda
##
## 2019-05-27 - 16:14:36: MCMCglmm performed on tree 70
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1740.336; 2000; 570.0425; 115.7163; 322.3152; 1126.892; 2000; 1859.724; 1016.633; 131.579; 216.1987;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.002735; 1.051985; 1.003628; 1.006821; 1.128053; 1.008453
## Individual models saved as: M_rep_lif_exp_run-tree70_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree70_conv.rda
##
## 2019-05-27 - 16:14:37: MCMCglmm performed on tree 71
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 634.0033; 117.0134; 123.2044; 1042.451; 1940.667; 1708.025; 820.9417; 152.1344; 230.8284
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.069609; 1.001057; 0.9996026; 1.235669; 1.005983; 0.9997727
## Individual models saved as: M_rep_lif_exp_run-tree71_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree71_conv.rda
##
## 2019-05-27 - 16:14:38: MCMCglmm performed on tree 72
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1419.385; 852.21; 142.0912; 265.522; 1254.144; 2000; 2000; 883.6609; 84.04058; 36.43437; 721.7
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.063703; 1.166678; 1.003333; 1.06554; 1.37587; 1.008456
## Individual models saved as: M_rep_lif_exp_run-tree72_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree72_conv.rda
##
## 2019-05-27 - 16:14:39: MCMCglmm performed on tree 73
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 1748.186; 1022.574; 133.4161; 238.9899; 1274.949; 2000; 1701.34; 510.5007; 71.01758; 208.3222;
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.087781; 1.005602; 1.0009; 1.235534; 1.005687; 1.005992
## Individual models saved as: M_rep_lif_exp_run-tree73_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree73_conv.rda
##
## 2019-05-27 - 16:14:40: MCMCglmm performed on tree 74
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2139.52; 1747.79; 630.3739; 119.5656; 251.8491; 1131.534; 2000; 2000; 939.704; 138.7; 280.2112; 1254
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.023824; 1.081297; 0.9995247; 1.036075; 1.224069; 0.9995934
## Individual models saved as: M_rep_lif_exp_run-tree74_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree74_conv.rda
##
## 2019-05-27 - 16:14:40: MCMCglmm performed on tree 75
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 702.4296; 109.315; 289.4958; 1243.642; 2000; 1861.444; 581.7748; 110.0105; 253.708; 981.
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004958; 1.01576; 1.001561; 1.006437; 1.027157; 1.007629
## Individual models saved as: M_rep_lif_exp_run-tree75_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree75_conv.rda
##
## 2019-05-27 - 16:14:41: MCMCglmm performed on tree 76
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1565.749; 729.9129; 125.142; 229.1419; 1165.605; 2000; 2000; 774.6037; 133.0354; 205.5169; 136
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.008355; 1.004569; 0.9995465; 1.039083; 1.009467; 0.9997177
## Individual models saved as: M_rep_lif_exp_run-tree76_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree76_conv.rda
##
## 2019-05-27 - 16:14:42: MCMCglmm performed on tree 77
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1867.784; 1857.094; 909.6178; 154.025; 153.3581; 1094.45; 1800.106; 1831.319; 465.4117; 81.34688; 16
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.025359; 1.042344; 0.9999209; 1.045189; 1.114651; 1.000308
## Individual models saved as: M_rep_lif_exp_run-tree77_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree77_conv.rda
##
## 2019-05-27 - 16:14:43: MCMCglmm performed on tree 78
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1851.374; 1284.18; 566.6942; 121.1163; 221.3288; 1189.024; 1758.251; 1725.485; 594.7034; 112.742; 20
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.019716; 1.001759; 0.9998033; 1.089973; 1.010638; 1.000729
```

```
## Individual models saved as: M_rep_lif_exp_run-tree78_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree78_conv.rda
##
## 2019-05-27 - 16:14:44: MCMCglmm performed on tree 79
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1861.627; 1370.721; 403.1025; 89.27413; 248.2741; 1042.003; 2000; 1851.232; 775.551; 148.8113; 209.2
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.033965; 1.015576; 0.9997555; 1.088383; 1.020404; 1.000168
## Individual models saved as: M_rep_lif_exp_run-tree79_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree79_conv.rda
##
## 2019-05-27 - 16:14:45: MCMCglmm performed on tree 80
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1653.662; 846.2273; 128.2931; 180.9907; 1299.582; 2000; 1649.03; 861.2635; 117.8273; 259.478;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.011301; 1.003677; 1.002196; 1.055012; 1.011188; 1.002219
## Individual models saved as: M_rep_lif_exp_run-tree80_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree80_conv.rda
##
## 2019-05-27 - 16:14:45: MCMCglmm performed on tree 81
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1839.089; 737.4746; 78.98433; 223.8415; 1307.652; 1673.057; 2000; 443.6044; 91.43733; 271.819;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.026942; 1.018432; 0.9996349; 1.095778; 1.032385; 0.9997958
## Individual models saved as: M_rep_lif_exp_run-tree81_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree81_conv.rda
##
## 2019-05-27 - 16:14:46: MCMCglmm performed on tree 82
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1583.015; 659.9921; 100.9732; 180.6936; 1258.062; 2897.592; 1570.337; 714.2368; 118.1381; 149.5
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.005041; 1.009573; 1.002711; 1.005191; 1.024226; 1.015342
## Individual models saved as: M_rep_lif_exp_run-tree82_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree82_conv.rda
##
## 2019-05-27 - 16:14:47: MCMCglmm performed on tree 83
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1805.256; 455.9706; 87.08695; 203.8505; 1158.901; 2000; 2000; 692.5941; 111.7488; 206.8249; 11
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.011359; 1.020474; 1.001622; 1.050535; 1.024092; 1.010015
## Individual models saved as: M_rep_lif_exp_run-tree83_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree83_conv.rda
##
## 2019-05-27 - 16:14:48: MCMCglmm performed on tree 84
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1833.949; 1726.266; 761.6321; 128.2434; 212.194; 1315.311; 1844.206; 2000; 437.0809; 94.42527; 228.0
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.066555; 1.047545; 1.001221; 1.238608; 1.108636; 1.003018
## Individual models saved as: M_rep_lif_exp_run-tree84_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree84_conv.rda
##
## 2019-05-27 - 16:14:49: MCMCglmm performed on tree 85
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 752.2081; 109.6424; 205.2571; 1268.991; 2000; 1602.168; 647.8088; 124.8406; 193.6438; 124
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.000719; 1.022488; 1.003094; 1.000746; 1.042406; 1.011932
## Individual models saved as: M_rep_lif_exp_run-tree85_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree85_conv.rda
##
## 2019-05-27 - 16:14:50: MCMCglmm performed on tree 86
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1821.766; 2000; 782.3739; 160.7946; 193.2467; 1193.878; 2000; 1649.347; 641.342; 101.6476; 123.4576;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.023503; 1.006543; 1.000021; 1.024707; 1.006888; 1.001828
## Individual models saved as: M_rep_lif_exp_run-tree86_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree86_conv.rda
##
## 2019-05-27 - 16:14:50: MCMCglmm performed on tree 87
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1332.953; 377.9127; 108.6572; 157.5953; 1208.284; 1619.824; 1539.948; 536.657; 125.378; 149.274
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.065241; 1.007784; 0.9997307; 1.20818; 1.009278; 0.9997415
## Individual models saved as: M_rep_lif_exp_run-tree87_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree87_conv.rda
##
## 2019-05-27 - 16:14:51: MCMCglmm performed on tree 88
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2207.825; 955.2186; 609.5227; 122.1818; 225.8843; 1245.322; 2475.262; 1854.879; 286.8114; 113.6684; 1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: TRUE
## 1.002409; 1.011774; 1.000973; 1.011875; 1.018367; 1.004983
## Individual models saved as: M_rep_lif_exp_run-tree88_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree88_conv.rda
##
## 2019-05-27 - 16:14:52: MCMCglmm performed on tree 89
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1715.545; 510.2708; 81.97658; 167.1187; 1303.334; 2000; 1756.102; 607.2285; 134.9566; 186.375;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: FALSE
## 1.064893; 1.070504; 1.000174; 1.176848; 1.190683; 1.000175
## Individual models saved as: M_rep_lif_exp_run-tree89_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree89_conv.rda
##
## 2019-05-27 - 16:14:53: MCMCglmm performed on tree 90
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1788.288; 1433.047; 535.2277; 111.662; 194.5852; 1215.044; 2000; 1370.833; 655.4445; 109.4985; 245.25
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 0.9998588; 1.00313; 1.004779; 1.000653; 1.017399; 1.024144
## Individual models saved as: M_rep_lif_exp_run-tree90_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree90_conv.rda
##
## 2019-05-27 - 16:14:54: MCMCglmm performed on tree 91
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1014.819; 142.4485; 332.5589; 1303.083; 2346.026; 1873.701; 713.7056; 109.4857; 270.8496
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.038197; 1.041856; 0.9998743; 1.138905; 1.086298; 1.001187
## Individual models saved as: M_rep_lif_exp_run-tree91_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree91_conv.rda
##
## 2019-05-27 - 16:14:54: MCMCglmm performed on tree 92
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1049.816; 129.5668; 156.2149; 1250.237; 2000; 1356.779; 700.2521; 108.5714; 244.5147; 13
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.039802; 1.125929; 1.009846; 1.147652; 1.409041; 1.041931
## Individual models saved as: M_rep_lif_exp_run-tree92_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree92_conv.rda
##
## 2019-05-27 - 16:14:55: MCMCglmm performed on tree 93
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1726.595; 2000; 660.3825; 99.79695; 101.914; 1235.275; 2000; 1852.459; 735.5784; 111.4193; 212.708;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.008603; 1.023447; 1.001922; 1.009728; 1.026364; 1.011151
## Individual models saved as: M_rep_lif_exp_run-tree93_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree93_conv.rda
##
## 2019-05-27 - 16:14:56: MCMCglmm performed on tree 94
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1791.38; 646.8012; 120.7283; 235.9865; 1170.052; 1870.213; 2000; 456.7372; 131.8304; 281.1718;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.003514; 1.023391; 0.9997394; 1.006524; 1.070604; 1.000516
## Individual models saved as: M_rep_lif_exp_run-tree94_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree94_conv.rda
```

```
##
## 2019-05-27 - 16:14:57: MCMCglmm performed on tree 95
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1496.491; 825.9948; 120.049; 219.3419; 1197.421; 2000; 1783.39; 561.3172; 132.0264; 183.1555;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.007481; 1.003569; 0.9998863; 1.037037; 1.008661; 1.000001
## Individual models saved as: M_rep_lif_exp_run-tree95_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree95_conv.rda
##
## 2019-05-27 - 16:14:58: MCMCglmm performed on tree 96
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 755.3916; 133.0776; 224.904; 1201.738; 2164.126; 1617.679; 715.2424; 121.1434; 180.009;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.030371; 0.9996256; 1.002593; 1.110039; 0.9997486; 1.013667
## Individual models saved as: M_rep_lif_exp_run-tree96_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree96_conv.rda
##
## 2019-05-27 - 16:14:58: MCMCglmm performed on tree 97
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1778.539; 1844.835; 599.9918; 113.9707; 222.6085; 1509.494; 2000; 1492.202; 824.1181; 126.7899; 84.63
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.068867; 1.037945; 1.004667; 1.259763; 1.105621; 1.019516
## Individual models saved as: M_rep_lif_exp_run-tree97_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree97_conv.rda
##
## 2019-05-27 - 16:14:59: MCMCglmm performed on tree 98
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1777.966; 1288.317; 825.0918; 145.8098; 142.0571; 1231.431; 1808.643; 1419.365; 604.3242; 96.18893;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.187973; 1.062287; 0.9995475; 1.67254; 1.103877; 0.9997341
## Individual models saved as: M_rep_lif_exp_run-tree98_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree98_conv.rda
##
## 2019-05-27 - 16:15:00: MCMCglmm performed on tree 99
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1849.038; 524.3862; 91.78728; 159.9643; 1222.537; 2171.254; 1680.784; 601.2478; 96.44054; 114.5
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.006416; 1.007927; 0.999686; 1.006651; 1.008657; 1.000012
## Individual models saved as: M_rep_lif_exp_run-tree99_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree99_conv.rda
##
## 2019-05-27 - 16:15:01: MCMCglmm performed on tree 100
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 1873.654; 1853.534; 842.5054; 166.8458; 237.1908; 1216.924; 2000; 1420.858; 935.8059; 113.6194; 212.1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.008962; 1.015539; 1.001012; 1.024279; 1.046154; 1.004389
## Individual models saved as: M_rep_lif_exp_run-tree100_chain*.rda
## Convergence diagnosis saved as: M_rep_lif_exp_run-tree100_conv.rda
##
## 2019-05-27 - 16:15:01: MCMCglmm successfully performed on 100 trees.
## Total execution time: 1.35071 mins.
## Use read.mulTree() to read the data as 'mulTree' data.
## Use summary.mulTree() and plot.mulTree() for plotting or summarizing the 'mulTree' data.
```

Reporductive spread as measured using the gini index

```
formula_gini <- gini ~ mass_g + matrix_size

mulTree(mulTree.data = pop_multree,
        formula = formula_gini,
        priors = prior,
        parameters = parameters,
        output = "gini_run",
        ESS = 1000,
        chains = 2)
```

```
## Output chain name "gini_run" already exists!
## Press [enter] if you wish to overwrite the models or [esc] to cancel.
```

```
## Models will be overwritten...
```

```
##
## 2019-05-27 - 16:15:02: MCMCglmm performed on tree 1
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1762.495; 420.6136; 163.7077; 17.86004; 25.50916; 1015.554; 2000; 407.1263; 388.7012; 27.62802; 34.48
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.474249; 1.191289; 1.003497; 2.498887; 1.660875; 1.014806
## Individual models saved as: gini_run-tree1_chain*.rda
## Convergence diagnosis saved as: gini_run-tree1_conv.rda
##
## 2019-05-27 - 16:15:03: MCMCglmm performed on tree 2
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 365.0524; 420.3415; 24.08001; 51.87763; 1127.194; 1923.862; 394.4117; 334.0622; 19.799; 82.8715
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.032954; 1.029126; 1.001822; 1.091478; 1.130661; 1.010399
## Individual models saved as: gini_run-tree2_chain*.rda
## Convergence diagnosis saved as: gini_run-tree2_conv.rda
##
## 2019-05-27 - 16:15:03: MCMCglmm performed on tree 3
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2550.418; 667.3614; 327.781; 25.44461; 61.22718; 1120.813; 2000; 354.8696; 442.666; 15.561; 46.73491
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.021646; 1.01527; 1.002814; 1.043029; 1.049136; 1.002814
## Individual models saved as: gini_run-tree3_chain*.rda
## Convergence diagnosis saved as: gini_run-tree3_conv.rda
##
## 2019-05-27 - 16:15:04: MCMCglmm performed on tree 4
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1719.659; 384.2578; 219.8502; 27.69535; 74.45415; 1090.8; 2000; 736.7706; 427.2548; 21.82663; 65.317
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.095797; 1.005901; 1.000354; 1.288999; 1.008021; 1.003705
## Individual models saved as: gini_run-tree4_chain*.rda
## Convergence diagnosis saved as: gini_run-tree4_conv.rda
##
## 2019-05-27 - 16:15:05: MCMCglmm performed on tree 5
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1235.605; 624.2441; 34.51634; 103.4678; 1061.805; 1810.831; 471.3996; 1137.618; 31.47965; 106.
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.VCV.species < 10
## All levels converged < 1.1: TRUE
## 1.035172; 1.022951; 1.007211; 1.043573; 1.083122; 1.009895
## Individual models saved as: gini_run-tree5_chain*.rda
## Convergence diagnosis saved as: gini_run-tree5_conv.rda
##
## 2019-05-27 - 16:15:06: MCMCglmm performed on tree 6
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1164.345; 458.1315; 246.9211; 13.68028; 32.0972; 1087.502; 2329.585; 295.8841; 715.6555; 25.00112; 8
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.148036; 1.043111; 1.003372; 1.474242; 1.175956; 1.010703
## Individual models saved as: gini_run-tree6_chain*.rda
## Convergence diagnosis saved as: gini_run-tree6_conv.rda
##
## 2019-05-27 - 16:15:07: MCMCglmm performed on tree 7
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 350.4593; 226.6695; 20.71898; 83.91091; 1027.877; 2000; 362.9614; 303.421; 20.66563; 71.24825;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.192795; 1.041051; 1.000614; 1.678251; 1.177444; 1.001763
## Individual models saved as: gini_run-tree7_chain*.rda
## Convergence diagnosis saved as: gini_run-tree7_conv.rda
##
## 2019-05-27 - 16:15:08: MCMCglmm performed on tree 8
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1778.961; 595.9004; 326.9942; 19.98703; 24.8812; 1053.966; 2083.555; 509.1536; 339.2137; 40.60132; 1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.027965; 1.030761; 0.9999271; 1.11135; 1.096842; 1.001622
```

