Finding the mjor descriptors of species networks

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Abstract: TODO

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Blah blah blah Vermaat et al. (2009)

"It is incumbent on network ecologists to establish clearly the independence and uniqueness of the descriptive metrics used." - Lau et al. (2017)

Table 1: An informative caption about the different network properties

Label	Definition	"Function"	Reference (for maths), can make footnotes probs
Basal	Percentage of basal taxa, defined as species who have a vulnerability of zero		
Connectance	L/S^2, where S is the number of species and L the number of links		
Cannibal	Percentage of species that are cannibals		
ChLen	Mean food chain length, averaged over all species (where a food chain is defined as a continuous path from a 'basal' to a 'top' species)		
ChSD	Standard deviation of ChLen		
ChNum	log number of food chains		
Clust	mean clustering coefficient (probability that two taxa linked to the same taxon are also linked)		**TODO**
GenSD	Normalized standard deviation of generality of a species standardized by L/S		Williams & Martinez (2008)
Herbivore	Percentage of herbivores plus detritivores (taxa that feed only on basal taxa)		

Label	Definition	“Function”	Reference (for maths), can make footnotes probs
Intermediate	Percentage of intermediate taxa (with both consumers and resources)		
LinkSD	Normalized standard deviation of links (number of consumers plus resources per taxon)		
Loop	Percentage of taxa in loops (food chains in which a taxon occurs twice)		
L/S	links per species		
MaxSim	Mean of the maximum trophic similarity of each taxon to other taxa, the number of predators and prey shared by a pair of species divided by their total number of predators and prey		**TODO**
Omnivory	Percentage of omnivores (taxa that feed on ≥ 2 taxa with different trophic levels)		
Path	characteristic path length, the mean shortest food chain length between species pairs		
Richness	Number of nodes in the network		
TL	Prey-weighted trophic level averaged across taxa		Williams & Martinez (2004)
Top	Percentage of top taxa (taxa without consumers)		

Label	Definition	"Function"	Reference (for maths), can make footnotes probs
VulSD	Normalized standard deviation of vulnerability of a species standardized by L/S		
Links	The number of links in the network		
Diameter	Diameter can also be measured as the average of the distances between each pair of nodes in the network		Delmas et al. (2019)
ρ	Spectral radius is a a conceptual analog to nestedness (and more appropriate for unipartite networks). It is defined as the absolute value of the largest real part of the eigenvalues of the *undirected* adjacency matrix		Staniczenko et al. (2013)
Complexity	SVD complexity of a network, defined as the Pielou entropy of its singular values	Something about structural v behavioural complexity being captured	Strydom et al. (2021)
Centrality	Centrality is a measure of how 'influential' a species is, under various definitions of 'influence'…	Centrality can help in quantifying the importance of species in a network	
S1	Number of linear chains		Stouffer et al. (2007) Milo et al. (2002)
S2	Number of omnivory motifs		Stouffer et al. (2007) Milo et al. (2002)

Label	Definition	"Function"	Reference (for maths), can make footnotes probs
S4	Number of apparent competition motifs		Stouffer et al. (2007) Milo et al. (2002)
S5	Number of direct competition motifs		Stouffer et al. (2007) Milo et al. (2002)
Intervality			**TODO** Stouffer et al. (2006)

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