

Supplementary Table 4. Results for the generalized linear mixed models (GLMM) that were ran on the dataset without non-native species, including community level metrics (mean and skewness of local and regional functional and species richness), and the species-specific ratio of trait-based local originality to regional originality. Compared to Supplementary Table 3, here we considered types of land-cover, with build-up areas taken as a reference.

	Intercept	Agriculture	Urban green space	Forest	Semi-natural	Species Richness (SR)	Year	Agriculture*SR	Urban green space*SR	Forest*SR	Semi-natural*SR	R ² _c	R ² _m
Mean local functional originality	5.3 10 ⁻¹ ***	-5.0 10 ⁻² ***	-3.4 10 ⁻² ***	-6.4 10 ⁻² ***	-4.8 10 ⁻² ***	-1.4 10 ⁻³ ***	-5.6 10 ⁻⁴ *	2.1 10 ⁻³ ***	1.6 10 ⁻³ **	2.7 10 ⁻³ ***	1.7 10 ⁻³ *	0.42	0.10
Mean regional functional originality	5.4 10 ⁻¹ ***	-2.0 10 ⁻² ***	-2.2 10 ⁻² ***	-2.3 10 ⁻² ***	-2.7 10 ⁻² ***	-1.1 10 ⁻³ ***	-1.4 10 ⁻⁴ **	1.0 10 ⁻³ ***	9.8 10 ⁻⁴ ***	9.0 10 ⁻⁴ ***	1.0 10 ⁻³ ***	0.62	0.10
Skewness of local functional originality	5.8 10 ⁻² NS	5.7 10 ⁻² NS	7.0 10 ⁻² NS	5.4 10 ⁻³ NS	2.3 10 ⁻¹ NS	2.8 10 ⁻² ***	-1.3 10 ⁻³ NS	-1.3 10 ⁻³ NS	-6.7 10 ⁻³ NS	-3.0 10 ⁻³ NS	-2.0 10 ⁻² *	0.19	0.12
Skewness of regional functional originality	-2.6 10 ⁻² NS	1.3 10 ⁻² NS	9.6 10 ⁻² NS	-3.5 10 ⁻² NS	1.7 10 ⁻¹ NS	4.3 10 ⁻² ***	-1.4 10 ⁻³ NS	-1.3 10 ⁻² *	-1.3 10 ⁻² *	-2.0 10 ⁻³ NS	-2.9 10 ⁻² **	0.33	0.17
Species Richness (SR)	2.1 ***	-0.2 *	3.1 10 ⁻¹ ***	-2.5 10 ⁻¹ ***	3.2 10 ⁻¹ *	omitted	-4.3 10 ⁻³ NS	omitted	omitted	omitted	omitted	3.3 10 ⁻²	4.7 10 ⁻³
Local/regional functional originality	9.6 10 ⁻¹ ***	-4.3 10 ⁻² ***	-2.6 10 ⁻² ***	-6.3 10 ⁻² ***	-4.4 10 ⁻² ***	5.8 10 ⁻⁴ NS	-9.1 10 ⁻⁴ ***	9.1 10 ⁻⁴ **	2.7 10 ⁻⁴ NS	1.6 10 ⁻³ ***	-3.1 10 ⁻⁴ NS	0.45	0.06

The GLMM was used by contrasting each level of the land-cover variable to a reference baseline. We chose the urban built-up area as this reference land-cover level. This means for example, that the mean local functional originality is lower by $-5.0 \cdot 10^{-2}$ units in agricultural plots than in urban built-up plots. P-values: NS = non-significant ($P > 0.050$); * = $0.010 < P \leq 0.050$; ** = $0.001 < P \leq 0.010$; *** = $P \leq 0.001$.