```
## Individual models saved as: gini_run-tree8_chain*.rda
## Convergence diagnosis saved as: gini_run-tree8_conv.rda
##
## 2019-05-27 - 16:15:08: MCMCglmm performed on tree 9
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1682.259; 1099.445; 750.0639; 38.72805; 138.0528; 1072.236; 1739.734; 808.1835; 500.5918; 24.17437; 8
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: TRUE
## 1.006526; 1.001409; 0.9998655; 1.018313; 1.002761; 1.000991
## Individual models saved as: gini_run-tree9_chain*.rda
## Convergence diagnosis saved as: gini_run-tree9_conv.rda
##
## 2019-05-27 - 16:15:09: MCMCglmm performed on tree 10
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 266.6682; 209.8394; 27.40368; 112.5954; 1009.919; 1284.136; 536.5765; 400.1459; 7.832273; 96.88
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.061865; 1.003011; 1.000635; 1.205794; 1.016192; 1.003116
## Individual models saved as: gini_run-tree10_chain*.rda
## Convergence diagnosis saved as: gini_run-tree10_conv.rda
##
## 2019-05-27 - 16:15:10: MCMCglmm performed on tree 11
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2384.953; 844.3856; 694.8524; 35.10873; 104.5947; 1021.39; 1986.648; 333.0294; 398.573; 24.85291; 40
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.050283; 1.026222; 0.9999319; 1.209096; 1.047644; 1.000479
## Individual models saved as: gini_run-tree11_chain*.rda
## Convergence diagnosis saved as: gini_run-tree11_conv.rda
##
## 2019-05-27 - 16:15:11: MCMCglmm performed on tree 12
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1424.049; 450.8771; 517.473; 17.62067; 128.455; 977.9426; 1943.008; 1569.746; 1167.282; 40.15471; 113
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV
## All levels converged < 1.1: FALSE
## 1.288522; 1.11407; 0.999975; 1.913277; 1.421592; 1.001817
## Individual models saved as: gini_run-tree12_chain*.rda
## Convergence diagnosis saved as: gini_run-tree12_conv.rda
##
## 2019-05-27 - 16:15:12: MCMCglmm performed on tree 13
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 236.9139; 507.1885; 22.8603; 84.0021; 1024.932; 2130.993; 375.3868; 435.3013; 21.51167; 45.8484
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.012611; 1.001545; 1.001898; 1.047637; 1.008442; 1.008976
## Individual models saved as: gini_run-tree13_chain*.rda
## Convergence diagnosis saved as: gini_run-tree13_conv.rda
##
## 2019-05-27 - 16:15:12: MCMCglmm performed on tree 14
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 726.3859; 613.7958; 45.10841; 107.2695; 1042.584; 2347.227; 641.0959; 489.8302; 33.85558; 59.28
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.059634; 1.054888; 1.00004; 1.176389; 1.227271; 1.001996
## Individual models saved as: gini_run-tree14_chain*.rda
## Convergence diagnosis saved as: gini_run-tree14_conv.rda
##
## 2019-05-27 - 16:15:13: MCMCglmm performed on tree 15
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3931.2; 190.7259; 212.055; 15.71793; 27.58225; 973.8822; 1498.391; 358.3119; 217.7677; 30.64275; 102
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.295049; 1.138092; 1.000215; 1.931122; 1.495049; 1.001891
## Individual models saved as: gini_run-tree15_chain*.rda
## Convergence diagnosis saved as: gini_run-tree15_conv.rda
##
## 2019-05-27 - 16:15:14: MCMCglmm performed on tree 16
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1830.505; 921.0718; 443.9927; 40.11501; 171.1184; 996.7211; 1723.972; 466.2239; 494.4976; 32.75926; 5
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.113359; 1.007644; 1.00704; 1.418695; 1.024691; 1.029879
## Individual models saved as: gini_run-tree16_chain*.rda
## Convergence diagnosis saved as: gini_run-tree16_conv.rda
##
## 2019-05-27 - 16:15:15: MCMCglmm performed on tree 17
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1411.964; 386.022; 602.3668; 13.68605; 48.47296; 968.226; 2000; 655.1399; 472.5945; 36.11343; 55.745
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: TRUE
## 1.003913; 1.005027; 1.000898; 1.012853; 1.021463; 1.005852
## Individual models saved as: gini_run-tree17_chain*.rda
## Convergence diagnosis saved as: gini_run-tree17_conv.rda
##
## 2019-05-27 - 16:15:16: MCMCglmm performed on tree 18
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1307.939; 371.3606; 430.0378; 23.58062; 82.87602; 1059.34; 2045.453; 576.6336; 314.3572; 28.80686; 10
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.086489; 1.001457; 1.000383; 1.192437; 1.008994; 1.001385
## Individual models saved as: gini_run-tree18_chain*.rda
## Convergence diagnosis saved as: gini_run-tree18_conv.rda
##
## 2019-05-27 - 16:15:17: MCMCglmm performed on tree 19
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1660.512; 203.5421; 526.8265; 17.87461; 79.6136; 1118.533; 2000; 449.6972; 384.3749; 21.4563; 38.470
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
```

```
## All levels converged < 1.1: FALSE
## 1.638503; 1.586146; 1.000612; 2.824712; 2.866656; 1.00409
## Individual models saved as: gini_run-tree19_chain*.rda
## Convergence diagnosis saved as: gini_run-tree19_conv.rda
##
## 2019-05-27 - 16:15:17: MCMCglmm performed on tree 20
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2114.799; 587.1714; 212.4062; 18.31076; 128.5803; 906.3712; 2221.244; 1080.865; 636.0005; 38.24228; 8
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 1.786544; 1.302049; 1.000242; 5.775176; 1.96765; 1.002965
## Individual models saved as: gini_run-tree20_chain*.rda
## Convergence diagnosis saved as: gini_run-tree20_conv.rda
##
## 2019-05-27 - 16:15:18: MCMCglmm performed on tree 21
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 617.1606; 231.1028; 15.09197; 160.8914; 1114.971; 2144.604; 517.6745; 762.7641; 30.88262; 55.95
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.453553; 1.083622; 1.000272; 2.798381; 1.302902; 1.000584
## Individual models saved as: gini_run-tree21_chain*.rda
## Convergence diagnosis saved as: gini_run-tree21_conv.rda
##
## 2019-05-27 - 16:15:19: MCMCglmm performed on tree 22
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3183.812; 462.6743; 648.329; 28.25635; 95.93817; 1141.549; 2000; 955.9; 456.6352; 16.05968; 60.95521
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.666614; 1.292822; 1.00293; 2.908595; 1.935537; 1.015166
## Individual models saved as: gini_run-tree22_chain*.rda
## Convergence diagnosis saved as: gini_run-tree22_conv.rda
##
## 2019-05-27 - 16:15:20: MCMCglmm performed on tree 23
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2696.121; 441.0506; 216.7329; 17.79824; 235.4517; 975.2283; 1738.431; 432.6786; 952.612; 53.97654; 2
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.071695; 1.072137; 1.002001; 1.111749; 1.263874; 1.003617
## Individual models saved as: gini_run-tree23_chain*.rda
## Convergence diagnosis saved as: gini_run-tree23_conv.rda
##
## 2019-05-27 - 16:15:21: MCMCglmm performed on tree 24
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 284.1555; 869.145; 10.04373; 65.30102; 999.639; 1845.675; 1231.494; 836.2333; 45.75264; 129.504
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.matrix_size, C
## All levels converged < 1.1: FALSE
## 1.095987; 1.051797; 1.002635; 1.361497; 1.214382; 1.004934
## Individual models saved as: gini_run-tree24_chain*.rda
## Convergence diagnosis saved as: gini_run-tree24_conv.rda
```

```
##
## 2019-05-27 - 16:15:21: MCMCglmm performed on tree 25
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 393.4535; 286.7379; 30.38336; 80.71156; 1023.417; 2763.552; 246.3571; 198.7332; 13.72647; 35.24
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.02073; 1.025604; 0.9998616; 1.027838; 1.033828; 1.001304
## Individual models saved as: gini_run-tree25_chain*.rda
## Convergence diagnosis saved as: gini_run-tree25_conv.rda
##
## 2019-05-27 - 16:15:22: MCMCglmm performed on tree 26
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 205.9084; 312.2384; 23.69438; 62.69321; 1076.1; 2000; 2000; 704.4612; 52.12243; 233.4061; 1048
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.136379; 1.024067; 1.00136; 1.48737; 1.074111; 1.001457
## Individual models saved as: gini_run-tree26_chain*.rda
## Convergence diagnosis saved as: gini_run-tree26_conv.rda
##
## 2019-05-27 - 16:15:23: MCMCglmm performed on tree 27
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2092.577; 994.8135; 773.4334; 18.34196; 75.62222; 1058.22; 1835.009; 258.9686; 458.9002; 27.60999; 94
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.193587; 1.015968; 1.000277; 1.693064; 1.075105; 1.000305
## Individual models saved as: gini_run-tree27_chain*.rda
## Convergence diagnosis saved as: gini_run-tree27_conv.rda
##
## 2019-05-27 - 16:15:24: MCMCglmm performed on tree 28
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1656.87; 281.8514; 408.5726; 20.74472; 119.1083; 1186.129; 2000; 264.34; 380.2694; 19.30437; 46.2035
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.035287; 1.020779; 1.000807; 1.035408; 1.088373; 1.00163
## Individual models saved as: gini_run-tree28_chain*.rda
## Convergence diagnosis saved as: gini_run-tree28_conv.rda
##
## 2019-05-27 - 16:15:25: MCMCglmm performed on tree 29
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1786.146; 556.8529; 899.9285; 49.08217; 179.8503; 1142.981; 2000; 445.6927; 706.8324; 12.87671; 18.88
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.330244; 1.497727; 1.011329; 2.043777; 3.05303; 1.045604
## Individual models saved as: gini_run-tree29_chain*.rda
## Convergence diagnosis saved as: gini_run-tree29_conv.rda
##
## 2019-05-27 - 16:15:26: MCMCglmm performed on tree 30
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 1752.01; 271.6012; 273.6924; 14.34722; 64.75341; 1132.398; 2000; 575.9529; 833.1614; 43.09659; 64.99
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 2.511192; 1.697058; 1.00162; 10.58412; 3.035811; 1.008342
## Individual models saved as: gini_run-tree30_chain*.rda
## Convergence diagnosis saved as: gini_run-tree30_conv.rda
##
## 2019-05-27 - 16:15:26: MCMCglmm performed on tree 31
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 624.4605; 454.524; 28.19011; 65.91127; 1132.481; 1861.685; 342.336; 483.254; 30.30416; 76.4267
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.001012; 1.006178; 0.9999077; 1.006745; 1.031862; 1.000428
## Individual models saved as: gini_run-tree31_chain*.rda
## Convergence diagnosis saved as: gini_run-tree31_conv.rda
##
## 2019-05-27 - 16:15:27: MCMCglmm performed on tree 32
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1937.409; 358.4682; 779.5136; 30.75621; 58.29264; 937.4405; 2513.678; 927.4619; 587.0579; 36.65592;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.288534; 1.095499; 0.9998236; 1.923191; 1.354812; 1.000149
## Individual models saved as: gini_run-tree32_chain*.rda
## Convergence diagnosis saved as: gini_run-tree32_conv.rda
##
## 2019-05-27 - 16:15:28: MCMCglmm performed on tree 33
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2248.362; 348.725; 526.3605; 30.04801; 46.35341; 1097.896; 2160.004; 530.5573; 288.4847; 25.28423; 5
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.121452; 1.001909; 1.00164; 1.376773; 1.009796; 1.001909
## Individual models saved as: gini_run-tree33_chain*.rda
## Convergence diagnosis saved as: gini_run-tree33_conv.rda
##
## 2019-05-27 - 16:15:29: MCMCglmm performed on tree 34
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2184.638; 554.5089; 408.9111; 25.47625; 59.83335; 1166.067; 2000; 438.1832; 381.769; 35.79445; 50.41
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.21834; 1.10792; 1.000585; 1.738687; 1.401701; 1.003521
## Individual models saved as: gini_run-tree34_chain*.rda
## Convergence diagnosis saved as: gini_run-tree34_conv.rda
##
## 2019-05-27 - 16:15:30: MCMCglmm performed on tree 35
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 476.2299; 144.9336; 21.33702; 64.20361; 1049.326; 2255.761; 311.0377; 467.5094; 22.07406; 25.5
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.169302; 1.059127; 1.004065; 1.600658; 1.228647; 1.01824
```

```
## Individual models saved as: gini_run-tree35_chain*.rda
## Convergence diagnosis saved as: gini_run-tree35_conv.rda
##
## 2019-05-27 - 16:15:31: MCMCglmm performed on tree 36
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2331.615; 222.9438; 294.253; 18.42211; 41.25205; 1265.294; 2000; 484.6834; 307.3813; 30.85628; 156.7
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.080594; 1.075316; 0.9995296; 1.230791; 1.281896; 0.9996334
## Individual models saved as: gini_run-tree36_chain*.rda
## Convergence diagnosis saved as: gini_run-tree36_conv.rda
##
## 2019-05-27 - 16:15:31: MCMCglmm performed on tree 37
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 420.4031; 613.9977; 34.4579; 110.5756; 1113.632; 2000; 773.6383; 260.3902; 25.56824; 30.58452;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.532468; 1.152668; 1.002316; 2.989357; 1.538496; 1.00526
## Individual models saved as: gini_run-tree37_chain*.rda
## Convergence diagnosis saved as: gini_run-tree37_conv.rda
##
## 2019-05-27 - 16:15:32: MCMCglmm performed on tree 38
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 417.7954; 463.7216; 27.29609; 49.13654; 1072.169; 1917.987; 192.2603; 306.2048; 20.64198; 37.83
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.164772; 1.017006; 1.000366; 1.581112; 1.078996; 1.000917
## Individual models saved as: gini_run-tree38_chain*.rda
## Convergence diagnosis saved as: gini_run-tree38_conv.rda
##
## 2019-05-27 - 16:15:33: MCMCglmm performed on tree 39
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 204.1246; 414.5477; 21.7841; 126.2187; 1152.038; 2000; 333.1121; 638.6658; 37.48208; 29.50501;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.155514; 1.012889; 1.00586; 1.551587; 1.052657; 1.027735
## Individual models saved as: gini_run-tree39_chain*.rda
## Convergence diagnosis saved as: gini_run-tree39_conv.rda
##
## 2019-05-27 - 16:15:34: MCMCglmm performed on tree 40
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1753.658; 930.1938; 602.3524; 36.70033; 123.51; 1024.815; 1734.133; 188.6804; 133.2275; 20.67632; 78
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.1098; 1.036193; 1.005168; 1.243997; 1.158671; 1.026083
## Individual models saved as: gini_run-tree40_chain*.rda
## Convergence diagnosis saved as: gini_run-tree40_conv.rda
##
## 2019-05-27 - 16:15:35: MCMCglmm performed on tree 41
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1925.39; 555.0694; 1122.997; 16.9994; 60.35094; 1137.177; 2000; 597.1161; 168.0855; 16.72552; 48.493
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal, C2.V
## All levels converged < 1.1: FALSE
## 1.3447; 1.157396; 1.002097; 2.226476; 1.554931; 1.005252
## Individual models saved as: gini_run-tree41_chain*.rda
## Convergence diagnosis saved as: gini_run-tree41_conv.rda
##
## 2019-05-27 - 16:15:36: MCMCglmm performed on tree 42
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 312.4833; 343.8067; 25.91885; 45.80715; 1012.553; 2298.387; 425.7495; 723.3521; 33.48578; 91.4
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.148061; 1.035315; 1.002189; 1.432414; 1.152209; 1.003224
## Individual models saved as: gini_run-tree42_chain*.rda
## Convergence diagnosis saved as: gini_run-tree42_conv.rda
##
## 2019-05-27 - 16:15:36: MCMCglmm performed on tree 43
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 652.3246; 280.197; 26.76784; 64.83303; 1089.116; 2248.732; 876.0633; 974.8737; 43.37445; 78.38
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 2.009655; 1.036162; 1.005544; 4.968935; 1.1562; 1.021002
## Individual models saved as: gini_run-tree43_chain*.rda
## Convergence diagnosis saved as: gini_run-tree43_conv.rda
##
## 2019-05-27 - 16:15:37: MCMCglmm performed on tree 44
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 404.0112; 399.2709; 25.45303; 55.79285; 1121.334; 2000; 287.9418; 263.6966; 23.58725; 82.7095;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.034204; 1.004366; 1.005964; 1.044272; 1.00447; 1.030925
## Individual models saved as: gini_run-tree44_chain*.rda
## Convergence diagnosis saved as: gini_run-tree44_conv.rda
##
## 2019-05-27 - 16:15:38: MCMCglmm performed on tree 45
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 440.7368; 450.7404; 32.77964; 82.23907; 1068.61; 1838.855; 402.737; 994.1392; 25.02403; 51.554
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.059391; 1.000548; 1.002504; 1.166418; 1.001246; 1.012703
## Individual models saved as: gini_run-tree45_chain*.rda
## Convergence diagnosis saved as: gini_run-tree45_conv.rda
##
## 2019-05-27 - 16:15:39: MCMCglmm performed on tree 46
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1689.513; 176.6077; 192.8109; 21.44365; 53.7658; 1099.293; 1410.561; 561.5457; 319.9388; 25.50465; 78
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
```

```
## All levels converged < 1.1: FALSE
## 1.090555; 1.011143; 1.003355; 1.280974; 1.04779; 1.009848
## Individual models saved as: gini_run-tree46_chain*.rda
## Convergence diagnosis saved as: gini_run-tree46_conv.rda
##
## 2019-05-27 - 16:15:40: MCMCglmm performed on tree 47
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2172.691; 615.5127; 701.9806; 43.80132; 44.58643; 1096.798; 1696.301; 575.096; 299.103; 17.04541; 63
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.009156; 1.009391; 0.9997297; 1.015576; 1.025542; 0.9997494
## Individual models saved as: gini_run-tree47_chain*.rda
## Convergence diagnosis saved as: gini_run-tree47_conv.rda
##
## 2019-05-27 - 16:15:40: MCMCglmm performed on tree 48
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2134.706; 392.6719; 334.1759; 32.83565; 197.4623; 1157.327; 2378.471; 416.9538; 452.2502; 19.37992;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.085484; 1.003033; 1.000854; 1.332066; 1.015589; 1.00521
## Individual models saved as: gini_run-tree48_chain*.rda
## Convergence diagnosis saved as: gini_run-tree48_conv.rda
##
## 2019-05-27 - 16:15:41: MCMCglmm performed on tree 49
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 823.4033; 739.4794; 18.47314; 99.39749; 1766.289; 1698.164; 567.8055; 1071.737; 24.12641; 98.7
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.VCV.animal, C2.V
## All levels converged < 1.1: FALSE
## 1.011371; 1.076618; 0.9995221; 1.054275; 1.287717; 0.9996077
## Individual models saved as: gini_run-tree49_chain*.rda
## Convergence diagnosis saved as: gini_run-tree49_conv.rda
##
## 2019-05-27 - 16:15:42: MCMCglmm performed on tree 50
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2192.274; 553.2355; 638.079; 44.36142; 88.81032; 1133.031; 2147.189; 746.5069; 895.3693; 31.85366; 6
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.101548; 1.09033; 1.002614; 1.380116; 1.335588; 1.008269
## Individual models saved as: gini_run-tree50_chain*.rda
## Convergence diagnosis saved as: gini_run-tree50_conv.rda
##
## 2019-05-27 - 16:15:43: MCMCglmm performed on tree 51
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 826.7073; 382.9548; 26.91826; 99.87606; 1115.497; 2000; 548.8464; 526.8728; 36.26811; 162.2436
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.214383; 1.035022; 1.001951; 1.717689; 1.126122; 1.006029
## Individual models saved as: gini_run-tree51_chain*.rda
## Convergence diagnosis saved as: gini_run-tree51_conv.rda
```

