

Supplementary materials

Ariane MIRABEL^{1*}

Eric MARCON¹

Bruno HERAULT²

Abstract

¹UMR EcoFoG, AgroParistech, CNRS, Cirad, INRA, Université des Antilles, Université de Guyane.
Campus Agronomique, 97310 Kourou, France.

²INPHB (Institut National Polytechnique Félix Houphouët Boigny)
Yamoussoukro, Ivory Coast

*: ariane.mirabel@ecofog.gf, <http://www.ecofog.gf/spip.php?article47>

Contents

1	Appendix figures	1
2	Figure S1: Bayesian process scheme	1
3	Figure S2: Redundancy metric	1
4	Figure S3: Proportion of seed mass classes along time	1

2. Figure S1: Bayesian process scheme

3. Figure S2: Redundancy metric

4. Figure S3: Proportion of seed mass classes along time

1. Appendix figures

The following information are available for this article:

Figure S1: Whenever the family or genus were recorded for a vernacular name, the pool of species sampled to replace the vernacular name was restricted to those pertaining to the same higher taxonomic level (i.e species of the same genus when the species is missing, species of the same family when the genus is missing) 1.

Figure S2: Scheme of the redundancy measurement process

Figure S3: Trajectories of seed mass classes proportions over 30 years after disturbance, corresponding to the median (solid line) and 0.025 and 0.975 percentile (gray envelope) observed after 50 iteration of the taxonomic uncertainty propagation. No gap filling process was applied in this case. Initial treatments are represented by solid lines colors with green for control, blue for T1, orange for T2 and red for T3 3.

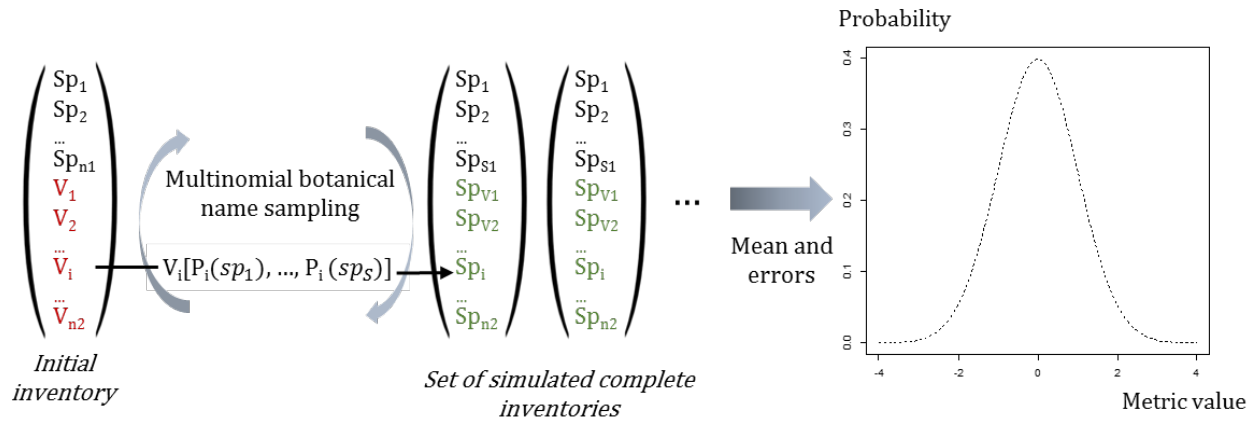


Figure 1. Scheme of the Bayesian process propagating the taxonomic uncertainty

The functional redundancy is measured as the overlap among species in communities' functional space [Carmona et al., 2016]. First, the samples of the trait database are mapped in a 2-dimensional plan with a PCA analysis. Then, multivariate kernel density estimator associated with individual trees were give species traits probability distribution (TDP). TDP, weighted by species abundance, are summed to give communities TDP: the functional redundancy is the sum of TDP overlaps, corresponding to the average number of species that could be removed from without reducing the functional space.

