3   Appendix S2. Weighted-mean approach applied on 2D simulated

4   community data sets: additional results
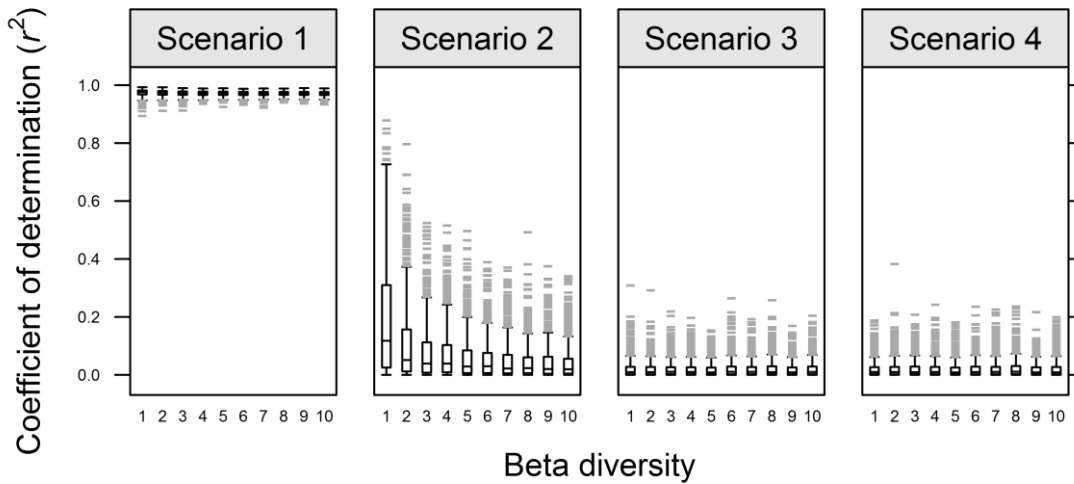
5
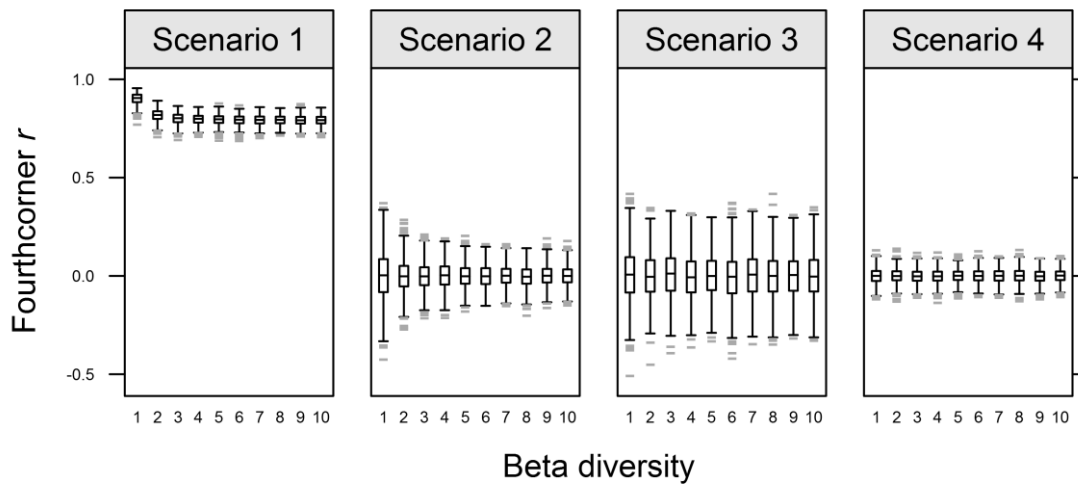
6   Appendix S2: Figure S1

7   Coefficient of determination (r^2) for linear least squares regression of the CWM on sample
8   attributes for each of the four scenarios and 10 levels of beta diversity. Grey horizontal bars
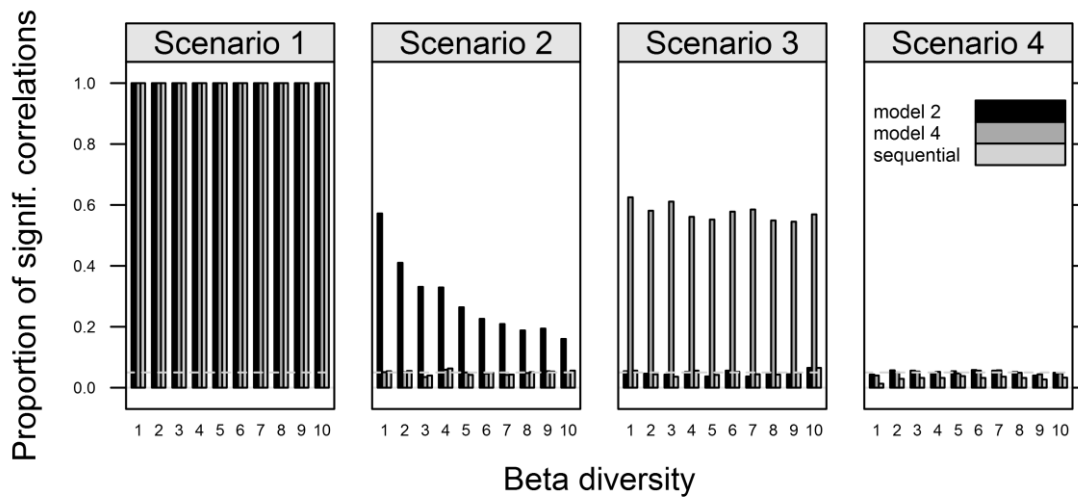9   are outliers.

10

Figure: The fourth-corner statistic r between R, L and Q matrices for each of the four scenarios and 10 levels of beta diversity. Grey horizontal bars are outliers.

11

Appendix S2: Figure S2

13 The fourth-corner statistic r between **R**, **L** and **Q** matrices for each of the four scenarios and
14 10 levels of beta diversity. Grey horizontal bars are outliers.

15

16

Appendix S2: Figure S3

Proportion of significant results ($P < 0.05$) of the fourth-corner analysis between **R**, **L** and **Q** matrix, tested by model 2 (permuting sample attributes in **R**), model 4 (permuting species attributes in **Q**) and the sequential permutation test (sensu ter Braak et al. 2012, consisting of the sequence of model 2 and model 4 test). Results are reported for each of the four scenarios and 10 levels of beta diversity.

References

ter Braak, C.J.F., Cormont, A. & Dray, S. 2012. Improved testing of species traits-environment relationships in the fourth-corner problem. *Ecology* 93: 1525–1526.