```
##
## 2019-05-27 - 16:15:44: MCMCglmm performed on tree 52
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1559.141; 337.401; 1160.886; 19.41919; 26.22483; 1066.437; 1697.295; 488.5623; 356.7033; 26.58594; 18
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal, C2.VC
## All levels converged < 1.1: FALSE
## 1.18136; 1.080674; 0.9997773; 1.635365; 1.303892; 1.000393
## Individual models saved as: gini_run-tree52_chain*.rda
## Convergence diagnosis saved as: gini_run-tree52_conv.rda
##
## 2019-05-27 - 16:15:45: MCMCglmm performed on tree 53
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3145.106; 600.4096; 232.7197; 26.70804; 69.98992; 1136.438; 2000; 625.5997; 525.7516; 29.85622; 94.20
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.129499; 1.224329; 1.000164; 1.46849; 1.755528; 1.002826
## Individual models saved as: gini_run-tree53_chain*.rda
## Convergence diagnosis saved as: gini_run-tree53_conv.rda
##
## 2019-05-27 - 16:15:45: MCMCglmm performed on tree 54
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3430.818; 286.4647; 359.3827; 22.50032; 46.79776; 1110.196; 2000; 586.5917; 938.4542; 25.64244; 38.80
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.003896; 1.009167; 1.001654; 1.019979; 1.029634; 1.001824
## Individual models saved as: gini_run-tree54_chain*.rda
## Convergence diagnosis saved as: gini_run-tree54_conv.rda
##
## 2019-05-27 - 16:15:46: MCMCglmm performed on tree 55
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2806.383; 336.4092; 911.2342; 20.88587; 42.12764; 1087.678; 1714.685; 278.3813; 408.6765; 16.49909; 8
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.895039; 1.246408; 0.9999899; 4.160255; 1.813562; 1.001343
## Individual models saved as: gini_run-tree55_chain*.rda
## Convergence diagnosis saved as: gini_run-tree55_conv.rda
##
## 2019-05-27 - 16:15:47: MCMCglmm performed on tree 56
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 667.0635; 1119.427; 30.26482; 95.56181; 888.1243; 2000; 493.9998; 568.1027; 19.58979; 33.41617
## C1.Sol.mass_g, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV
## All levels converged < 1.1: FALSE
## 1.11269; 1.145998; 1.000119; 1.415109; 1.519726; 1.001468
## Individual models saved as: gini_run-tree56_chain*.rda
## Convergence diagnosis saved as: gini_run-tree56_conv.rda
##
## 2019-05-27 - 16:15:48: MCMCglmm performed on tree 57
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 1874.258; 756.1404; 493.3617; 28.84853; 120.0895; 883.2168; 1687.789; 482.9109; 459.6517; 33.35413; 8
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.051841; 1.000275; 1.000055; 1.18507; 1.003311; 1.001981
## Individual models saved as: gini_run-tree57_chain*.rda
## Convergence diagnosis saved as: gini_run-tree57_conv.rda
##
## 2019-05-27 - 16:15:49: MCMCglmm performed on tree 58
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1799.239; 445.311; 706.2343; 19.11254; 44.92064; 1071.544; 2064.323; 347.382; 335.5971; 24.00487; 13
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.018238; 1.011784; 1.00031; 1.085879; 1.029255; 1.002048
## Individual models saved as: gini_run-tree58_chain*.rda
## Convergence diagnosis saved as: gini_run-tree58_conv.rda
##
## 2019-05-27 - 16:15:49: MCMCglmm performed on tree 59
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2972.329; 588.2823; 487.8336; 25.93088; 125.9597; 1026.311; 1580.349; 478.0703; 635.2535; 27.88486; 1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.040273; 1.166293; 1.000109; 1.165165; 1.588242; 1.002538
## Individual models saved as: gini_run-tree59_chain*.rda
## Convergence diagnosis saved as: gini_run-tree59_conv.rda
##
## 2019-05-27 - 16:15:50: MCMCglmm performed on tree 60
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2724.076; 324.2244; 337.7617; 17.8417; 26.54854; 1057.639; 2000; 163.0062; 378.0556; 30.21043; 63.09
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.015215; 1.005594; 1.001606; 1.02701; 1.009576; 1.007757
## Individual models saved as: gini_run-tree60_chain*.rda
## Convergence diagnosis saved as: gini_run-tree60_conv.rda
##
## 2019-05-27 - 16:15:51: MCMCglmm performed on tree 61
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 415.0289; 675.7176; 29.89772; 104.1539; 1049.961; 2000; 810.4252; 555.5108; 26.09232; 103.6932
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.001006; 1.008661; 1.001943; 1.003549; 1.03992; 1.006307
## Individual models saved as: gini_run-tree61_chain*.rda
## Convergence diagnosis saved as: gini_run-tree61_conv.rda
##
## 2019-05-27 - 16:15:52: MCMCglmm performed on tree 62
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1642.672; 480.3815; 646.5898; 44.14522; 98.92175; 1145.409; 1858.998; 243.2617; 226.5469; 21.67499; 0
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.173998; 1.091066; 1.000856; 1.600291; 1.340681; 1.006091
```

```
## Individual models saved as: gini_run-tree62_chain*.rda
## Convergence diagnosis saved as: gini_run-tree62_conv.rda
##
## 2019-05-27 - 16:15:53: MCMCglmm performed on tree 63
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2738.015; 528.7141; 186.1958; 13.288; 19.50837; 1070.924; 2000; 469.7111; 463.1224; 22.68913; 54.3953
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.330659; 1.047407; 1.002598; 2.105612; 1.198641; 1.009961
## Individual models saved as: gini_run-tree63_chain*.rda
## Convergence diagnosis saved as: gini_run-tree63_conv.rda
##
## 2019-05-27 - 16:15:53: MCMCglmm performed on tree 64
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 394.6295; 684.7393; 24.00459; 120.6414; 1091.885; 1790.223; 352.8095; 283.0821; 17.47442; 162.1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.733314; 1.250411; 0.9995574; 3.607886; 1.833864; 0.9995725
## Individual models saved as: gini_run-tree64_chain*.rda
## Convergence diagnosis saved as: gini_run-tree64_conv.rda
##
## 2019-05-27 - 16:15:54: MCMCglmm performed on tree 65
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2143.379; 1521.465; 854.9248; 31.994; 202.5041; 1220.19; 1095.922; 288.23; 280.039; 19.71525; 81.6897
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.367076; 1.20626; 0.9998452; 2.265679; 1.692676; 1.000841
## Individual models saved as: gini_run-tree65_chain*.rda
## Convergence diagnosis saved as: gini_run-tree65_conv.rda
##
## 2019-05-27 - 16:15:55: MCMCglmm performed on tree 66
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 765.0969; 725.5728; 15.06855; 18.67861; 1143.049; 2573.718; 590.2447; 354.784; 25.37092; 52.211
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.006533; 1.04164; 1.001855; 1.02256; 1.12833; 1.00692
## Individual models saved as: gini_run-tree66_chain*.rda
## Convergence diagnosis saved as: gini_run-tree66_conv.rda
##
## 2019-05-27 - 16:15:56: MCMCglmm performed on tree 67
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2081.133; 439.3538; 447.2659; 23.61343; 84.26274; 988.2066; 2000; 737.7088; 785.699; 13.45391; 127.17
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.079369; 1.045953; 1.006203; 1.273464; 1.178196; 1.03042
## Individual models saved as: gini_run-tree67_chain*.rda
## Convergence diagnosis saved as: gini_run-tree67_conv.rda
##
## 2019-05-27 - 16:15:57: MCMCglmm performed on tree 68
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1957.096; 310.1433; 304.8905; 22.73747; 119.4417; 1051.217; 2000; 780.8656; 684.5005; 32.92927; 149.
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.068593; 1.109432; 0.9999289; 1.274053; 1.398411; 1.001617
## Individual models saved as: gini_run-tree68_chain*.rda
## Convergence diagnosis saved as: gini_run-tree68_conv.rda
##
## 2019-05-27 - 16:15:58: MCMCglmm performed on tree 69
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 906.1618; 336.718; 24.79794; 77.09284; 1103.626; 2000; 245.8495; 362.0979; 24.16479; 55.84959;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.084628; 1.001333; 1.002083; 1.304929; 1.002241; 1.012264
## Individual models saved as: gini_run-tree69_chain*.rda
## Convergence diagnosis saved as: gini_run-tree69_conv.rda
##
## 2019-05-27 - 16:15:58: MCMCglmm performed on tree 70
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2549.311; 146.0645; 266.3495; 21.44323; 54.36843; 1038.052; 1901.824; 524.7742; 309.1162; 19.32504; 
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.015624; 1.000907; 1.000027; 1.054266; 1.005702; 1.000178
## Individual models saved as: gini_run-tree70_chain*.rda
## Convergence diagnosis saved as: gini_run-tree70_conv.rda
##
## 2019-05-27 - 16:15:59: MCMCglmm performed on tree 71
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2203.191; 610.4015; 745.9305; 26.31067; 84.02097; 1035.261; 1729.951; 408.8824; 197.0291; 26.71179; 
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.209801; 1.072755; 1.00182; 1.761569; 1.289963; 1.008797
## Individual models saved as: gini_run-tree71_chain*.rda
## Convergence diagnosis saved as: gini_run-tree71_conv.rda
##
## 2019-05-27 - 16:16:00: MCMCglmm performed on tree 72
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1558.836; 1339.207; 397.0996; 42.48521; 63.75445; 1100.742; 2276.546; 459.3328; 214.8554; 13.96033; 5
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.125665; 1.139076; 1.002152; 1.454738; 1.498105; 1.006357
## Individual models saved as: gini_run-tree72_chain*.rda
## Convergence diagnosis saved as: gini_run-tree72_conv.rda
##
## 2019-05-27 - 16:16:01: MCMCglmm performed on tree 73
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 732.444; 318.3206; 28.24197; 74.46; 840.8679; 1657.693; 414.8794; 288.7893; 20.29183; 64.43578
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
```

```
## All levels converged < 1.1: FALSE
## 1.041686; 1.060878; 1.009043; 1.157453; 1.246779; 1.041432
## Individual models saved as: gini_run-tree73_chain*.rda
## Convergence diagnosis saved as: gini_run-tree73_conv.rda
##
## 2019-05-27 - 16:16:02: MCMCglmm performed on tree 74
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2074.434; 651.1736; 813.3635; 37.86174; 96.51915; 1135.051; 2000; 498.3552; 643.9914; 32.1982; 81.38
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.027772; 1.068578; 1.005056; 1.090941; 1.26191; 1.024008
## Individual models saved as: gini_run-tree74_chain*.rda
## Convergence diagnosis saved as: gini_run-tree74_conv.rda
##
## 2019-05-27 - 16:16:03: MCMCglmm performed on tree 75
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2160.409; 1836.112; 534.328; 48.42775; 62.81204; 1085.44; 2000; 662.158; 269.029; 17.67172; 86.12519
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.147737; 1.066939; 1.001352; 1.524535; 1.256145; 1.006645
## Individual models saved as: gini_run-tree75_chain*.rda
## Convergence diagnosis saved as: gini_run-tree75_conv.rda
##
## 2019-05-27 - 16:16:03: MCMCglmm performed on tree 76
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2972.034; 754.5934; 620.186; 31.11791; 75.35804; 1055.467; 2942.204; 814.2622; 311.7389; 25.04751; 14
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.375496; 1.174818; 1.001568; 2.199004; 1.606031; 1.002062
## Individual models saved as: gini_run-tree76_chain*.rda
## Convergence diagnosis saved as: gini_run-tree76_conv.rda
##
## 2019-05-27 - 16:16:04: MCMCglmm performed on tree 77
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2659.483; 431.0806; 258.8905; 12.09027; 51.45044; 1024.907; 1753.8; 602.7228; 377.7709; 25.27158; 103
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.299899; 1.12751; 0.9997034; 2.352863; 1.463183; 0.9998537
## Individual models saved as: gini_run-tree77_chain*.rda
## Convergence diagnosis saved as: gini_run-tree77_conv.rda
##
## 2019-05-27 - 16:16:05: MCMCglmm performed on tree 78
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1990.858; 428.3818; 414.2746; 18.13656; 46.8695; 987.7808; 1790.85; 368.0595; 290.4843; 31.13061; 62
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.891067; 1.481602; 1.006447; 4.471681; 2.478947; 1.032455
## Individual models saved as: gini_run-tree78_chain*.rda
## Convergence diagnosis saved as: gini_run-tree78_conv.rda
```

```
##
## 2019-05-27 - 16:16:06: MCMCglmm performed on tree 79
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1947.819; 486.1673; 453.8033; 24.92414; 55.04902; 1092.288; 2320.652; 646.5232; 907.0271; 19.73328; 1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.01646; 1.007553; 0.9996839; 1.076414; 1.03689; 0.9996847
## Individual models saved as: gini_run-tree79_chain*.rda
## Convergence diagnosis saved as: gini_run-tree79_conv.rda
##
## 2019-05-27 - 16:16:06: MCMCglmm performed on tree 80
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 578.2977; 581.4852; 21.71243; 176.739; 1084.29; 2000; 682.3634; 282.2837; 31.29446; 49.14364; 9
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.033922; 1.014242; 1.006804; 1.147177; 1.057592; 1.029044
## Individual models saved as: gini_run-tree80_chain*.rda
## Convergence diagnosis saved as: gini_run-tree80_conv.rda
##
## 2019-05-27 - 16:16:07: MCMCglmm performed on tree 81
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 442.3984; 228.7962; 19.25502; 56.23751; 1076.197; 2000; 284.5638; 460.347; 31.99413; 51.3046; 1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.000843; 1.021306; 1.002247; 1.001377; 1.063432; 1.012525
## Individual models saved as: gini_run-tree81_chain*.rda
## Convergence diagnosis saved as: gini_run-tree81_conv.rda
##
## 2019-05-27 - 16:16:08: MCMCglmm performed on tree 82
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2377.162; 228.1252; 399.7997; 29.84874; 44.89094; 1182.005; 2000; 1387.164; 551.6151; 39.15332; 116.4
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.40482; 1.216855; 0.999778; 2.345684; 1.749457; 1.00085
## Individual models saved as: gini_run-tree82_chain*.rda
## Convergence diagnosis saved as: gini_run-tree82_conv.rda
##
## 2019-05-27 - 16:16:09: MCMCglmm performed on tree 83
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2344.355; 430.2583; 219.9447; 17.55809; 135.2472; 1025.334; 2056.073; 462.9591; 443.3624; 35.24501; 1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.002294; 1.001895; 1.003518; 1.002793; 1.002212; 1.004045
## Individual models saved as: gini_run-tree83_chain*.rda
## Convergence diagnosis saved as: gini_run-tree83_conv.rda
##
## 2019-05-27 - 16:16:09: MCMCglmm performed on tree 84
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2405.926; 190.021; 147.8826; 12.86936; 35.84518; 972.8949; 2000; 761.7131; 328.3789; 32.09807; 31.71
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.065608; 1.027112; 0.9998068; 1.11267; 1.068975; 1.000371
## Individual models saved as: gini_run-tree84_chain*.rda
## Convergence diagnosis saved as: gini_run-tree84_conv.rda
##
## 2019-05-27 - 16:16:10: MCMCglmm performed on tree 85
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1384.008; 606.1782; 557.3258; 34.05866; 117.4694; 992.0384; 2030.142; 401.637; 416.571; 23.37559; 51
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.414307; 1.011104; 1.002363; 2.570905; 1.045633; 1.00462
## Individual models saved as: gini_run-tree85_chain*.rda
## Convergence diagnosis saved as: gini_run-tree85_conv.rda
##
## 2019-05-27 - 16:16:11: MCMCglmm performed on tree 86
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 383.4242; 622.6827; 31.89859; 70.9792; 1031.186; 2000; 375.3915; 589.5924; 22.44336; 50.90502;
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.625444; 1.132612; 1.001417; 3.874806; 1.478483; 1.005553
## Individual models saved as: gini_run-tree86_chain*.rda
## Convergence diagnosis saved as: gini_run-tree86_conv.rda
##
## 2019-05-27 - 16:16:12: MCMCglmm performed on tree 87
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2846.046; 310.5544; 338.0761; 34.49085; 123.7563; 1012.112; 2000; 536.1541; 694.3384; 33.21351; 143.1
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.37266; 1.500046; 1.002044; 2.135762; 2.557483; 1.006656
## Individual models saved as: gini_run-tree87_chain*.rda
## Convergence diagnosis saved as: gini_run-tree87_conv.rda
##
## 2019-05-27 - 16:16:13: MCMCglmm performed on tree 88
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2526.067; 628.5678; 658.8804; 32.3139; 86.34753; 1017.372; 2353.401; 424.5057; 383.02; 27.3232; 110.0
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.021058; 1.038085; 1.002103; 1.03049; 1.161878; 1.009487
## Individual models saved as: gini_run-tree88_chain*.rda
## Convergence diagnosis saved as: gini_run-tree88_conv.rda
##
## 2019-05-27 - 16:16:13: MCMCglmm performed on tree 89
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1876.682; 597.3154; 343.5639; 29.80564; 115.88; 1089.941; 2000; 260.7312; 343.0156; 20.51968; 48.7943
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.000652; 1.049439; 0.9997752; 1.005251; 1.193624; 0.9997799
```

