

Table S5. Co-occurrence analyses of congeneric guilds.

Entries as in Table S4.

Ecological Guild	Fixed-Fixed Model 5 × 5	Fixed-Fixed Model 10 × 10	Habitat Model 5 × 5	Habitat Model 10 × 10	Population Model 5 × 5	Population Model 10 × 10	Biomass Model 5 × 5	Biomass Model 10 × 10
<i>Anthus</i> (4)	0.326	0.995	< 0.001	< 0.001	0.001	< 0.001	0.001	< 0.001
<i>Acrocephalus</i> (4)	0.578	0.142	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<i>Sylvia</i> (5)	0.017	0.020	0.605	0.430	0.981	0.942	0.951	0.808
<i>Phylloscopus</i> (4)	0.189	0.712	> 0.999	<i>‡</i> <0.001	0.779	0.213	0.976	0.283
<i>Parus</i> (6)	< 0.001	< 0.001	> 0.999	< 0.001	0.569	< 0.001	0.783	< 0.001
<i>Corvus</i> (4)	< 0.001	< 0.001	< 0.001	<i>‡</i> <0.001	< 0.001	< 0.001	< 0.001	< 0.001
<i>Carduelis</i> (5)	< 0.001	0.245	0.164	<i>‡</i> <0.001	< 0.001	< 0.001	< 0.001	< 0.001
<i>Turdus</i> (5)	0.002	0.191	0.089	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SEGREGATED	5	3	3	7	5	6	5	6
RANDOM	3	4	3	1	2	2	1	2
AGGREGATED	0	1	2	0	1	0	2	0

*‡*Entries in italics indicate three models for which it was not possible to generate 1000 randomizations because the constraints were very difficult to achieve, and the simulation usually aborted after thousands of unsuccessful trials. These p-values were estimated from the standardized effect size, based on 10 successful replications of each model.