

Identities only, or abundances included?

Are joint absences informative?

Pairwise measures:

Kinship with classical metrics:

Identities only (presence/absence)

Exclude joint absences

Jaccard
Sørensen

β_W
(multiplicative)

Include joint absences

Simple matching
Euclidean on pres/abs

β_{Add}
(additive)

Apply a probabilistic null model to control for differences in α diversity (richness)

Raup-Crick

Abundances included (or cover, biomass, etc.)

Exclude joint absences

Chi-squared
Hellinger, Chord
Euclidean on proportions
Bray-Curtis, fourth root
Bray-Curtis, square root
Bray-Curtis, raw data
Modified Gower, log10
Modified Gower, log5
Modified Gower, log2

Emphasis:

Rare species
Proportions
Composition + relative abund.
Composition log abundance

Include joint absences

Euclidean, log(y+1)
Euclidean, raw data

Log abundance
Raw abundance