```
## Individual models saved as: gini_run-tree89_chain*.rda
## Convergence diagnosis saved as: gini_run-tree89_conv.rda
##
## 2019-05-27 - 16:16:14: MCMCglmm performed on tree 90
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2608.586; 499.2616; 312.7227; 15.26594; 55.69559; 1014.213; 2324.446; 486.3723; 767.5407; 28.39966; 3
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.283819; 1.096697; 1.00313; 2.146131; 1.367467; 1.004113
## Individual models saved as: gini_run-tree90_chain*.rda
## Convergence diagnosis saved as: gini_run-tree90_conv.rda
##
## 2019-05-27 - 16:16:15: MCMCglmm performed on tree 91
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1301.212; 160.1521; 165.1061; 11.40901; 87.47658; 619.9779; 2042.775; 400.6886; 461.3137; 25.89939; 4
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: TRUE
## 1.021757; 1.002843; 1.00361; 1.059747; 1.015948; 1.010123
## Individual models saved as: gini_run-tree91_chain*.rda
## Convergence diagnosis saved as: gini_run-tree91_conv.rda
##
## 2019-05-27 - 16:16:16: MCMCglmm performed on tree 92
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1008.611; 625.9983; 38.65954; 186.9817; 1083.854; 2703.803; 379.1123; 555.0108; 27.01871; 86.67
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.427; 1.221218; 0.9997386; 2.361363; 1.746736; 1.000159
## Individual models saved as: gini_run-tree92_chain*.rda
## Convergence diagnosis saved as: gini_run-tree92_conv.rda
##
## 2019-05-27 - 16:16:16: MCMCglmm performed on tree 93
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1662.063; 207.117; 194.657; 29.44549; 64.26723; 1033.28; 2407.653; 636.6008; 664.1316; 47.72344; 204
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.043919; 1.02031; 0.999954; 1.046451; 1.064058; 1.000398
## Individual models saved as: gini_run-tree93_chain*.rda
## Convergence diagnosis saved as: gini_run-tree93_conv.rda
##
## 2019-05-27 - 16:16:17: MCMCglmm performed on tree 94
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1819.347; 724.7368; 789.2362; 23.76185; 130.4985; 859.4136; 1508.659; 430.9023; 661.1227; 16.60817; 5
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
## All levels converged < 1.1: FALSE
## 1.424366; 1.126346; 1.000849; 2.302979; 1.459363; 1.003895
## Individual models saved as: gini_run-tree94_chain*.rda
## Convergence diagnosis saved as: gini_run-tree94_conv.rda
##
## 2019-05-27 - 16:16:18: MCMCglmm performed on tree 95
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 305.6904; 316.3157; 24.94679; 50.62759; 1006.367; 2000; 407.7271; 331.9261; 21.30872; 69.70343
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.072208; 1.083105; 1.005797; 1.286952; 1.312149; 1.029713
## Individual models saved as: gini_run-tree95_chain*.rda
## Convergence diagnosis saved as: gini_run-tree95_conv.rda
##
## 2019-05-27 - 16:16:19: MCMCglmm performed on tree 96
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 682.5861; 664.6003; 41.43475; 134.1208; 1225.647; 2242.663; 209.7034; 187.116; 18.68836; 86.229
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: TRUE
## 1.008577; 1.001417; 1.000234; 1.039227; 1.004917; 1.003045
## Individual models saved as: gini_run-tree96_chain*.rda
## Convergence diagnosis saved as: gini_run-tree96_conv.rda
##
## 2019-05-27 - 16:16:19: MCMCglmm performed on tree 97
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1764.971; 603.6256; 483.4592; 40.8563; 118.3558; 1036.305; 2000; 504.3005; 400.9643; 31.27329; 84.583
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.143585; 1.000638; 0.9998392; 1.51201; 1.002176; 0.9998647
## Individual models saved as: gini_run-tree97_chain*.rda
## Convergence diagnosis saved as: gini_run-tree97_conv.rda
##
## 2019-05-27 - 16:16:20: MCMCglmm performed on tree 98
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1513.183; 249.4224; 201.209; 15.59423; 35.80622; 1156.275; 2540.722; 182.5885; 289.7574; 21.63655; 89
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size,
## All levels converged < 1.1: FALSE
## 1.132424; 1.018466; 1.012209; 1.464949; 1.061581; 1.048876
## Individual models saved as: gini_run-tree98_chain*.rda
## Convergence diagnosis saved as: gini_run-tree98_conv.rda
##
## 2019-05-27 - 16:16:21: MCMCglmm performed on tree 99
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2404.028; 2000; 872.8176; 51.7919; 491.6046; 1078.21; 2000; 283.9453; 550.9502; 29.98281; 67.73442; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.mass_g, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.22685; 1.061806; 1.000838; 1.857391; 1.237888; 1.002507
## Individual models saved as: gini_run-tree99_chain*.rda
## Convergence diagnosis saved as: gini_run-tree99_conv.rda
##
## 2019-05-27 - 16:16:22: MCMCglmm performed on tree 100
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 273.6137; 327.9811; 39.53597; 45.75003; 939.2889; 2644.151; 468.4939; 796.5996; 28.28334; 74.91
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.mass_g, C2.Sol
```

```
## All levels converged < 1.1: FALSE
## 1.056411; 1.000992; 1.001518; 1.124478; 1.006935; 1.00475
## Individual models saved as: gini_run-tree100_chain*.rda
## Convergence diagnosis saved as: gini_run-tree100_conv.rda
##
## 2019-05-27 - 16:16:22: MCMCglmm successfully performed on 100 trees.
## Total execution time: 1.346846 mins.
## Use read.mulTree() to read the data as 'mulTree' data.
## Use summary.mulTree() and plot.mulTree() for plotting or summarizing the 'mulTree' data.
```

Standard deviation of reporduction as measured using mxlx

```
formula_mxlxsd <- mxlxsd ~ mass_g + matrix_size

mulTree(mulTree.data = pop_multree,
        formula = formula_mxlxsd,
        priors = prior,
        parameters = parameters,
        output = "mxlxsd_logged_run",
        ESS = 1000,
        chains = 2)
```

```
## Output chain name "mxlxsd_logged_run" already exists!
## Press [enter] if you wish to overwrite the models or [esc] to cancel.
```

```
## Models will be overwritten...
```

```
##
## 2019-05-27 - 16:16:23: MCMCglmm performed on tree 1
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3311.097; 2000; 1634.711; 12.23549; 81.41035; 966.8826; 2283.049; 2146.501; 1528.785; 18.10291; 217.3
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.580727; 1.08465; 1.001845; 4.624745; 1.329175; 1.008946
## Individual models saved as: mxlxsd_logged_run-tree1_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree1_conv.rda
##
## 2019-05-27 - 16:16:23: MCMCglmm performed on tree 2
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1631.124; 2000; 2000; 23.00278; 260.0528; 1179.014; 1261.684; 2000; 1662.041; 22.268; 120.218; 990.64
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.018773; 1.069132; 1.001918; 1.027111; 1.244123; 1.011373
## Individual models saved as: mxlxsd_logged_run-tree2_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree2_conv.rda
##
## 2019-05-27 - 16:16:24: MCMCglmm performed on tree 3
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1554.41; 1575.451; 990.3989; 13.92861; 120.4699; 1078.459; 2236.179; 2000; 1749.353; 16.14104; 126.63
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: FALSE
## 1.363299; 1.087243; 1.00102; 2.753681; 1.337736; 1.001398
## Individual models saved as: mxlxsd_logged_run-tree3_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree3_conv.rda
##
## 2019-05-27 - 16:16:25: MCMCglmm performed on tree 4
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1122.487; 2000; 2000; 18.10697; 224.4255; 1170.68; 4622.819; 2168.652; 626.1743; 11.84744; 116.0605;
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.226288; 1.019426; 1.003543; 1.81888; 1.057541; 1.0127
## Individual models saved as: mxlxsd_logged_run-tree4_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree4_conv.rda
##
## 2019-05-27 - 16:16:26: MCMCglmm performed on tree 5
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2702.299; 2000; 1865.966; 32.02771; 603.3662; 1042.732; 2000; 1854.138; 685.1197; 5.644196; 74.94216
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.665335; 1.11581; 0.9997539; 4.946591; 1.423113; 1.00058
## Individual models saved as: mxlxsd_logged_run-tree5_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree5_conv.rda
##
## 2019-05-27 - 16:16:26: MCMCglmm performed on tree 6
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1831.752; 2000; 956.4501; 12.23215; 39.6823; 1043.868; 785.989; 1774.44; 2000; 14.21122; 132.2008; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.(Intercept), C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 2.131436; 1.579648; 1.000544; 9.341625; 2.682573; 1.000856
## Individual models saved as: mxlxsd_logged_run-tree6_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree6_conv.rda
##
## 2019-05-27 - 16:16:27: MCMCglmm performed on tree 7
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2842.784; 1653.954; 603.7966; 18.98283; 59.43417; 1064.676; 1484.756; 2000; 1723.838; 18.893; 201.08
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.140549; 1.028506; 0.9998651; 1.450706; 1.125311; 1.000479
## Individual models saved as: mxlxsd_logged_run-tree7_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree7_conv.rda
##
## 2019-05-27 - 16:16:28: MCMCglmm performed on tree 8
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1341.02; 2000; 1340.708; 7.255882; 60.17793; 1086.706; 1883.67; 2130.952; 2000; 32.9027; 1008.302; 1
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal < 1000
## All levels converged < 1.1: FALSE
## 1.569031; 1.024501; 1.002787; 5.635691; 1.086573; 1.00973
## Individual models saved as: mxlxsd_logged_run-tree8_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree8_conv.rda
```

```
##
## 2019-05-27 - 16:16:29: MCMCglmm performed on tree 9
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1877.387; 1092.485; 1860.956; 16.29952; 208.8088; 1109.8; 1405.397; 2000; 2000; 31.78405; 185.0461; 9
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: TRUE
## 1.004241; 1.018239; 1.009298; 1.020985; 1.073645; 1.025089
## Individual models saved as: mxlxsd_logged_run-tree9_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree9_conv.rda
##
## 2019-05-27 - 16:16:29: MCMCglmm performed on tree 10
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2212.06; 2000; 2000; 23.43196; 146.6196; 1107.9; 2389.206; 2000; 1749.412; 20.26597; 90.86752; 1200.0
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.206909; 1.108425; 1.000354; 1.699786; 1.403243; 1.002404
## Individual models saved as: mxlxsd_logged_run-tree10_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree10_conv.rda
##
## 2019-05-27 - 16:16:30: MCMCglmm performed on tree 11
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1731.487; 2190.463; 2000; 29.49781; 716.2068; 975.7319; 1897.4; 1656.262; 2000; 18.15334; 1108.554; 1
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal < 1000
## All levels converged < 1.1: TRUE
## 1.032773; 1.018568; 1.001883; 1.090574; 1.081722; 1.002797
## Individual models saved as: mxlxsd_logged_run-tree11_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree11_conv.rda
##
## 2019-05-27 - 16:16:31: MCMCglmm performed on tree 12
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1537.492; 2000; 1951.802; 25.69906; 420.9996; 1122.549; 2003.805; 2000; 1532.536; 22.43961; 367.7996
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.261751; 1.037871; 0.9996265; 2.085738; 1.16439; 0.9996589
## Individual models saved as: mxlxsd_logged_run-tree12_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree12_conv.rda
##
## 2019-05-27 - 16:16:32: MCMCglmm performed on tree 13
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2620.42; 2000; 2000; 25.30775; 170.8381; 913.5713; 666.4163; 2000; 2000; 12.39929; 173.7115; 1089.038
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.Sol.(Intercept), C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.054992; 1.004246; 1.001304; 1.109968; 1.020548; 1.003355
## Individual models saved as: mxlxsd_logged_run-tree13_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree13_conv.rda
##
## 2019-05-27 - 16:16:32: MCMCglmm performed on tree 14
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2088.941; 2000; 330.3229; 18.82005; 57.68046; 1086.254; 1815.015; 2000; 1621.763; 20.21144; 197.3621
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.301455; 1.044084; 0.9999914; 2.539935; 1.167547; 1.001636
## Individual models saved as: mxlxsd_logged_run-tree14_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree14_conv.rda
##
## 2019-05-27 - 16:16:33: MCMCglmm performed on tree 15
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1855.01; 2000; 1723.702; 16.8286; 168.5671; 1076.848; 879.4729; 2000; 1064.566; 11.24332; 50.08912;
## C1.VCV.animal, C1.VCV.species, C2.Sol.(Intercept), C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.259038; 1.071746; 1.000636; 2.06722; 1.277399; 1.002895
## Individual models saved as: mxlxsd_logged_run-tree15_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree15_conv.rda
##
## 2019-05-27 - 16:16:34: MCMCglmm performed on tree 16
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1744.429; 2000; 2000; 28.00269; 161.3267; 1081.911; 2000; 1145.752; 586.0207; 21.03438; 70.53878; 115
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.252574; 1.000828; 0.9995025; 2.040215; 1.003793; 0.9995025
## Individual models saved as: mxlxsd_logged_run-tree16_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree16_conv.rda
##
## 2019-05-27 - 16:16:35: MCMCglmm performed on tree 17
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3296.745; 2000; 2000; 37.49079; 745.1733; 1068.951; 1801.166; 2000; 2000; 16.31044; 284.7566; 1068.38
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.025308; 1.010348; 1.001319; 1.077258; 1.038142; 1.005556
## Individual models saved as: mxlxsd_logged_run-tree17_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree17_conv.rda
##
## 2019-05-27 - 16:16:35: MCMCglmm performed on tree 18
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1469.976; 2000; 1813.779; 28.08451; 489.1786; 1013.595; 915.43; 2000; 2118.477; 35.32263; 1275.846;
## C1.VCV.animal, C1.VCV.species, C2.Sol.(Intercept), C2.VCV.animal < 1000
## All levels converged < 1.1: FALSE
## 1.412836; 1.008293; 1.002515; 3.907929; 1.020524; 1.002543
## Individual models saved as: mxlxsd_logged_run-tree18_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree18_conv.rda
##
## 2019-05-27 - 16:16:36: MCMCglmm performed on tree 19
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1253.499; 1970.439; 13.93992; 678.239; 1038.975; 2157.349; 1741.437; 1870.729; 11.06788; 315.80
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.270278; 1.033302; 1.000072; 2.071494; 1.137041; 1.001729
```

```
## Individual models saved as: mxlxsd_logged_run-tree19_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree19_conv.rda
##
## 2019-05-27 - 16:16:37: MCMCglmm performed on tree 20
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2457.727; 1767.901; 826.6771; 21.9927; 61.29373; 990.3377; 2759.007; 1614.976; 1037.215; 11.69321; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 100
## All levels converged < 1.1: FALSE
## 1.497121; 1.049287; 1.000806; 4.816278; 1.175043; 1.005429
## Individual models saved as: mxlxsd_logged_run-tree20_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree20_conv.rda
##
## 2019-05-27 - 16:16:38: MCMCglmm performed on tree 21
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1561.648; 2000; 2000; 18.43455; 195.4699; 938.6984; 2000; 2000; 1789.221; 28.91501; 930.7771; 1254.85
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.441545; 1.021007; 1.000482; 4.124538; 1.041132; 1.000873
## Individual models saved as: mxlxsd_logged_run-tree21_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree21_conv.rda
##
## 2019-05-27 - 16:16:38: MCMCglmm performed on tree 22
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1816.772; 1822.544; 1530.776; 19.76833; 599.0011; 1042.585; 1676.958; 2000; 1029.744; 27.82442; 88.58
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.347262; 1.0142; 1.002017; 2.453748; 1.04579; 1.009746
## Individual models saved as: mxlxsd_logged_run-tree22_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree22_conv.rda
##
## 2019-05-27 - 16:16:39: MCMCglmm performed on tree 23
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2063.23; 2000; 1735.324; 42.98392; 437.1275; 1136.462; 2311.581; 2000; 910.496; 12.22786; 218.5507; 9
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 100
## All levels converged < 1.1: TRUE
## 1.005447; 1.002019; 1.000274; 1.022837; 1.011834; 1.003211
## Individual models saved as: mxlxsd_logged_run-tree23_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree23_conv.rda
##
## 2019-05-27 - 16:16:40: MCMCglmm performed on tree 24
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1899.149; 1881.846; 2000; 21.88255; 433.5284; 1117.905; 1501.055; 2000; 760.2231; 13.82693; 89.14849
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.06364; 0.9995418; 1.00118; 1.076623; 0.9996957; 1.003977
## Individual models saved as: mxlxsd_logged_run-tree24_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree24_conv.rda
##
## 2019-05-27 - 16:16:41: MCMCglmm performed on tree 25
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2338.638; 1564.722; 469.0918; 25.00848; 199.1188; 1025.061; 1895.784; 2000; 2000; 9.977356; 94.65547
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.169554; 1.07545; 1.000408; 1.597715; 1.296511; 1.003491
## Individual models saved as: mxlxsd_logged_run-tree25_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree25_conv.rda
##
## 2019-05-27 - 16:16:42: MCMCglmm performed on tree 26
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1800.815; 2000; 758.2693; 10.42368; 62.72548; 1046.336; 1158.214; 2000; 1222.327; 22.30342; 133.0102
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.42536; 1.207458; 1.00643; 3.318482; 1.694358; 1.030384
## Individual models saved as: mxlxsd_logged_run-tree26_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree26_conv.rda
##
## 2019-05-27 - 16:16:42: MCMCglmm performed on tree 27
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2459.788; 1576.251; 1441.291; 10.81749; 270.2151; 1102.553; 2834.372; 2000; 2000; 28.50001; 1318.529
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.430066; 1.023551; 0.9996699; 3.637618; 1.106872; 0.9997872
## Individual models saved as: mxlxsd_logged_run-tree27_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree27_conv.rda
##
## 2019-05-27 - 16:16:43: MCMCglmm performed on tree 28
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3441.011; 2000; 2000; 7.825879; 184.9851; 883.4838; 1729.779; 2000; 1441.362; 14.48989; 205.6284; 108
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.428105; 1.057055; 1.000257; 2.981004; 1.235831; 1.003102
## Individual models saved as: mxlxsd_logged_run-tree28_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree28_conv.rda
##
## 2019-05-27 - 16:16:44: MCMCglmm performed on tree 29
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2190.702; 2000; 1051.165; 28.52672; 407.8221; 1113.128; 3237.625; 1757.802; 2000; 8.997298; 252.0877
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.022047; 1.011889; 1.002433; 1.098525; 1.057251; 1.008604
## Individual models saved as: mxlxsd_logged_run-tree29_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree29_conv.rda
##
## 2019-05-27 - 16:16:45: MCMCglmm performed on tree 30
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1706.08; 2000; 1836.165; 16.14486; 154.3176; 1055.959; 1403.752; 2000; 1470.772; 36.71763; 362.8652;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: FALSE
## 1.149064; 1.001873; 1.000129; 1.503644; 1.008425; 1.000215
## Individual models saved as: mxlxsd_logged_run-tree30_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree30_conv.rda
##
## 2019-05-27 - 16:16:45: MCMCglmm performed on tree 31
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2711.949; 1551.646; 1307.33; 23.23138; 189.0413; 1002.22; 2342.367; 1810.144; 1874.767; 19.76821; 389
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.241891; 1.009918; 1.000463; 1.965335; 1.029497; 1.004239
## Individual models saved as: mxlxsd_logged_run-tree31_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree31_conv.rda
##
## 2019-05-27 - 16:16:46: MCMCglmm performed on tree 32
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2384.005; 2000; 2000; 32.16516; 530.1674; 1084.425; 2877.816; 2000; 2000; 15.78018; 91.68258; 981.023
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: TRUE
## 1.062879; 1.003698; 1.000777; 1.077767; 1.019874; 1.004587
## Individual models saved as: mxlxsd_logged_run-tree32_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree32_conv.rda
##
## 2019-05-27 - 16:16:47: MCMCglmm performed on tree 33
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1544.83; 2229.402; 218.4678; 9.069525; 34.74123; 1158.795; 1393.197; 1271.2; 1358.1; 21.91915; 195.19
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.535029; 1.12437; 1.003498; 4.891217; 1.453436; 1.010416
## Individual models saved as: mxlxsd_logged_run-tree33_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree33_conv.rda
##
## 2019-05-27 - 16:16:48: MCMCglmm performed on tree 34
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2924.729; 2000; 598.7458; 21.7306; 38.34995; 1086.081; 2000; 1052.369; 589.638; 7.330511; 60.29947;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.356227; 1.147091; 1.00159; 3.089048; 1.522055; 1.009262
## Individual models saved as: mxlxsd_logged_run-tree34_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree34_conv.rda
##
## 2019-05-27 - 16:16:48: MCMCglmm performed on tree 35
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1264.207; 2000; 1784.006; 19.36684; 112.6973; 1048.146; 1753.511; 2000; 2000; 22.86102; 292.3388; 11
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.408268; 1.087619; 1.005931; 2.94359; 1.336255; 1.028737
## Individual models saved as: mxlxsd_logged_run-tree35_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree35_conv.rda
```