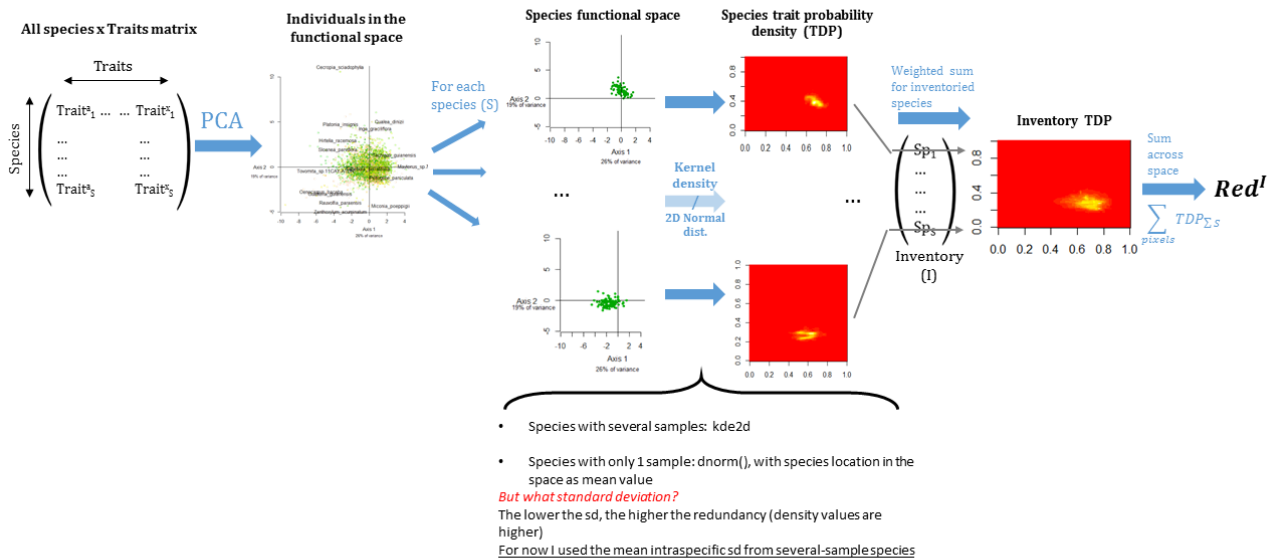


Figure 2. Scheme of the redundancy measurement process

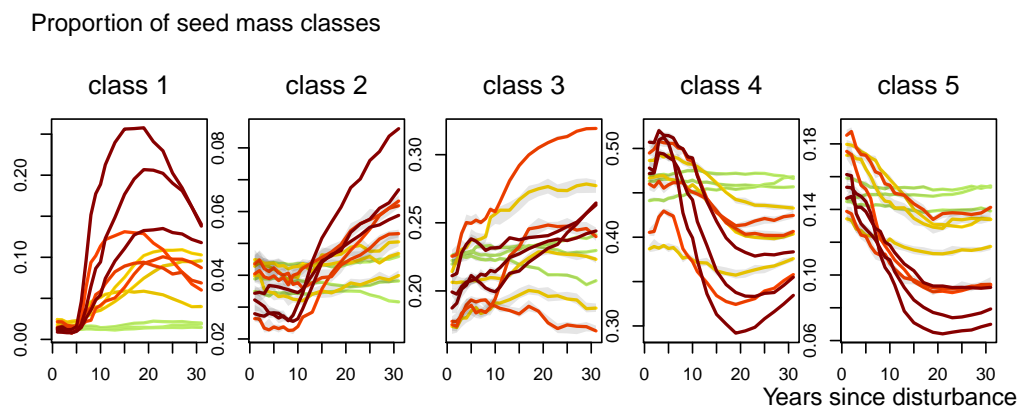


Figure 3. Trajectories of seed mass classes proportions over 30 years after disturbance. Colors are treatments: green (control), yellow (T1), orange (T2), red (T3).