Model selection based on AICc:

K AICc Delta\_AICc AICcWt Cum.Wt LL

model4 13 1134.59 0.00 0.81 0.81 -553.63

model3 15 1138.84 4.25 0.10 0.90 -553.38

model2 15 1138.84 4.25 0.10 1.00 -553.38

> summary(lvmod.4.fit, rsq=T, standardized=T,fit.measures = TRUE)

lavaan 0.6.16 ended normally after 23 iterations

Estimator ML

Optimization method NLMINB

Number of model parameters 13

Number of observations 117

Model Test User Model:

Test statistic 0.493

Degrees of freedom 2

P-value (Chi-square) 0.782

Model Test Baseline Model:

Test statistic 548.371

Degrees of freedom 10

P-value 0.000

User Model versus Baseline Model:

Comparative Fit Index (CFI) 1.000

Tucker-Lewis Index (TLI) 1.014

Loglikelihood and Information Criteria:

Loglikelihood user model (H0) -553.629

Loglikelihood unrestricted model (H1) -553.383

Akaike (AIC) 1133.258

Bayesian (BIC) 1169.166

Sample-size adjusted Bayesian (SABIC) 1128.072

Root Mean Square Error of Approximation:

RMSEA 0.000

90 Percent confidence interval - lower 0.000

90 Percent confidence interval - upper 0.119

P-value H\_0: RMSEA <= 0.050 0.831

P-value H\_0: RMSEA >= 0.080 0.113

Standardized Root Mean Square Residual:

SRMR 0.009

Parameter Estimates:

Standard errors Standard

Information Expected

Information saturated (h1) model Structured

Regressions:

Estimate Std.Err z-value P(>|z|) Std.lv Std.all

Plant.rich ~

pre.AI -0.305 0.088 -3.458 0.001 -0.305 -0.305

Micro.rich ~

Soil.pca1 0.115 0.138 0.832 0.405 0.115 0.115

Plant.rich -0.036 0.097 -0.368 0.713 -0.036 -0.036

Soil.pca1 ~

pre.AI -0.702 0.066 -10.564 0.000 -0.702 -0.702

Micro.rich -0.025 0.097 -0.258 0.796 -0.025 -0.025

EF ~

pre.AI -0.172 0.019 -9.103 0.000 -0.172 -0.172

Plant.rich 0.066 0.014 4.815 0.000 0.066 0.066

Soil.pca1 0.845 0.018 45.912 0.000 0.845 0.844

Variances:

Estimate Std.Err z-value P(>|z|) Std.lv Std.all

.Plant.rich 0.900 0.118 7.649 0.000 0.900 0.907

.Micro.rich 0.984 0.129 7.638 0.000 0.984 0.993

.Soil.pca1 0.507 0.067 7.540 0.000 0.507 0.512

.EF 0.020 0.003 7.649 0.000 0.020 0.020

pre.AI 0.991 0.130 7.649 0.000 0.991 1.000

R-Square:

Estimate

Plant.rich 0.093

Micro.rich 0.007

Soil.pca1 0.488

EF 0.980

> fitMeasures(lvmod.4.fit, c("cfi", "rmsea", "srmr"))

cfi rmsea srmr

1.000 0.000 0.009