```
##
## 2019-05-27 - 16:16:49: MCMCglmm performed on tree 36
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1557.087; 2000; 2000; 22.99365; 589.1093; 1036.091; 2100.695; 2000; 2000; 23.89064; 234.4954; 913.49
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.236049; 1.003036; 1.001823; 1.895013; 1.003214; 1.001876
## Individual models saved as: mxlxsd_logged_run-tree36_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree36_conv.rda
##
## 2019-05-27 - 16:16:50: MCMCglmm performed on tree 37
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1773.576; 2000; 2000; 27.42291; 156.6745; 1176.201; 1505.497; 2000; 1865.18; 30.62679; 1091.47; 1385
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal < 1000
## All levels converged < 1.1: FALSE
## 1.514192; 1.057764; 1.001231; 4.191497; 1.236855; 1.006812
## Individual models saved as: mxlxsd_logged_run-tree37_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree37_conv.rda
##
## 2019-05-27 - 16:16:51: MCMCglmm performed on tree 38
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1612.096; 2000; 1779.255; 17.98334; 90.72828; 1063.903; 1584.929; 2000; 1470.176; 25.70078; 211.6877
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.228051; 1.016435; 1.000555; 1.870985; 1.064673; 1.001371
## Individual models saved as: mxlxsd_logged_run-tree38_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree38_conv.rda
##
## 2019-05-27 - 16:16:51: MCMCglmm performed on tree 39
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2625.021; 2000; 1158.769; 11.25899; 80.77439; 1085.026; 1467.414; 2000; 2000; 26.54548; 166.8673; 11
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.374418; 1.036517; 1.001173; 3.451639; 1.145898; 1.004203
## Individual models saved as: mxlxsd_logged_run-tree39_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree39_conv.rda
##
## 2019-05-27 - 16:16:52: MCMCglmm performed on tree 40
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2144.7; 2000; 1500.227; 12.54627; 95.26689; 1054.398; 3886.593; 1829.222; 2000; 26.17249; 359.0058; 1
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.011779; 1.012115; 1.000269; 1.045136; 1.043843; 1.003317
## Individual models saved as: mxlxsd_logged_run-tree40_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree40_conv.rda
##
## 2019-05-27 - 16:16:53: MCMCglmm performed on tree 41
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2250.57; 1954.544; 1675.273; 44.35676; 493.5559; 1149.173; 3311.666; 2000; 1143.837; 18.43496; 120.98
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.332056; 1.011279; 1.001357; 2.89164; 1.027266; 1.001433
## Individual models saved as: mxlxsd_logged_run-tree41_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree41_conv.rda
##
## 2019-05-27 - 16:16:54: MCMCglmm performed on tree 42
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1417.561; 2000; 2000; 30.06063; 473.0923; 1133.775; 3526.187; 2139.74; 2000; 18.64382; 232.4024; 1060
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.145003; 1.010707; 1.011935; 1.489973; 1.047732; 1.054403
## Individual models saved as: mxlxsd_logged_run-tree42_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree42_conv.rda
##
## 2019-05-27 - 16:16:55: MCMCglmm performed on tree 43
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1653.098; 2000; 2163.326; 23.98698; 592.4573; 1144.705; 1594.75; 1067.743; 1170.259; 14.45108; 103.35
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.22963; 1.057993; 1.000323; 1.876419; 1.238081; 1.003047
## Individual models saved as: mxlxsd_logged_run-tree43_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree43_conv.rda
##
## 2019-05-27 - 16:16:55: MCMCglmm performed on tree 44
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2754.53; 2138.081; 1159.267; 27.97758; 110.4796; 1041.269; 3167.404; 2000; 2000; 25.00821; 222.6092;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.719364; 1.106947; 0.9996232; 5.560282; 1.39983; 0.9996308
## Individual models saved as: mxlxsd_logged_run-tree44_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree44_conv.rda
##
## 2019-05-27 - 16:16:56: MCMCglmm performed on tree 45
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3800.316; 1552.211; 1157.586; 24.12085; 85.85982; 1144.177; 2000; 1223.628; 2000; 26.07584; 576.1707
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.013073; 1.003864; 1.000013; 1.019945; 1.012362; 1.001691
## Individual models saved as: mxlxsd_logged_run-tree45_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree45_conv.rda
##
## 2019-05-27 - 16:16:57: MCMCglmm performed on tree 46
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1362.014; 1887.54; 2000; 11.50433; 74.36254; 1087.899; 1470.386; 2000; 1133.843; 21.73249; 71.39838;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.113198; 1.044274; 1.002603; 1.405662; 1.153015; 1.011018
```

```
## Individual models saved as: mxlxsd_logged_run-tree46_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree46_conv.rda
##
## 2019-05-27 - 16:16:58: MCMCglmm performed on tree 47
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2021.758; 2000; 1905.089; 36.92294; 1359.294; 1130.338; 2074.221; 1846.164; 1549.119; 18.56009; 375.
## C1.VCV.animal, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.026609; 1.008882; 1.00474; 1.038642; 1.018494; 1.021522
## Individual models saved as: mxlxsd_logged_run-tree47_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree47_conv.rda
##
## 2019-05-27 - 16:16:58: MCMCglmm performed on tree 48
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1755.046; 1566.169; 2000; 12.56902; 830.156; 1062.679; 2000; 1640.749; 1902.039; 21.31169; 1011.337;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal < 1000
## All levels converged < 1.1: TRUE
## 1.063968; 1.00219; 1.000527; 1.075453; 1.01282; 1.003945
## Individual models saved as: mxlxsd_logged_run-tree48_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree48_conv.rda
##
## 2019-05-27 - 16:16:59: MCMCglmm performed on tree 49
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2370.081; 2000; 820.1175; 16.69778; 110.9207; 1202.633; 1992.384; 1772.873; 2000; 29.80591; 336.5449
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.225068; 1.015366; 1.001441; 1.818053; 1.065799; 1.008653
## Individual models saved as: mxlxsd_logged_run-tree49_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree49_conv.rda
##
## 2019-05-27 - 16:17:00: MCMCglmm performed on tree 50
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1504.886; 2000; 2000; 25.60856; 360.7972; 1204.223; 2908.002; 1956.157; 707.89; 18.79391; 55.39628; 
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 100
## All levels converged < 1.1: FALSE
## 1.355163; 1.008429; 1.006264; 3.065654; 1.016135; 1.030973
## Individual models saved as: mxlxsd_logged_run-tree50_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree50_conv.rda
##
## 2019-05-27 - 16:17:01: MCMCglmm performed on tree 51
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1550.62; 2000; 1405.302; 17.21596; 166.623; 1161.479; 1673.036; 2000; 1251.698; 16.51207; 1015.173; 
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal < 1000
## All levels converged < 1.1: FALSE
## 1.191629; 1.029394; 1.000955; 1.688201; 1.119375; 1.003639
## Individual models saved as: mxlxsd_logged_run-tree51_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree51_conv.rda
##
## 2019-05-27 - 16:17:01: MCMCglmm performed on tree 52
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1810.129; 1632.79; 2000; 33.19546; 812.0236; 1041.069; 1720.097; 1816.951; 2000; 12.50619; 188.2823;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.291786; 1.01288; 1.000686; 2.417826; 1.062294; 1.001093
## Individual models saved as: mxlxsd_logged_run-tree52_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree52_conv.rda
##
## 2019-05-27 - 16:17:02: MCMCglmm performed on tree 53
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1178.379; 1642.716; 2000; 21.7333; 102.5652; 1142.113; 1707.178; 1769.083; 2000; 23.61379; 231.2473;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: TRUE
## 1.017372; 1.000065; 1.000486; 1.019192; 1.002322; 1.001481
## Individual models saved as: mxlxsd_logged_run-tree53_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree53_conv.rda
##
## 2019-05-27 - 16:17:03: MCMCglmm performed on tree 54
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 2000; 34.95642; 636.2364; 1075.14; 1672.172; 2000; 1845.051; 20.92616; 308.0145; 714.313
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: TRUE
## 1.017457; 1.002859; 1.001667; 1.082493; 1.014248; 1.002371
## Individual models saved as: mxlxsd_logged_run-tree54_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree54_conv.rda
##
## 2019-05-27 - 16:17:04: MCMCglmm performed on tree 55
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2173.333; 2237.641; 1483.4; 9.679437; 168.8351; 1063.215; 1963.501; 1763.04; 2000; 24.68849; 288.525
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.564651; 1.01917; 1.000624; 5.521785; 1.082562; 1.004583
## Individual models saved as: mxlxsd_logged_run-tree55_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree55_conv.rda
##
## 2019-05-27 - 16:17:04: MCMCglmm performed on tree 56
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2053.53; 1202.766; 1729.304; 9.877503; 71.31296; 1135.684; 1369.752; 2000; 2000; 37.17714; 1092.328;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal < 1000
## All levels converged < 1.1: FALSE
## 1.261586; 1.023835; 1.001266; 2.090969; 1.034123; 1.008287
## Individual models saved as: mxlxsd_logged_run-tree56_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree56_conv.rda
##
## 2019-05-27 - 16:17:05: MCMCglmm performed on tree 57
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2372.412; 2000; 1633.058; 24.37497; 500.8698; 1050.13; 2266.793; 2000; 2000; 35.75755; 366.3828; 111
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: FALSE
## 1.142516; 1.050053; 0.9995879; 1.3902; 1.198051; 0.9997245
## Individual models saved as: mxlxsd_logged_run-tree57_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree57_conv.rda
##
## 2019-05-27 - 16:17:06: MCMCglmm performed on tree 58
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2229.228; 2000; 621.4448; 7.851135; 67.26332; 1080.566; 1358.339; 2000; 1548.518; 31.09282; 87.67819
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.243138; 1.013214; 1.007578; 1.975805; 1.052502; 1.026463
## Individual models saved as: mxlxsd_logged_run-tree58_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree58_conv.rda
##
## 2019-05-27 - 16:17:07: MCMCglmm performed on tree 59
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2890.02; 2000; 1989.288; 10.94227; 122.727; 1087.664; 2161.408; 1475.064; 2000; 29.42439; 241.7968;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.338099; 1.025373; 1.000987; 2.784189; 1.115941; 1.003449
## Individual models saved as: mxlxsd_logged_run-tree59_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree59_conv.rda
##
## 2019-05-27 - 16:17:07: MCMCglmm performed on tree 60
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1858.322; 2000; 483.6408; 13.87582; 79.0909; 1005.397; 2000; 2000; 1856.081; 25.46201; 73.9223; 1175
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.13651; 1.004772; 1.005318; 1.139175; 1.020933; 1.027566
## Individual models saved as: mxlxsd_logged_run-tree60_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree60_conv.rda
##
## 2019-05-27 - 16:17:08: MCMCglmm performed on tree 61
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2316.913; 1801.013; 1794.001; 26.09533; 415.5733; 987.5853; 2000; 1832.839; 1177.268; 25.66782; 94.8
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.630053; 1.086418; 1.008105; 3.982226; 1.333372; 1.037551
## Individual models saved as: mxlxsd_logged_run-tree61_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree61_conv.rda
##
## 2019-05-27 - 16:17:09: MCMCglmm performed on tree 62
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1150.391; 1175.791; 1276.851; 14.89523; 259.8256; 919.4136; 1496.449; 2103.195; 1380.598; 19.13365; 8
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.26535; 1.025145; 0.99967; 2.115278; 1.081508; 0.9999514
## Individual models saved as: mxlxsd_logged_run-tree62_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree62_conv.rda
```

```
##
## 2019-05-27 - 16:17:10: MCMCglmm performed on tree 63
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1875.324; 2000; 1592.224; 13.9059; 98.19507; 1001.605; 1054.824; 2145.508; 2000; 29.71462; 395.9617;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.143951; 1.02529; 1.000127; 1.488056; 1.097608; 1.002201
## Individual models saved as: mxlxsd_logged_run-tree63_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree63_conv.rda
##
## 2019-05-27 - 16:17:11: MCMCglmm performed on tree 64
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2115.528; 2000; 421.4715; 6.532961; 66.95161; 1105.936; 2484.249; 1811.447; 2000; 24.32713; 527.0872
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.461405; 1.090601; 1.003691; 3.157711; 1.335779; 1.007805
## Individual models saved as: mxlxsd_logged_run-tree64_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree64_conv.rda
##
## 2019-05-27 - 16:17:11: MCMCglmm performed on tree 65
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2085.326; 2000; 1731.27; 13.46586; 93.78326; 988.4672; 2034.586; 2048.627; 2000; 10.0963; 893.4977;
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.746249; 1.093513; 0.9996613; 5.311316; 1.357646; 0.9998806
## Individual models saved as: mxlxsd_logged_run-tree65_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree65_conv.rda
##
## 2019-05-27 - 16:17:12: MCMCglmm performed on tree 66
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2264.827; 2000; 1250.116; 10.90505; 731.3795; 1029.57; 1939.922; 2000; 2000; 7.299014; 93.38728; 113
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.008634; 1.005355; 1.003599; 1.039143; 1.028065; 1.00564
## Individual models saved as: mxlxsd_logged_run-tree66_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree66_conv.rda
##
## 2019-05-27 - 16:17:13: MCMCglmm performed on tree 67
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2712.696; 1912.73; 1842.15; 14.02044; 82.0093; 1059.885; 2263.057; 1631.295; 501.204; 9.096372; 14.8
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.028938; 1.009987; 1.002996; 1.028939; 1.01289; 1.003872
## Individual models saved as: mxlxsd_logged_run-tree67_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree67_conv.rda
##
## 2019-05-27 - 16:17:14: MCMCglmm performed on tree 68
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2394.837; 1912.388; 2000; 30.07548; 198.7194; 1171.794; 1298.2; 2000; 2000; 11.55587; 1459.077; 1086
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal < 1000
## All levels converged < 1.1: TRUE
## 1.006879; 1.007461; 0.9996464; 1.033035; 1.032626; 1.0002
## Individual models saved as: mxlxsd_logged_run-tree68_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree68_conv.rda
##
## 2019-05-27 - 16:17:14: MCMCglmm performed on tree 69
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2819.013; 2000; 1583.262; 32.97855; 220.0539; 1019.733; 2329.921; 2000; 1485.644; 30.70417; 172.4634
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.046583; 1.000503; 0.9996695; 1.05565; 1.003381; 1.000293
## Individual models saved as: mxlxsd_logged_run-tree69_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree69_conv.rda
##
## 2019-05-27 - 16:17:15: MCMCglmm performed on tree 70
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1775.285; 1743.776; 1858.348; 13.8486; 504.8649; 1128.457; 1735.659; 1350.817; 1227.015; 11.10615; 1
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.191899; 1.042374; 1.003384; 1.588319; 1.179277; 1.009806
## Individual models saved as: mxlxsd_logged_run-tree70_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree70_conv.rda
##
## 2019-05-27 - 16:17:16: MCMCglmm performed on tree 71
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2302.197; 2000; 1148.656; 11.20341; 212.0031; 1049.543; 2409.551; 2000; 1298.087; 20.76599; 215.5945
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.005441; 1.060458; 1.010702; 1.01185; 1.239128; 1.042967
## Individual models saved as: mxlxsd_logged_run-tree71_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree71_conv.rda
##
## 2019-05-27 - 16:17:17: MCMCglmm performed on tree 72
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1367.886; 2000; 821.195; 13.24776; 315.6975; 1167.187; 1563.865; 1461.4; 2000; 16.74102; 150.6676; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.16052; 1.010752; 1.001666; 1.562485; 1.05307; 1.00912
## Individual models saved as: mxlxsd_logged_run-tree72_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree72_conv.rda
##
## 2019-05-27 - 16:17:17: MCMCglmm performed on tree 73
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1582.486; 2000; 1590.173; 23.5162; 146.152; 975.1169; 1724.638; 2154.414; 1458.768; 19.64723; 200.01
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.28879; 1.153074; 1.003572; 2.237593; 1.541077; 1.018737
```

