

Supplementary Table 3. Results for the generalized linear mixed models (GLMM) ran on the dataset without non-native species including community level metrics (mean and skewness of local and regional trait-based originality and species richness) and the species-specific ratio of trait-based local originality to regional originality.

Dependent variable	Intercept	Urbanization (U)	Species richness (SR)	Year of sampling	U×SR	R ² _c	R ² _m
Mean local trait-based originality	4.7 10 ⁻¹ ***	6.9 10 ⁻⁴ ***	9.1 10 ⁻⁴ ***	-5.810 ⁻⁴ *	-2.3 10 ⁻⁵ ***	0.435	0.119
Mean regional trait-based originality	5.2 10 ⁻¹ ***	2.4 10 ⁻⁴ ***	-5.2 10 ⁻⁷ NS	-1.7 10 ⁻⁴ *	-1.0 10 ⁻⁵ ***	0.644	0.083
Skewness of local trait-based originality	1.1 10 ⁻² ***	3.7 10 ⁻⁵ NS	2.5 10 ⁻² ***	-1.5 10 ⁻³ NS	excluded	0.194	0.120
Skewness of regional trait-based originality	-3.7 10 ⁻² NS	1.6 10 ⁻³ ***	3.1 10 ⁻² ***	-9.7 10 ⁻⁴ NS	excluded	0.332	0.175
Species richness	1.9 ***	4.0 10 ⁻³ ***	omitted	-4.0 10 ⁻³ NS	omitted	3.5 10 ⁻²	1.7 10 ⁻³
Local/regional trait-based originality	9.1 10 ⁻¹ ***	7.4 10 ⁻⁴ ***	1.7 10 ⁻³ ***	excluded	-2.0 10 ⁻⁵ ***	0.450	0.056

Estimated coefficients and their significance are shown for the explanatory variables that remained after backward selection of variables based on Akaike information criterion (AIC) values including urbanization percentage, species richness, interaction (×) between urbanization and species richness and year of sampling. The mention "excluded" means that the explanatory variable was not retained in the final model according to the Akaike criterion, except for the last model on local/regional originality where the year was excluded because of a default of convergence. Conditional and marginal R² describes the proportion of variance explained by fixed (R²_c) and random+fixed (R²_m) covariables. P-values: NS = non-significant (P>0.050); * = 0.010 < P ≤ 0.050; ** = 0.001 < P ≤ 0.010; *** = P ≤ 0.001.