Model selection based on AICc:

K AICc Delta\_AICc AICcWt Cum.Wt LL

model3 14 1258.28 0.00 0.75 0.75 -614.19

model2 15 1260.52 2.24 0.25 1.00 -614.09

> semPaths(lvmod.3.fit, what = 'std', layout = 'tree', residuals = FALSE,

+ edge.label.cex = 1)

> summary(lvmod.3.fit, rsq=T, standardized=T,fit.measures = TRUE)

lavaan 0.6.16 ended normally after 21 iterations

Estimator ML

Optimization method NLMINB

Number of model parameters 14

Number of observations 105

Model Test User Model:

Test statistic 0.208

Degrees of freedom 1

P-value (Chi-square) 0.648

Model Test Baseline Model:

Test statistic 256.684

Degrees of freedom 10

P-value 0.000

User Model versus Baseline Model:

Comparative Fit Index (CFI) 1.000

Tucker-Lewis Index (TLI) 1.032

Loglikelihood and Information Criteria:

Loglikelihood user model (H0) -614.193

Loglikelihood unrestricted model (H1) -614.089

Akaike (AIC) 1256.386

Bayesian (BIC) 1293.541

Sample-size adjusted Bayesian (SABIC) 1249.312

Root Mean Square Error of Approximation:

RMSEA 0.000

90 Percent confidence interval - lower 0.000

90 Percent confidence interval - upper 0.199

P-value H\_0: RMSEA <= 0.050 0.689

P-value H\_0: RMSEA >= 0.080 0.257

Standardized Root Mean Square Residual:

SRMR 0.004

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 -0.228 0.095 -2.397 0.017 -0.228 -0.228

Micro.rich ~

pre.AI -0.111 0.099 -1.117 0.264 -0.111 -0.111

Soil.pca1 0.082 0.297 0.276 0.783 0.082 0.082

Soil.pca1 ~

pre.AI -0.154 0.101 -1.532 0.126 -0.154 -0.154

Plant.rich -0.332 0.095 -3.516 0.000 -0.332 -0.332

Micro.rich 0.027 0.285 0.096 0.923 0.027 0.027

EF ~

pre.AI -0.056 0.033 -1.686 0.092 -0.056 -0.056

Plant.rich 0.123 0.035 3.564 0.000 0.123 0.123

Soil.pca1 0.967 0.034 28.679 0.000 0.967 0.967

Variances:

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

.Plant.rich 0.939 0.130 7.246 0.000 0.939 0.948

.Micro.rich 0.966 0.134 7.195 0.000 0.966 0.975

.Soil.pca1 0.875 0.128 6.862 0.000 0.875 0.883

.EF 0.105 0.014 7.246 0.000 0.105 0.106

pre.AI 0.990 0.137 7.246 0.000 0.990 1.000

R-Square:

Estimate

Plant.rich 0.052

Micro.rich 0.025

Soil.pca1 0.117

EF 0.894

> fitMeasures(lvmod.3.fit, c("cfi", "rmsea", "srmr"))

cfi rmsea srmr

1.000 0.000 0.004