```
## Individual models saved as: mxlxsd_logged_run-tree73_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree73_conv.rda
##
## 2019-05-27 - 16:17:18: MCMCglmm performed on tree 74
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1540.819; 2183.691; 1427.893; 28.32193; 223.2653; 1057.444; 1910.63; 1272.466; 1192.834; 18.64481; 1
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.337927; 1.006274; 1.000296; 2.777228; 1.031026; 1.001301
## Individual models saved as: mxlxsd_logged_run-tree74_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree74_conv.rda
##
## 2019-05-27 - 16:17:19: MCMCglmm performed on tree 75
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1491.004; 2000; 1383.414; 22.02234; 72.98937; 1039.791; 1455.289; 2000; 2000; 13.80944; 289.8381; 99
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.183549; 1.009188; 1.001312; 1.645235; 1.026077; 1.006983
## Individual models saved as: mxlxsd_logged_run-tree75_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree75_conv.rda
##
## 2019-05-27 - 16:17:20: MCMCglmm performed on tree 76
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1581.995; 2000; 1610.617; 16.56569; 176.3438; 1047.358; 2093.513; 2245.565; 1692.479; 10.98254; 117.3
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.1434; 0.9995814; 1.002962; 1.303883; 0.999909; 1.013812
## Individual models saved as: mxlxsd_logged_run-tree76_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree76_conv.rda
##
## 2019-05-27 - 16:17:20: MCMCglmm performed on tree 77
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1992.762; 2000; 1492.208; 21.29458; 640.3188; 1136.96; 1916.552; 2000; 2000; 32.2683; 278.7844; 1084
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.222683; 1.008755; 1.001083; 1.834935; 1.031259; 1.001318
## Individual models saved as: mxlxsd_logged_run-tree77_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree77_conv.rda
##
## 2019-05-27 - 16:17:21: MCMCglmm performed on tree 78
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 4072.855; 2000; 2000; 24.18005; 229.287; 965.3755; 1119.186; 2000; 2000; 20.1941; 399.0686; 1049.407
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.214437; 1.003792; 1.006191; 1.61919; 1.019856; 1.013613
## Individual models saved as: mxlxsd_logged_run-tree78_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree78_conv.rda
##
## 2019-05-27 - 16:17:22: MCMCglmm performed on tree 79
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2883.135; 2000; 1527.916; 17.58243; 89.53609; 976.083; 1386; 2000; 2174.678; 25.17124; 524.8267; 982
## C1.VCV.animal, C1.VCV.species, C1.VCV.units, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 2.057936; 1.208841; 0.9999423; 8.371491; 1.697279; 1.000861
## Individual models saved as: mxlxsd_logged_run-tree79_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree79_conv.rda
##
## 2019-05-27 - 16:17:23: MCMCglmm performed on tree 80
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1372.234; 2000; 1661.6; 22.90019; 159.5184; 1070.623; 1738.902; 2000; 989.3874; 45.7745; 437.0468; 1
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.527094; 1.022484; 1.013099; 3.217955; 1.100526; 1.05739
## Individual models saved as: mxlxsd_logged_run-tree80_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree80_conv.rda
##
## 2019-05-27 - 16:17:24: MCMCglmm performed on tree 81
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1310.245; 2000; 417.6846; 9.460288; 109.8908; 1081.17; 1673.208; 1382.363; 2000; 8.930723; 509.1988;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 100
## All levels converged < 1.1: FALSE
## 1.090152; 1.033497; 1.003622; 1.191512; 1.141017; 1.019321
## Individual models saved as: mxlxsd_logged_run-tree81_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree81_conv.rda
##
## 2019-05-27 - 16:17:25: MCMCglmm performed on tree 82
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1648.906; 1381.611; 1608.846; 18.11397; 218.4072; 1059.475; 1883.294; 2000; 690.3822; 10.06555; 38.4
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.105334; 1.035859; 1.002187; 1.112849; 1.155797; 1.012583
## Individual models saved as: mxlxsd_logged_run-tree82_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree82_conv.rda
##
## 2019-05-27 - 16:17:25: MCMCglmm performed on tree 83
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1882.038; 1779.167; 2000; 24.40302; 495.6765; 1017.987; 1798.042; 1726.943; 2000; 15.16085; 156.6053
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.335627; 1.017894; 1.001104; 2.438442; 1.062057; 1.005346
## Individual models saved as: mxlxsd_logged_run-tree83_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree83_conv.rda
##
## 2019-05-27 - 16:17:26: MCMCglmm performed on tree 84
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1621.896; 980.9633; 12.99979; 83.98067; 1136.837; 3087.006; 2000; 1274.327; 14.50377; 75.45642
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
```

```
## All levels converged < 1.1: FALSE
## 1.608894; 1.02946; 1.001596; 4.573708; 1.096162; 1.005177
## Individual models saved as: mxlxsd_logged_run-tree84_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree84_conv.rda
##
## 2019-05-27 - 16:17:27: MCMCglmm performed on tree 85
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2110.528; 2000; 1140.114; 20.63467; 462.3488; 1040.053; 1678.228; 2020.74; 2000; 37.60185; 854.5983;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.708282; 1.030634; 1.007149; 6.317305; 1.133161; 1.024048
## Individual models saved as: mxlxsd_logged_run-tree85_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree85_conv.rda
##
## 2019-05-27 - 16:17:28: MCMCglmm performed on tree 86
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1451.985; 1802.778; 2000; 26.72334; 1366.774; 1147.849; 2767.057; 1499.412; 1060.907; 16.89716; 217.
## C1.VCV.animal, C2.VCV.animal, C2.VCV.species, C2.VCV.units < 1000
## All levels converged < 1.1: FALSE
## 1.145399; 1.001081; 1.002296; 1.155262; 1.005528; 1.010474
## Individual models saved as: mxlxsd_logged_run-tree86_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree86_conv.rda
##
## 2019-05-27 - 16:17:28: MCMCglmm performed on tree 87
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1135.468; 2000; 661.3843; 10.83706; 105.3192; 1064.509; 2053.506; 2000; 2000; 19.5482; 159.4119; 105
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.886561; 1.109477; 0.9999805; 3.499006; 1.408068; 1.001126
## Individual models saved as: mxlxsd_logged_run-tree87_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree87_conv.rda
##
## 2019-05-27 - 16:17:29: MCMCglmm performed on tree 88
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2441.15; 2000; 1055.671; 20.31255; 111.7117; 1134.579; 1360.268; 2171.582; 1798.208; 28.33948; 229.7
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.041273; 1.015294; 1.000844; 1.143604; 1.072461; 1.000853
## Individual models saved as: mxlxsd_logged_run-tree88_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree88_conv.rda
##
## 2019-05-27 - 16:17:30: MCMCglmm performed on tree 89
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2145.682; 1756.904; 2000; 17.23577; 296.1125; 1262.366; 1490.476; 2000; 2000; 15.79355; 366.5185; 10
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.122278; 1.00201; 1.000188; 1.339737; 1.011944; 1.00291
## Individual models saved as: mxlxsd_logged_run-tree89_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree89_conv.rda
```

```
##
## 2019-05-27 - 16:17:31: MCMCglmm performed on tree 90
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1589.453; 1855.77; 2000; 32.4646; 425.5444; 1072.678; 1888.341; 2000; 1353.156; 13.57292; 94.16764;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.427357; 1.037574; 1.001064; 2.483588; 1.15967; 1.005861
## Individual models saved as: mxlxsd_logged_run-tree90_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree90_conv.rda
##
## 2019-05-27 - 16:17:32: MCMCglmm performed on tree 91
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3890.623; 2000; 818.4263; 10.9533; 184.3421; 1006.851; 2960.423; 2000; 1026.936; 26.81995; 141.5922;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.142553; 1.013943; 1.000418; 1.450378; 1.065249; 1.004031
## Individual models saved as: mxlxsd_logged_run-tree91_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree91_conv.rda
##
## 2019-05-27 - 16:17:32: MCMCglmm performed on tree 92
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2810.013; 2000; 1261.398; 20.55052; 169.8865; 1040.386; 1810.236; 2000; 2000; 26.15933; 389.1849; 10
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.030484; 1.001382; 1.001396; 1.102602; 1.006933; 1.001437
## Individual models saved as: mxlxsd_logged_run-tree92_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree92_conv.rda
##
## 2019-05-27 - 16:17:33: MCMCglmm performed on tree 93
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2064.705; 2000; 2000; 10.95163; 280.8814; 1141.185; 4077.135; 1616.961; 2000; 12.5682; 430.9495; 109
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.321321; 1.008078; 1.000229; 2.797814; 1.035913; 1.000382
## Individual models saved as: mxlxsd_logged_run-tree93_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree93_conv.rda
##
## 2019-05-27 - 16:17:34: MCMCglmm performed on tree 94
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2531.322; 2000; 2132.353; 42.50596; 596.6381; 1086.965; 2000; 1913.845; 2000; 27.40521; 1252.735; 10
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal < 1000
## All levels converged < 1.1: FALSE
## 1.124359; 1.000377; 1.000945; 1.414847; 1.00385; 1.003308
## Individual models saved as: mxlxsd_logged_run-tree94_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree94_conv.rda
##
## 2019-05-27 - 16:17:35: MCMCglmm performed on tree 95
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2822.637; 2000; 1422.732; 15.06104; 124.8276; 1052.73; 2083.679; 2000; 1653.623; 48.44339; 581.8138;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.070808; 1.00592; 0.999655; 1.235577; 1.024022; 0.9999961
## Individual models saved as: mxlxsd_logged_run-tree95_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree95_conv.rda
##
## 2019-05-27 - 16:17:35: MCMCglmm performed on tree 96
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2149.648; 1805.692; 2000; 19.76565; 886.9801; 1146.201; 949.6825; 2000; 670.3751; 18.11158; 52.67322
## C1.VCV.animal, C1.VCV.species, C2.Sol.(Intercept), C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.274669; 1.088811; 0.9999385; 2.053456; 1.342517; 1.001664
## Individual models saved as: mxlxsd_logged_run-tree96_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree96_conv.rda
##
## 2019-05-27 - 16:17:36: MCMCglmm performed on tree 97
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2596.132; 1780.887; 2000; 11.3632; 136.0147; 1113.828; 1723.237; 1476.062; 1702.616; 14.62953; 304.55
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.451679; 1.016925; 0.999635; 4.231871; 1.075719; 1.000081
## Individual models saved as: mxlxsd_logged_run-tree97_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree97_conv.rda
##
## 2019-05-27 - 16:17:37: MCMCglmm performed on tree 98
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1532.245; 1839.3; 2000; 8.327594; 59.70613; 1058.538; 1639.167; 2000; 2000; 46.67552; 811.12; 1043.0
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.395346; 1.009763; 1.001386; 3.563263; 1.022594; 1.007603
## Individual models saved as: mxlxsd_logged_run-tree98_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree98_conv.rda
##
## 2019-05-27 - 16:17:38: MCMCglmm performed on tree 99
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1741.41; 2000; 1272.415; 14.54937; 251.9308; 1067.893; 1392.522; 2048.483; 2000; 23.69147; 240.5002;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.084268; 1.007044; 0.9998891; 1.301518; 1.035909; 1.000101
## Individual models saved as: mxlxsd_logged_run-tree99_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree99_conv.rda
##
## 2019-05-27 - 16:17:39: MCMCglmm performed on tree 100
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2545.446; 2000; 1496.941; 10.80473; 79.13906; 1173.457; 1046.136; 2000; 2000; 7.224884; 159.971; 109
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.168168; 1.112586; 1.002576; 1.595393; 1.417806; 1.012481
```

```
## Individual models saved as: mxlxsd_logged_run-tree100_chain*.rda
## Convergence diagnosis saved as: mxlxsd_logged_run-tree100_conv.rda
##
## 2019-05-27 - 16:17:39: MCMCglmm successfully performed on 100 trees.
## Total execution time: 1.281126 mins.
## Use read.mulTree() to read the data as 'mulTree' data.
## Use summary.mulTree() and plot.mulTree() for plotting or summarizing the 'mulTree' data.
```

Standard deviation of mortality rates

```
formula_surv_sd <- surv_sd ~ mass_g + matrix_size

mulTree(mulTree.data = pop_multree,
        formula = formula_surv_sd,
        priors = prior,
        parameters = parameters,
        output = "surv_sd_run",
        ESS = 1000,
        chains = 2)
```

```
## Output chain name "surv_sd_run" already exists!
## Press [enter] if you wish to overwrite the models or [esc] to cancel.
```

```
## Models will be overwritten...
```

```
##
## 2019-05-27 - 16:17:39: MCMCglmm performed on tree 1
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1777; 1733.903; 471.079; 96.5716; 144.4999; 1412.456; 1708.554; 2000; 948.7591; 151.6625; 293.5105;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.009377; 1.032038; 1.009391; 1.009405; 1.045073; 1.035863
## Individual models saved as: surv_sd_run-tree1_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree1_conv.rda
##
## 2019-05-27 - 16:17:40: MCMCglmm performed on tree 2
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 886.3302; 139.2815; 175.0463; 1249.333; 1871.105; 1534.311; 616.8314; 143.4908; 158.7131
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004276; 1.004964; 1.003651; 1.019767; 1.018273; 1.010152
## Individual models saved as: surv_sd_run-tree2_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree2_conv.rda
##
## 2019-05-27 - 16:17:41: MCMCglmm performed on tree 3
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1471.113; 921.8113; 122.7224; 279.297; 1202.288; 2000; 2000; 904.9244; 129.7863; 165.2073; 123
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.010539; 1.049745; 1.003244; 1.030425; 1.122526; 1.013654
```

