

Table S1. Results of the GLMMs of Variance inflate factor, Moran's I test, Zero inflation test, and Overdispersion test.

a)

Model	VIF_tree_hedgerow_100m	VIF_annual_crop_100m	VIF_water_1km	VIF_forest_1km	VIF_shrubland_1km
Abundance	1.008	1.028	1.043	1.145	1.138
Richness	1.011	1.025	1.068	1.234	1.227
endemic	1.036	1.078	1.162	2.339	2.368
granivores	1.003	1.041	1.038	1.137	1.138
insectivores	1.009	1.048	1.094	1.39	1.342
omnivores	1.01	1.009	1.023	1.055	1.049
carnivores	1.04	1.014	1.124	1.268	1.352

b)

Model	Moran_I_statistic	Moran_I_p_value	Zero_inflation_p_value	Overdispersion_parameter	Overdispersion_p_value
Abundance	0.087	0.023	1	0.222	1
Richness	0.023	0.255	1	0.750	1
endemic	-0.018	0.580	0.568	0.741	1
granivores	0.125	0.002	0.680	0.234	1
insectivores	-0.012	0.533	0.952	0.957	1
omnivores	0.063	0.066	0.904	0.345	1
carnivores	-0.062	0.871	0.896	0.804	1