> summary(model4) power =0.2

Iterations = 10001:49991

Thinning interval = 30

Sample size = 1334

DIC: -10.57713

G-structure: ~us(1):study\_ID

post.mean l-95% CI u-95% CI eff.samp

(Intercept):(Intercept).study\_ID 0.7066 0.02916 2.378 1334

~us(1 + T):species\_rotl

post.mean l-95% CI u-95% CI eff.samp

(Intercept):(Intercept).species\_rotl 6.00307 2.71268 9.77869 1334

T:(Intercept).species\_rotl -0.20872 -0.49124 0.01898 1334

(Intercept):T.species\_rotl -0.20872 -0.49124 0.01898 1334

T:T.species\_rotl 0.07113 0.04186 0.10664 1334

R-structure: ~units

post.mean l-95% CI u-95% CI eff.samp

units 0.03469 0.003285 0.07965 903.8

Location effects: log(mean) ~ scale(log(body\_mass\_g)) + T\_w + T\_b

post.mean l-95% CI u-95% CI eff.samp pMCMC

(Intercept) 2.485237 -0.972985 5.727992 1334 0.157

scale(log(body\_mass\_g)) 0.947928 -0.649913 2.738258 1334 0.229

T\_w -0.090340 -0.248467 0.063868 1334 0.285

T\_b 0.001587 -0.037382 0.042259 1334 0.931

> summary(model4) power = 0.5

Iterations = 10001:49991

Thinning interval = 30

Sample size = 1334

DIC: 0.01857487

G-structure: ~us(1):study\_ID

post.mean l-95% CI u-95% CI eff.samp

(Intercept):(Intercept).study\_ID 0.7693 0.008486 2.658 1334

~us(1 + T):species\_rotl

post.mean l-95% CI u-95% CI eff.samp

(Intercept):(Intercept).species\_rotl 7.87341 2.79248 13.112958 1667

T:(Intercept).species\_rotl -0.29628 -0.64262 -0.001766 1334

(Intercept):T.species\_rotl -0.29628 -0.64262 -0.001766 1334

T:T.species\_rotl 0.07616 0.04234 0.112206 1334

R-structure: ~units

post.mean l-95% CI u-95% CI eff.samp

units 0.03684 0.003543 0.07785 688.7

Location effects: log(mean) ~ scale(acclimation\_temp) + scale(log(body\_mass\_g)) + T\_w + T\_b

post.mean l-95% CI u-95% CI eff.samp pMCMC

(Intercept) 2.1453489 -2.0477538 6.0422929 1757 0.294

scale(acclimation\_temp) -0.0346618 -0.1999652 0.1481417 1334 0.720

scale(log(body\_mass\_g)) 0.2963298 -1.6502909 2.4893043 1629 0.769

T\_w -0.1081890 -0.3079826 0.0636094 1630 0.226

T\_b 0.0005022 -0.0429966 0.0400606 1162 0.997

> summary(model4) power = 0.8

Iterations = 10001:49991

Thinning interval = 30

Sample size = 1334

DIC: -2.325114

G-structure: ~us(1):study\_ID

post.mean l-95% CI u-95% CI eff.samp

(Intercept):(Intercept).study\_ID 0.7775 0.0122 2.429 1334

~us(1 + T):species\_rotl

post.mean l-95% CI u-95% CI eff.samp

(Intercept):(Intercept).species\_rotl 11.04637 4.4510 19.36910 1123

T:(Intercept).species\_rotl -0.43342 -0.8834 -0.07147 1274

(Intercept):T.species\_rotl -0.43342 -0.8834 -0.07147 1274

T:T.species\_rotl 0.08644 0.0481 0.12904 1334

R-structure: ~units

post.mean l-95% CI u-95% CI eff.samp

units 0.03675 0.001368 0.07919 959.5

Location effects: log(mean) ~ scale(acclimation\_temp) + scale(log(body\_mass\_g)) + T\_w + T\_b

post.mean l-95% CI u-95% CI eff.samp pMCMC

(Intercept) 2.2697265 -2.0786553 6.6352978 1334 0.303

scale(acclimation\_temp) -0.0370371 -0.2101045 0.1180695 1155 0.667

scale(log(body\_mass\_g)) -0.2614526 -2.3647507 2.1421605 1565 0.805

T\_w -0.0970705 -0.2909320 0.0831782 1334 0.330

T\_b -0.0007645 -0.0418933 0.0413386 1334 0.952