```
## Individual models saved as: surv_sd_run-tree3_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree3_conv.rda
##
## 2019-05-27 - 16:17:42: MCMCglmm performed on tree 4
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1236.658; 647.5269; 107.5744; 284.0642; 1393.554; 2000; 2000; 818.0112; 149.3629; 269.6034; 115
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.01384; 0.9996287; 0.9997209; 1.025172; 0.9996297; 0.9998661
## Individual models saved as: surv_sd_run-tree4_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree4_conv.rda
##
## 2019-05-27 - 16:17:42: MCMCglmm performed on tree 5
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 793.8272; 130.8828; 255.2575; 1280.165; 2000; 1669.724; 694.1; 107.3717; 158.1151; 1250.1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.015733; 1.004257; 1.002686; 1.062655; 1.022052; 1.015153
## Individual models saved as: surv_sd_run-tree5_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree5_conv.rda
##
## 2019-05-27 - 16:17:43: MCMCglmm performed on tree 6
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 3356.947; 1714.513; 485.7989; 141.2645; 153.6088; 1306.038; 2000; 2000; 534.0649; 91.23622; 77.75371
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.013032; 1.032545; 0.9999229; 1.057113; 1.072998; 1.001061
## Individual models saved as: surv_sd_run-tree6_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree6_conv.rda
##
## 2019-05-27 - 16:17:44: MCMCglmm performed on tree 7
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2031.142; 1901.151; 607.6272; 115.9765; 205.128; 1362.82; 2000; 1828.137; 562.3639; 144.4811; 203.731
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.042008; 1.06861; 0.9997978; 1.176787; 1.159598; 1.000893
## Individual models saved as: surv_sd_run-tree7_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree7_conv.rda
##
## 2019-05-27 - 16:17:45: MCMCglmm performed on tree 8
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1730.824; 765.7512; 140.584; 245.0077; 1259.316; 2000; 2000; 922.885; 110.6109; 246.0507; 1269
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002871; 1.006547; 0.9996393; 1.015008; 1.033695; 1.000117
## Individual models saved as: surv_sd_run-tree8_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree8_conv.rda
##
## 2019-05-27 - 16:17:45: MCMCglmm performed on tree 9
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1842.099; 1825.895; 911.9577; 131.3582; 117.9003; 1303.12; 2000; 2000; 858.8971; 125.0788; 143.1189;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.022186; 1.114686; 0.9996341; 1.02225; 1.286374; 1.000077
## Individual models saved as: surv_sd_run-tree9_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree9_conv.rda
##
## 2019-05-27 - 16:17:46: MCMCglmm performed on tree 10
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 944.1602; 119.8124; 231.6047; 1257.222; 2000; 1435.794; 1200.033; 150.2339; 288.0613; 124
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.026687; 1.006931; 1.000328; 1.070456; 1.009196; 1.003468
## Individual models saved as: surv_sd_run-tree10_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree10_conv.rda
##
## 2019-05-27 - 16:17:47: MCMCglmm performed on tree 11
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 653.532; 85.66583; 236.9024; 1264.279; 2000; 2000; 855.4764; 120.0256; 236.3582; 1310.68
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.054635; 1.007332; 1.004126; 1.185; 1.028484; 1.021864
## Individual models saved as: surv_sd_run-tree11_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree11_conv.rda
##
## 2019-05-27 - 16:17:48: MCMCglmm performed on tree 12
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 895.893; 112.325; 196.4094; 1576.278; 2093.636; 1293.925; 1138.967; 128.5648; 149.8293;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.002818; 1.016605; 1.004493; 1.00309; 1.022499; 1.012284
## Individual models saved as: surv_sd_run-tree12_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree12_conv.rda
##
## 2019-05-27 - 16:17:48: MCMCglmm performed on tree 13
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2140.084; 1813.808; 1159.146; 116.0273; 248.1256; 1198.272; 2000; 2000; 1037.491; 140.1585; 221.5465
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.062673; 1.012589; 1.000466; 1.238076; 1.058047; 1.001359
## Individual models saved as: surv_sd_run-tree13_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree13_conv.rda
##
## 2019-05-27 - 16:17:49: MCMCglmm performed on tree 14
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 619.9092; 133.1946; 197.2106; 1280.713; 2000; 1577.699; 744.0932; 114.2986; 209.2325; 12
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: TRUE
## 1.007504; 1.004725; 1.000061; 1.030252; 1.004728; 1.002007
## Individual models saved as: surv_sd_run-tree14_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree14_conv.rda
##
## 2019-05-27 - 16:17:50: MCMCglmm performed on tree 15
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 719.7893; 142.8232; 186.1811; 1317.173; 2000; 1577.216; 523.9907; 102.7249; 263.4155; 128
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.019677; 1.00746; 0.9997061; 1.03325; 1.018812; 0.9997067
## Individual models saved as: surv_sd_run-tree15_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree15_conv.rda
##
## 2019-05-27 - 16:17:51: MCMCglmm performed on tree 16
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1876.208; 1854.907; 605.5586; 92.34712; 222.6068; 1284.621; 2000; 1372.3; 739.3897; 123.1516; 174.55
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.011216; 1.01662; 1.004887; 1.054648; 1.023796; 1.011886
## Individual models saved as: surv_sd_run-tree16_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree16_conv.rda
##
## 2019-05-27 - 16:17:52: MCMCglmm performed on tree 17
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2332.635; 1815.951; 1353.455; 151.7707; 288.2696; 1190.003; 2000; 1588.369; 367.7182; 81.74728; 154.
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.0253; 1.018243; 1.001249; 1.103969; 1.038719; 1.007334
## Individual models saved as: surv_sd_run-tree17_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree17_conv.rda
##
## 2019-05-27 - 16:17:52: MCMCglmm performed on tree 18
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1124.591; 798.8993; 132.0193; 173.6988; 1357.664; 2000; 1755.793; 758.2772; 147.0821; 273.1989
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.015389; 1.054066; 0.9996063; 1.047511; 1.151776; 0.99984
## Individual models saved as: surv_sd_run-tree18_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree18_conv.rda
##
## 2019-05-27 - 16:17:53: MCMCglmm performed on tree 19
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2230.851; 1715.51; 715.7339; 124.4407; 262.5271; 1317.128; 2000; 2000; 973.2805; 136.3344; 193.151;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.017403; 1.016813; 0.9999598; 1.064979; 1.072052; 1.001773
## Individual models saved as: surv_sd_run-tree19_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree19_conv.rda
```

```
##
## 2019-05-27 - 16:17:54: MCMCglmm performed on tree 20
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1241.719; 807.143; 128.4347; 94.66804; 1283.509; 2000; 1701.334; 947.0099; 130.3793; 145.5294;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.006272; 1.015538; 1.000818; 1.007574; 1.043509; 1.000948
## Individual models saved as: surv_sd_run-tree20_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree20_conv.rda
##
## 2019-05-27 - 16:17:55: MCMCglmm performed on tree 21
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2088.192; 1736.417; 723.739; 132.5188; 175.6195; 1237.129; 2000; 2000; 722.1394; 103.6371; 214.9774;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004099; 1.002851; 1.002516; 1.017716; 1.01223; 1.00532
## Individual models saved as: surv_sd_run-tree21_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree21_conv.rda
##
## 2019-05-27 - 16:17:55: MCMCglmm performed on tree 22
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1279.251; 524.9506; 129.7498; 240.314; 1054.789; 1860.08; 1358.256; 752.6125; 93.41896; 155.43
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.011976; 1.006784; 1.000678; 1.021654; 1.00682; 1.002829
## Individual models saved as: surv_sd_run-tree22_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree22_conv.rda
##
## 2019-05-27 - 16:17:56: MCMCglmm performed on tree 23
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1701.424; 715.7355; 142.0088; 216.2223; 1224.855; 2000; 1384.815; 1072.652; 154.6937; 193.6419
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.046276; 0.9995822; 1.001983; 1.167622; 0.999702; 1.005437
## Individual models saved as: surv_sd_run-tree23_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree23_conv.rda
##
## 2019-05-27 - 16:17:57: MCMCglmm performed on tree 24
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1190.007; 134.0576; 266.7949; 1326.904; 2144.806; 2000; 491.4095; 104.5374; 139.1686; 135
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.001717; 1.020552; 1.004347; 1.010512; 1.041231; 1.021898
## Individual models saved as: surv_sd_run-tree24_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree24_conv.rda
##
## 2019-05-27 - 16:17:57: MCMCglmm performed on tree 25
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 2000; 1201.031; 129.4159; 275.3857; 1318.543; 1793.417; 2000; 532.8801; 121.579; 130.3358; 154
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.005007; 1.072337; 1.000787; 1.009107; 1.126706; 1.001351
## Individual models saved as: surv_sd_run-tree25_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree25_conv.rda
##
## 2019-05-27 - 16:17:58: MCMCglmm performed on tree 26
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 740.583; 131.8471; 335.8872; 1039.3; 2157.517; 1627.173; 1040.618; 128.694; 211.5562; 12
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.035119; 1.013536; 0.9995125; 1.085552; 1.030955; 0.9995402
## Individual models saved as: surv_sd_run-tree26_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree26_conv.rda
##
## 2019-05-27 - 16:17:59: MCMCglmm performed on tree 27
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 700.1331; 145.8656; 241.621; 1377.445; 2146.746; 1804.941; 765.6712; 159.7154; 186.4346;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.017071; 1.066695; 1.000869; 1.031964; 1.213548; 1.00087
## Individual models saved as: surv_sd_run-tree27_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree27_conv.rda
##
## 2019-05-27 - 16:18:00: MCMCglmm performed on tree 28
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 833.9212; 145.914; 118.8585; 1163.568; 2000; 1814.857; 653.8464; 88.40561; 164.7369; 129
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.010557; 1.001154; 1.005188; 1.027791; 1.002098; 1.027045
## Individual models saved as: surv_sd_run-tree28_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree28_conv.rda
##
## 2019-05-27 - 16:18:01: MCMCglmm performed on tree 29
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 1051.326; 122.675; 146.4264; 1169.639; 2000; 1426.207; 503.5063; 107.3815; 226.5863; 122
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.16729; 1.005835; 1.002655; 1.588866; 1.015696; 1.013367
## Individual models saved as: surv_sd_run-tree29_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree29_conv.rda
##
## 2019-05-27 - 16:18:01: MCMCglmm performed on tree 30
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1441.937; 847.9559; 131.9874; 295.2726; 1300.991; 1741.866; 1669.596; 503.1971; 115.1528; 187.8
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.193478; 1.005245; 1.004835; 1.698846; 1.005797; 1.023721
```

```
## Individual models saved as: surv_sd_run-tree30_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree30_conv.rda
##
## 2019-05-27 - 16:18:02: MCMCglmm performed on tree 31
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1872.031; 545.118; 121.7506; 197.1291; 1312.823; 2163.637; 1714.9; 611.4085; 111.7081; 318.449
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.003919; 1.006799; 1.001695; 1.016377; 1.015583; 1.002238
## Individual models saved as: surv_sd_run-tree31_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree31_conv.rda
##
## 2019-05-27 - 16:18:03: MCMCglmm performed on tree 32
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2736.329; 1526.704; 815.5975; 112.9597; 162.5574; 1174.573; 2154.989; 1717.835; 833.3641; 148.4265; 8
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.035784; 1.003684; 1.000598; 1.092884; 1.009927; 1.001153
## Individual models saved as: surv_sd_run-tree32_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree32_conv.rda
##
## 2019-05-27 - 16:18:04: MCMCglmm performed on tree 33
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 867.485; 146.4213; 197.9655; 1307.965; 2000; 1359.933; 897.1803; 149.3726; 301.229; 1391
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.015153; 1.006053; 1.000859; 1.050334; 1.022399; 1.005417
## Individual models saved as: surv_sd_run-tree33_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree33_conv.rda
##
## 2019-05-27 - 16:18:04: MCMCglmm performed on tree 34
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1707.066; 831.3155; 140.8179; 254.9353; 1283.465; 2000; 1283.289; 678.2143; 98.61873; 247.4677
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.060727; 1.007011; 1.001096; 1.187221; 1.035865; 1.007448
## Individual models saved as: surv_sd_run-tree34_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree34_conv.rda
##
## 2019-05-27 - 16:18:05: MCMCglmm performed on tree 35
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2087.503; 1791.758; 731.3949; 146.0314; 213.9623; 1180.049; 2000; 1753.69; 886.866; 110.7857; 216.904
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.128349; 1.017984; 0.9999047; 1.462015; 1.062922; 1.001528
## Individual models saved as: surv_sd_run-tree35_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree35_conv.rda
##
## 2019-05-27 - 16:18:06: MCMCglmm performed on tree 36
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2008.881; 828.3845; 132.9924; 263.8176; 1300.725; 2147.837; 1399.255; 1036.785; 128.3547; 233.5
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.148749; 1.081439; 1.002565; 1.528491; 1.240922; 1.008465
## Individual models saved as: surv_sd_run-tree36_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree36_conv.rda
##
## 2019-05-27 - 16:18:07: MCMCglmm performed on tree 37
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1630.456; 785.8829; 127.9344; 184.4787; 1357.794; 2000; 1685.712; 813.2658; 127.1361; 156.0994
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.000027; 1.005153; 0.9995314; 1.00196; 1.026528; 0.9995429
## Individual models saved as: surv_sd_run-tree37_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree37_conv.rda
##
## 2019-05-27 - 16:18:08: MCMCglmm performed on tree 38
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1265.602; 468.6087; 112.5425; 178.109; 1054.453; 2000; 2000; 1136.406; 169.2935; 317.7326; 136
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.138794; 1.042045; 1.001063; 1.482542; 1.092042; 1.007005
## Individual models saved as: surv_sd_run-tree38_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree38_conv.rda
##
## 2019-05-27 - 16:18:08: MCMCglmm performed on tree 39
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1786.34; 1511.087; 633.0515; 115.7432; 263.5757; 1331.954; 2000; 1583.048; 835.2303; 117.5878; 271.6
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.017973; 1.043272; 0.9996619; 1.074305; 1.097474; 0.9996794
## Individual models saved as: surv_sd_run-tree39_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree39_conv.rda
##
## 2019-05-27 - 16:18:09: MCMCglmm performed on tree 40
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1549.907; 818.0362; 138.8639; 240.2035; 1133.4; 2000; 2000; 491.9965; 114.9827; 268.5792; 1329
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.066102; 1.041694; 1.000349; 1.231846; 1.107308; 1.003543
## Individual models saved as: surv_sd_run-tree40_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree40_conv.rda
##
## 2019-05-27 - 16:18:10: MCMCglmm performed on tree 41
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 883.5555; 125.5615; 324.9487; 1308.81; 2000; 1412.775; 858.5665; 119.09; 149.8051; 1283.
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: TRUE
## 1.018437; 1.002889; 0.999667; 1.079294; 1.002931; 1.000297
## Individual models saved as: surv_sd_run-tree41_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree41_conv.rda
##
## 2019-05-27 - 16:18:11: MCMCglmm performed on tree 42
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1629.412; 788.474; 143.3923; 217.4806; 1323.077; 2206.445; 1699.856; 587.6812; 100.7438; 187.38
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.122189; 1.010349; 1.00643; 1.348195; 1.020027; 1.027841
## Individual models saved as: surv_sd_run-tree42_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree42_conv.rda
##
## 2019-05-27 - 16:18:12: MCMCglmm performed on tree 43
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1801.231; 984.7458; 118.057; 264.0281; 1069.852; 1832.366; 2000; 984.5698; 109.5476; 194.6289;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.078514; 1.013973; 1.00976; 1.306835; 1.053062; 1.038106
## Individual models saved as: surv_sd_run-tree43_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree43_conv.rda
##
## 2019-05-27 - 16:18:12: MCMCglmm performed on tree 44
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 815.1108; 138.6736; 163.8391; 1210.667; 2000; 1779.399; 824.5286; 111.9511; 252.4234; 11
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.042647; 1.034378; 0.9997174; 1.182952; 1.085752; 1.000549
## Individual models saved as: surv_sd_run-tree44_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree44_conv.rda
##
## 2019-05-27 - 16:18:13: MCMCglmm performed on tree 45
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1959.47; 1568.901; 771.6846; 110.9777; 194.7429; 1288.992; 1991.701; 1834.636; 845.8516; 138.4666; 3
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.013382; 1.028444; 0.9997301; 1.045207; 1.063609; 0.9997343
## Individual models saved as: surv_sd_run-tree45_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree45_conv.rda
##
## 2019-05-27 - 16:18:14: MCMCglmm performed on tree 46
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 565.0751; 102.4583; 160.8676; 1321.073; 2082.054; 2000; 701.8314; 112.584; 245.814; 1227
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.044902; 1.030072; 1.001064; 1.148084; 1.034121; 1.00124
## Individual models saved as: surv_sd_run-tree46_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree46_conv.rda
```

```
##
## 2019-05-27 - 16:18:15: MCMCglmm performed on tree 47
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1734.359; 733.1024; 146.3661; 202.163; 1269.986; 2000; 1619.808; 622.882; 117.7446; 214.7655;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002664; 1.026281; 0.9999636; 1.002942; 1.069761; 1.000321
## Individual models saved as: surv_sd_run-tree47_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree47_conv.rda
##
## 2019-05-27 - 16:18:16: MCMCglmm performed on tree 48
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2280.805; 2000; 660.6689; 141.7866; 260.7329; 1098.691; 2000; 1634.334; 777.7689; 127.5811; 119.0492
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002179; 1.009692; 1.001542; 1.008354; 1.032158; 1.008604
## Individual models saved as: surv_sd_run-tree48_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree48_conv.rda
##
## 2019-05-27 - 16:18:16: MCMCglmm performed on tree 49
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1316.04; 651.1894; 167.2241; 230.2062; 1304.067; 2000; 2000; 994.7925; 128.2214; 215.4661; 131
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.013588; 1.013102; 1.006796; 1.0572; 1.02811; 1.03266
## Individual models saved as: surv_sd_run-tree49_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree49_conv.rda
##
## 2019-05-27 - 16:18:17: MCMCglmm performed on tree 50
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1815.589; 1510.723; 771.6756; 139.3548; 158.8557; 1430.135; 2000; 1398.945; 916.095; 143.3338; 273.08
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.001234; 1.065016; 1.000518; 1.001373; 1.103876; 1.000518
## Individual models saved as: surv_sd_run-tree50_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree50_conv.rda
##
## 2019-05-27 - 16:18:18: MCMCglmm performed on tree 51
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2167.724; 1850.364; 908.1944; 108.4159; 261.3644; 1309.544; 2000; 1104.846; 566.9966; 134.8652; 268.
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.084243; 1.001012; 1.002723; 1.31024; 1.003427; 1.012292
## Individual models saved as: surv_sd_run-tree51_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree51_conv.rda
##
## 2019-05-27 - 16:18:19: MCMCglmm performed on tree 52
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 2000; 674.1295; 99.40182; 120.7739; 1056.611; 2000; 1566.029; 825.6526; 129.4133; 181.5435; 13
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.002037; 1.001395; 1.000431; 1.010917; 1.007781; 1.00317
## Individual models saved as: surv_sd_run-tree52_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree52_conv.rda
##
## 2019-05-27 - 16:18:19: MCMCglmm performed on tree 53
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1927.987; 1076.849; 440.2917; 108.9328; 48.03585; 1315.058; 2145.726; 1766.04; 706.6921; 150.7836; 3
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.04848; 1.224166; 0.999731; 1.203078; 1.854496; 1.000623
## Individual models saved as: surv_sd_run-tree53_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree53_conv.rda
##
## 2019-05-27 - 16:18:20: MCMCglmm performed on tree 54
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1810.861; 799.1624; 157.4251; 269.1319; 1453.364; 2052.294; 1299.06; 864.8188; 118.3301; 139.6
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.055565; 1.029954; 1.000217; 1.130581; 1.092715; 1.001659
## Individual models saved as: surv_sd_run-tree54_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree54_conv.rda
##
## 2019-05-27 - 16:18:21: MCMCglmm performed on tree 55
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1991.569; 1712.112; 692.8325; 119.6927; 260.5583; 1455.476; 2154.993; 2000; 652.3018; 118.4409; 230.3
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.003572; 1.04185; 1.002825; 1.016068; 1.085647; 1.0029
## Individual models saved as: surv_sd_run-tree55_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree55_conv.rda
##
## 2019-05-27 - 16:18:22: MCMCglmm performed on tree 56
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1818.041; 1055.644; 111.0691; 260.8817; 1288.223; 2000; 1853.039; 1095.92; 147.2543; 228.4323;
## C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.014897; 1.008111; 1.000294; 1.056084; 1.012358; 1.003263
## Individual models saved as: surv_sd_run-tree56_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree56_conv.rda
##
## 2019-05-27 - 16:18:23: MCMCglmm performed on tree 57
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2145.55; 2000; 1240.429; 144.421; 215.6631; 1412.272; 1723.228; 2000; 626.5846; 112.8234; 201.8817;
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.03771; 1.009311; 1.001153; 1.146433; 1.029175; 1.001409
```

