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Community assembly processes along a sub-Mediterranean elevation gradient: analyzing the interdependence of trait community weighted mean and functional diversity.

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Online Resource 4

Table 4.1. Results of spatial autocorrelation with Moran's performed on residuals of the models: values higher than 0 stand for positive autocorrelation (spatial aggregation) while values lower than 0 stand for negative autocorrelation (spatial segregation). To test for the significance of Moran's I values, we used spatial correlograms for each variable (R package spdep, Bivand 2018) setting up to 7th order neighbors (as lags) with links for 2 nearest neighbors. The last two models refer to FDis_{SM}-CWM_H and FDis_{SLA}-CWM_H.

Trait	Lag	Estimate	Expectation
Plant height	1	0.12 ^{n.s.}	-0.02
	7	0.001 ^{n.s.}	-0.09
SLA	1	0.04 ^{n.s.}	-0.02
	7	-0.01 ^{n.s.}	-0.09
Seed Mass	1	0.05 ^{n.s.}	-0.04

	7	-0.06 ^{n.s.}	-0.05
Seed Mass –	1	0.09 ^{n.s.}	-0.02
Plant height	7	-0.09 ^{n.s.}	-0.05
SLA - Plant	1	0.15 ^{n.s.}	-0.02
height	7	0.02 ^{n.s.}	-0.09

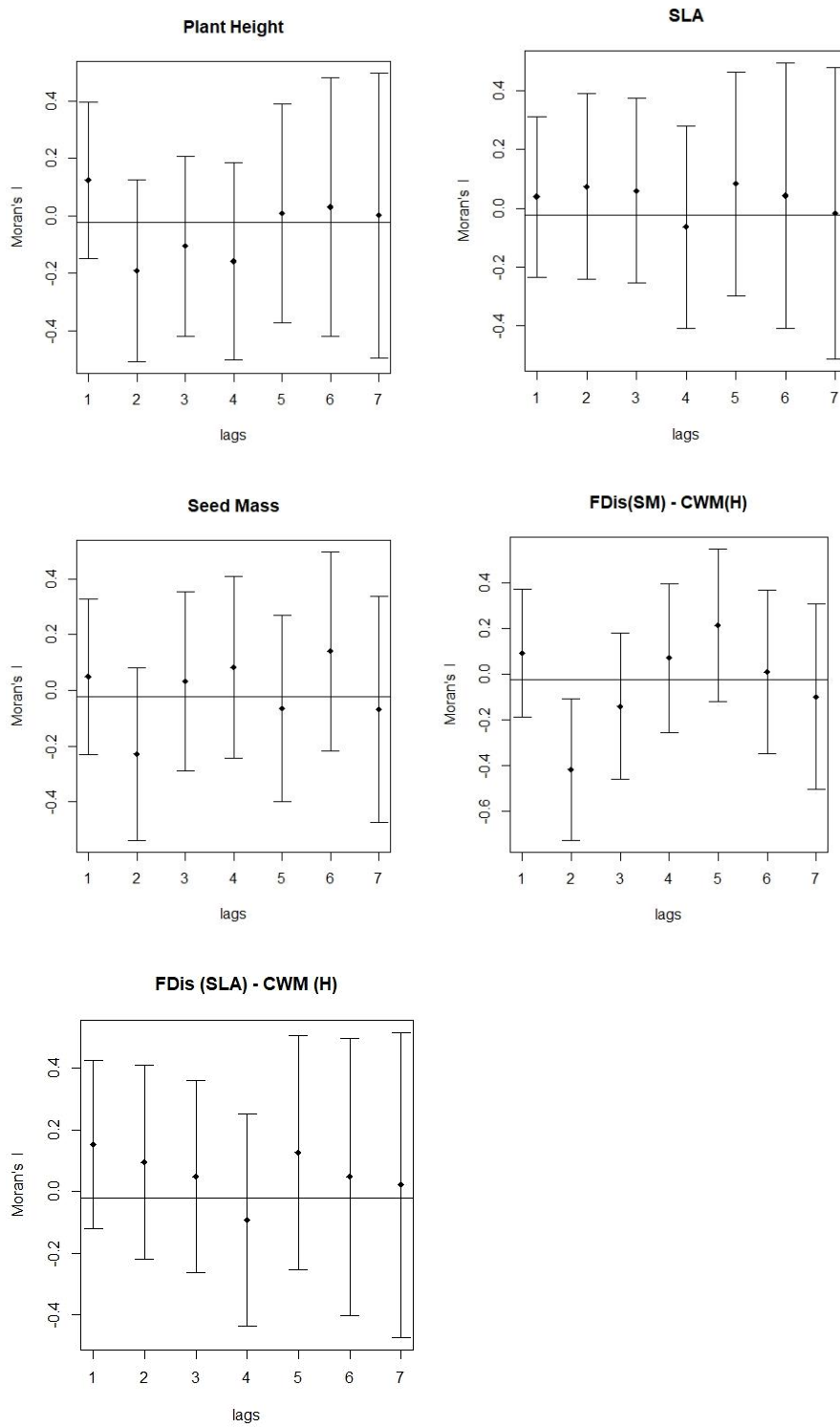


Fig. 4.1 Residual autocorrelation between (S)ES CWM and FDis for plant height (H), specific leaf area (SLA) and seed mass (SM), and between traits (FDis_{SM} - CWM_H and FDis_{SLA} - CWM_H).

Table 4.2 Results of pairwise similarities analyses using the matrix “plot x species cover (with all species)”. The dissimilarity matrix has been calculated with Bray-Curtis index and it has been analysed with adonis function in vegan package (using 999 permutation). R refers degree of dissimilarity: values close to 1 means higher dissimilarity and close to 0 lower dissimilarity. *** $p < 0.001$; ** $p = 0.01$; * $p = 0.05$.

Elevation belts	R
1 - 2	0.18***
1 - 3	0.10*
1 - 4	0.22***
2 - 3	0.15**
2 - 4	0.25***
3 - 4	0.16***

Reference

Bivand R (2018) “The Problem of Spatial Autocorrelation:” forty years on. <http://cran.r-project.org/web/packages/spdep/vignettes/CO69.pdf> (accessed 15 January 2011.)