```
## Individual models saved as: surv_sd_run-tree57_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree57_conv.rda
##
## 2019-05-27 - 16:18:23: MCMCglmm performed on tree 58
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2139.898; 2000; 639.1095; 110.5645; 193.3169; 1336.396; 2000; 1477.943; 744.4828; 150.2836; 193.7005
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.014176; 1.006433; 1.000007; 1.064741; 1.013538; 1.00077
## Individual models saved as: surv_sd_run-tree58_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree58_conv.rda
##
## 2019-05-27 - 16:18:24: MCMCglmm performed on tree 59
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1175.32; 394.6898; 116.5628; 113.6497; 1093.556; 1570.39; 2000; 855.9513; 142.7913; 196.3101;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.012244; 1.014708; 1.002152; 1.018051; 1.015303; 1.012178
## Individual models saved as: surv_sd_run-tree59_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree59_conv.rda
##
## 2019-05-27 - 16:18:25: MCMCglmm performed on tree 60
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1843.313; 592.8028; 124.2985; 238.079; 1229.121; 2000; 1817.368; 1354.248; 137.7777; 258.6154;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.017513; 1.057332; 1.002456; 1.031964; 1.184021; 1.012576
## Individual models saved as: surv_sd_run-tree60_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree60_conv.rda
##
## 2019-05-27 - 16:18:26: MCMCglmm performed on tree 61
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1495.59; 872.1084; 131.5939; 310.3038; 1241.693; 2000; 2000; 963.2147; 142.039; 260.0585; 1376
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004536; 1.044388; 1.001597; 1.024089; 1.066811; 1.009458
## Individual models saved as: surv_sd_run-tree61_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree61_conv.rda
##
## 2019-05-27 - 16:18:26: MCMCglmm performed on tree 62
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1574.591; 643.7011; 124.4549; 237.7456; 1324.606; 2000; 2000; 638.7006; 128.9981; 219.1073; 138
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.109088; 1.010604; 1.00454; 1.396509; 1.01062; 1.008805
## Individual models saved as: surv_sd_run-tree62_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree62_conv.rda
##
## 2019-05-27 - 16:18:27: MCMCglmm performed on tree 63
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1841.132; 876.5847; 134.7665; 222.6344; 1313.966; 2000; 1735.939; 1054.88; 152.6071; 299.8566;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.012451; 1.002453; 1.007129; 1.059071; 1.004965; 1.025951
## Individual models saved as: surv_sd_run-tree63_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree63_conv.rda
##
## 2019-05-27 - 16:18:28: MCMCglmm performed on tree 64
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2352.284; 2000; 721.6298; 156.1286; 268.868; 1289.76; 2000; 2000; 841.7458; 126.9481; 201.8701; 1301
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004564; 1.004364; 1.001692; 1.021561; 1.016436; 1.007538
## Individual models saved as: surv_sd_run-tree64_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree64_conv.rda
##
## 2019-05-27 - 16:18:29: MCMCglmm performed on tree 65
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1805.778; 1270.964; 789.2911; 72.61364; 102.3681; 1351.779; 2000; 1746.501; 582.5513; 104.5047; 234.
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.014239; 1.019877; 1.002873; 1.068645; 1.053467; 1.010625
## Individual models saved as: surv_sd_run-tree65_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree65_conv.rda
##
## 2019-05-27 - 16:18:30: MCMCglmm performed on tree 66
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 763.2801; 136.7118; 137.7191; 1294.7; 2000; 2000; 1022.308; 114.3528; 266.8213; 1348.381
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.014262; 1.023314; 1.002137; 1.040334; 1.037376; 1.002503
## Individual models saved as: surv_sd_run-tree66_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree66_conv.rda
##
## 2019-05-27 - 16:18:30: MCMCglmm performed on tree 67
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1357.139; 828.2252; 129.6215; 268.6966; 1172.683; 2000; 2000; 1064.851; 142.0629; 300.3268; 14
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.013192; 1.004485; 1.000749; 1.018715; 1.004568; 1.00299
## Individual models saved as: surv_sd_run-tree67_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree67_conv.rda
##
## 2019-05-27 - 16:18:31: MCMCglmm performed on tree 68
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1664.123; 1799.393; 720.6753; 106.6104; 199.1028; 1467.512; 2000; 1603.543; 730.0697; 128.1347; 184.
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: TRUE
## 0.999914; 1.005421; 1.000061; 1.0004; 1.010253; 1.000071
## Individual models saved as: surv_sd_run-tree68_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree68_conv.rda
##
## 2019-05-27 - 16:18:32: MCMCglmm performed on tree 69
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2333.152; 1702.35; 1083.409; 113.3338; 234.4206; 1356.684; 1823.984; 2000; 566.3895; 119.6378; 284.25
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.02986; 1.023847; 1.000102; 1.128017; 1.075503; 1.002469
## Individual models saved as: surv_sd_run-tree69_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree69_conv.rda
##
## 2019-05-27 - 16:18:33: MCMCglmm performed on tree 70
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1845.4; 1786.58; 842.2385; 105.1794; 160.1081; 1267.974; 1849.912; 1760.51; 862.4729; 123.279; 184.83
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.000508; 1.00082; 0.9997209; 1.003774; 1.005547; 1.000603
## Individual models saved as: surv_sd_run-tree70_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree70_conv.rda
##
## 2019-05-27 - 16:18:33: MCMCglmm performed on tree 71
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1070.423; 603.4626; 93.9571; 53.95894; 1409.787; 1881.946; 1868.282; 914.6615; 193.9938; 230.81
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.046847; 1.094375; 0.9997602; 1.057376; 1.162986; 0.9998154
## Individual models saved as: surv_sd_run-tree71_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree71_conv.rda
##
## 2019-05-27 - 16:18:34: MCMCglmm performed on tree 72
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 612.6801; 124.7445; 240.4279; 1240.885; 2258.454; 2000; 479.4374; 90.75428; 153.5982; 123
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.004497; 1.003493; 1.000334; 1.004572; 1.015398; 1.003652
## Individual models saved as: surv_sd_run-tree72_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree72_conv.rda
##
## 2019-05-27 - 16:18:35: MCMCglmm performed on tree 73
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 990.5123; 121.2439; 307.4606; 1303.77; 2000; 1229.439; 1001.172; 118.9026; 208.5681; 1300
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.00103; 1.028094; 1.000057; 1.001031; 1.028096; 1.000511
## Individual models saved as: surv_sd_run-tree73_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree73_conv.rda
```

```
##
## 2019-05-27 - 16:18:36: MCMCglmm performed on tree 74
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 869.6982; 126.7962; 281.3598; 1474.494; 2000; 1695.063; 667.4413; 126.1662; 168.7832; 12
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.006678; 1.003124; 1.002123; 1.024088; 1.0169; 1.011555
## Individual models saved as: surv_sd_run-tree74_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree74_conv.rda
##
## 2019-05-27 - 16:18:37: MCMCglmm performed on tree 75
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 971.4764; 620.9675; 125.4887; 277.1753; 1181.243; 1746.745; 1535.943; 830.6122; 96.99436; 112.
## C1.Sol.mass_g, C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal,
## All levels converged < 1.1: FALSE
## 1.073061; 1.150097; 1.003666; 1.289693; 1.493914; 1.014777
## Individual models saved as: surv_sd_run-tree75_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree75_conv.rda
##
## 2019-05-27 - 16:18:37: MCMCglmm performed on tree 76
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1830.373; 670.3651; 101.6342; 266.9233; 1257.376; 2351.985; 2000; 879.325; 142.1928; 309.5669;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.031038; 1.06155; 1.002093; 1.138115; 1.173716; 1.011935
## Individual models saved as: surv_sd_run-tree76_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree76_conv.rda
##
## 2019-05-27 - 16:18:38: MCMCglmm performed on tree 77
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1770.18; 729.5912; 132.4081; 151.2378; 1216.157; 2000; 1417.042; 532.2668; 104.1168; 138.4267;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.027508; 1.041033; 1.002185; 1.06418; 1.092837; 1.012053
## Individual models saved as: surv_sd_run-tree77_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree77_conv.rda
##
## 2019-05-27 - 16:18:39: MCMCglmm performed on tree 78
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2172.552; 1847.433; 490.5327; 96.99617; 226.639; 1241.932; 3537.923; 1570.761; 648.6323; 114.8599; 14
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.082894; 1.019698; 1.003184; 1.291945; 1.067876; 1.011344
## Individual models saved as: surv_sd_run-tree78_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree78_conv.rda
##
## 2019-05-27 - 16:18:40: MCMCglmm performed on tree 79
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
```

```
## 2000; 1704.452; 601.4438; 116.9943; 206.9969; 1245.763; 2000; 1492.032; 997.2318; 157.9661; 220.3506
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.036708; 1.037589; 0.9995787; 1.124814; 1.100477; 0.9996102
## Individual models saved as: surv_sd_run-tree79_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree79_conv.rda
##
## 2019-05-27 - 16:18:41: MCMCglmm performed on tree 80
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1987.703; 1817.748; 1134.839; 175.7452; 133.2454; 1243.965; 2000; 1609.551; 996.4827; 118.5788; 159.1
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.004036; 1.025645; 0.9995006; 1.006755; 1.030802; 0.9995024
## Individual models saved as: surv_sd_run-tree80_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree80_conv.rda
##
## 2019-05-27 - 16:18:41: MCMCglmm performed on tree 81
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1810.567; 2000; 712.7819; 130.2918; 256.6679; 1308.392; 1709.155; 2000; 783.4844; 132.31; 195.7863; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.013478; 1.010558; 1.004096; 1.016277; 1.037288; 1.022047
## Individual models saved as: surv_sd_run-tree81_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree81_conv.rda
##
## 2019-05-27 - 16:18:42: MCMCglmm performed on tree 82
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 640.439; 88.83805; 298.4576; 1198.236; 2000; 2000; 1094.028; 151.9583; 284.6713; 1240.698
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: FALSE
## 1.079093; 1.005251; 1.001533; 1.255968; 1.021281; 1.00258
## Individual models saved as: surv_sd_run-tree82_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree82_conv.rda
##
## 2019-05-27 - 16:18:43: MCMCglmm performed on tree 83
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1420.022; 596.211; 115.8677; 230.4707; 1258.205; 2156.599; 2000; 836.3639; 113.5503; 172.608; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.034595; 1.002372; 1.004951; 1.056859; 1.003974; 1.0076
## Individual models saved as: surv_sd_run-tree83_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree83_conv.rda
##
## 2019-05-27 - 16:18:44: MCMCglmm performed on tree 84
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 615.8798; 127.6477; 187.5175; 1172.265; 2000; 2000; 710.3065; 118.655; 226.3368; 1342.265
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.02049; 1.072073; 1.00005; 1.056649; 1.214654; 1.002111
```

```
## Individual models saved as: surv_sd_run-tree84_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree84_conv.rda
##
## 2019-05-27 - 16:18:44: MCMCglmm performed on tree 85
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 870.1291; 164.5139; 259.3227; 1294.401; 2000; 1469.726; 963.0685; 163.5598; 165.3177; 13
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.107055; 1.014956; 0.9997984; 1.393251; 1.040986; 1.000695
## Individual models saved as: surv_sd_run-tree85_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree85_conv.rda
##
## 2019-05-27 - 16:18:45: MCMCglmm performed on tree 86
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2470.165; 2000; 798.9; 140.1658; 235.6364; 1267.489; 2000; 1270.802; 875.9791; 118.2438; 259.6814; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.00776; 1.007767; 0.9998802; 1.031268; 1.018044; 0.9998818
## Individual models saved as: surv_sd_run-tree86_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree86_conv.rda
##
## 2019-05-27 - 16:18:46: MCMCglmm performed on tree 87
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1806.084; 465.5577; 104.9018; 196.1986; 1247.569; 1936.141; 2000; 785.7434; 132.9254; 164.4052
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.101218; 1.118752; 1.004089; 1.367814; 1.355769; 1.016241
## Individual models saved as: surv_sd_run-tree87_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree87_conv.rda
##
## 2019-05-27 - 16:18:47: MCMCglmm performed on tree 88
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2152.857; 761.9807; 141.0256; 271.1482; 1170.38; 2000; 1819.75; 854.7516; 128.932; 220.3853; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.012046; 1.000792; 0.9995048; 1.052275; 1.00533; 0.9995076
## Individual models saved as: surv_sd_run-tree88_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree88_conv.rda
##
## 2019-05-27 - 16:18:48: MCMCglmm performed on tree 89
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2318.732; 1247.683; 605.0528; 78.83381; 144.5934; 1378.007; 2000; 1664.526; 1171.773; 133.6881; 259.
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.052497; 1.038736; 0.9996509; 1.076671; 1.047939; 1.000203
## Individual models saved as: surv_sd_run-tree89_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree89_conv.rda
##
## 2019-05-27 - 16:18:48: MCMCglmm performed on tree 90
```

```
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1708.568; 1717.715; 932.4384; 114.6201; 305.5439; 1246.265; 1761.675; 1756.082; 713.563; 108.7742; 15
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.001398; 1.002126; 1.002989; 1.005321; 1.003405; 1.006749
## Individual models saved as: surv_sd_run-tree90_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree90_conv.rda
##
## 2019-05-27 - 16:18:49: MCMCglmm performed on tree 91
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2605.46; 1797.032; 527.6513; 105.2843; 103.8095; 1221.139; 2000; 1520.958; 801.2541; 122.7615; 232.11
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.003128; 1.000308; 0.9999096; 1.006324; 1.001068; 1.000915
## Individual models saved as: surv_sd_run-tree91_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree91_conv.rda
##
## 2019-05-27 - 16:18:50: MCMCglmm performed on tree 92
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 839.9474; 135.6714; 218.5151; 1386.09; 2465.09; 1626.283; 834.5911; 87.43592; 268.4986; 9
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.132481; 1.095035; 1.001331; 1.407099; 1.196492; 1.006279
## Individual models saved as: surv_sd_run-tree92_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree92_conv.rda
##
## 2019-05-27 - 16:18:51: MCMCglmm performed on tree 93
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 2000; 740.8714; 143.6534; 126.5552; 1208.784; 2133.37; 1580.12; 821.4766; 108.8299; 298.8473; 1
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.019693; 1.112223; 1.004959; 1.088059; 1.387478; 1.007277
## Individual models saved as: surv_sd_run-tree93_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree93_conv.rda
##
## 2019-05-27 - 16:18:51: MCMCglmm performed on tree 94
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 1864.204; 1844.58; 1009.709; 136.5857; 245.9901; 1182.739; 1785.597; 2000; 936.4126; 152.5396; 194.11
## C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.003145; 1.00836; 1.001408; 1.008826; 1.023616; 1.008536
## Individual models saved as: surv_sd_run-tree94_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree94_conv.rda
##
## 2019-05-27 - 16:18:52: MCMCglmm performed on tree 95
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1602.014; 955.4564; 115.0235; 118.8312; 1468.679; 1869.908; 1778.242; 965.7103; 114.5488; 161.4
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
```

```
## All levels converged < 1.1: FALSE
## 1.127055; 1.036337; 1.00612; 1.461662; 1.070264; 1.031497
## Individual models saved as: surv_sd_run-tree95_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree95_conv.rda
##
## 2019-05-27 - 16:18:53: MCMCglmm performed on tree 96
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1735.629; 746.7567; 129.3223; 195.136; 1300.142; 2000; 1160.683; 679.548; 144.6248; 300.9532;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.013741; 1.030035; 1.000065; 1.019633; 1.039057; 1.000817
## Individual models saved as: surv_sd_run-tree96_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree96_conv.rda
##
## 2019-05-27 - 16:18:54: MCMCglmm performed on tree 97
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1656.531; 750.2958; 125.3208; 278.7975; 1284.846; 1684.218; 2000; 1046.202; 157.1016; 312.933;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.VCV.animal, C2.VCV.species < 1000
## All levels converged < 1.1: TRUE
## 1.003128; 1.000454; 0.9996186; 1.003254; 1.002232; 0.999969
## Individual models saved as: surv_sd_run-tree97_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree97_conv.rda
##
## 2019-05-27 - 16:18:55: MCMCglmm performed on tree 98
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1521.034; 554.9678; 103.8381; 216.8378; 1082.803; 1733.29; 1841.772; 802.3885; 96.67233; 153.2
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.025317; 1.018676; 1.000999; 1.110493; 1.020312; 1.00468
## Individual models saved as: surv_sd_run-tree98_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree98_conv.rda
##
## 2019-05-27 - 16:18:55: MCMCglmm performed on tree 99
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2000; 1180.784; 531.4027; 106.3699; 124.9186; 1254.704; 2000; 1864.119; 684.7582; 129.5138; 315.5755
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: FALSE
## 1.06003; 1.016837; 0.9999063; 1.119056; 1.022061; 1.000534
## Individual models saved as: surv_sd_run-tree99_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree99_conv.rda
##
## 2019-05-27 - 16:18:56: MCMCglmm performed on tree 100
## Convergence diagnosis:
## Effective sample size is > 1000: FALSE
## 2140.691; 1876.39; 878.7641; 145.0048; 248.7628; 1211.831; 2000; 2000; 798.0446; 121.0787; 280.6809;
## C1.Sol.matrix_size, C1.VCV.animal, C1.VCV.species, C2.Sol.matrix_size, C2.VCV.animal, C2.VCV.species
## All levels converged < 1.1: TRUE
## 1.019084; 1.001693; 1.00396; 1.08248; 1.009775; 1.005226
## Individual models saved as: surv_sd_run-tree100_chain*.rda
## Convergence diagnosis saved as: surv_sd_run-tree100_conv.rda
```

```
##
## 2019-05-27 - 16:18:56: MCMCglmm successfully performed on 100 trees.
## Total execution time: 1.293199 mins.
## Use read.mulTree() to read the data as 'mulTree' data.
## Use summary.mulTree() and plot.mulTree() for plotting or summarizing the 'mulTree' data.
```