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Dispersing Rice-Associated Arthropods Ignore a Phantom Ultrasonic Insect Chorus

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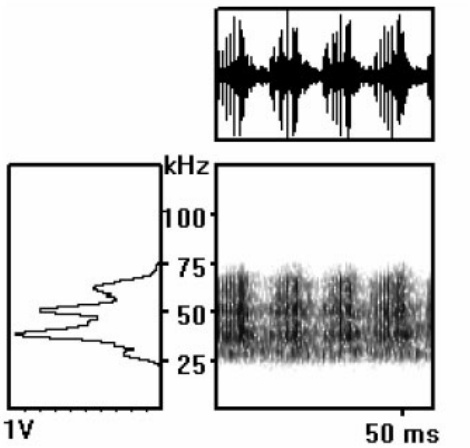

Fig. S1. Waveform, power spectrum and spectrogram of a representative 50 ms portion of the katydid chorus playback reflected off a metal plate at the experimental rice paddy in the Philippines.

Table S1. Negative binomial models of arthropod abundance by guild. Each guild was analyzed with a generalized linear mixed-effects model (GLMM). All continuous terms were centered by the mean and scaled by two standard deviations to be directly comparable to categorical terms (Gelman, 2008).

Distribution	Term	Estimate	Std.error	Statistic	*p*.value	Model
NB2	Intercept	0.152026	0.287532	0.528728	0.596994	Aquatic predators
NB2	Playback	-0.28051	0.420914	-0.66644	0.505129	Aquatic predators
NB2	Site_poles	-0.37265	0.357895	-1.04124	0.297764	Aquatic predators
NB2	Site_control	-0.71032	0.366841	-1.9363	0.052831	Aquatic predators
NB2	Date	1.355278	0.354453	3.823578	0.000132	Aquatic predators
NB2	RH	-0.21846	0.263655	-0.82858	0.407344	Aquatic predators
NB2	Temp	-0.56557	0.315795	-1.79095	0.073301	Aquatic predators
NB2	Intercept	0.597825	0.189876	3.148506	0.001641	Detritivores
NB2	Playback	-0.1775	0.269379	-0.65892	0.509947	Detritivores
NB2	Site_poles	-0.5719	0.2371	-2.41206	0.015863	Detritivores
NB2	Site_control	-0.03053	0.229688	-0.13294	0.894244	Detritivores
NB2	Date	-2.39992	0.205068	-11.703	1.23E-31	Detritivores
NB2	RH	-0.10658	0.198313	-0.53742	0.590976	Detritivores
NB2	Temp	0.745969	0.21783	3.424546	0.000616	Detritivores
NB1	Intercept	0.923185	0.170724	5.40748	6.39E-08	General predators
NB1	Playback	0.130943	0.227683	0.57511	0.565217	General predators
NB1	Site_poles	0.216911	0.196489	1.103933	0.269622	General predators
NB1	Site_control	0.328444	0.193478	1.697583	0.089587	General predators
NB1	Date	0.591803	0.157406	3.759728	0.00017	General predators
NB1	RH	0.000858	0.136036	0.006306	0.994969	General predators
NB1	Temp	-0.23726	0.135266	-1.75405	0.079422	General predators
NB1	Intercept	-0.72605	0.232247	-3.12621	0.001771	Herbivores
NB1	Playback	-0.08989	0.338853	-0.26527	0.790804	Herbivores
NB1	Site_poles	0.264816	0.268035	0.98799	0.323158	Herbivores
NB1	Site_control	0.222779	0.271619	0.820187	0.412109	Herbivores
NB1	Date	0.893387	0.238049	3.752962	0.000175	Herbivores
NB1	RH	-0.03366	0.192284	-0.17508	0.861018	Herbivores
NB1	Temp	-0.38695	0.194841	-1.98597	0.047037	Herbivores

Table S2. Negative binomial models of arthropod abundance by family. Each family was analyzed with a generalized linear mixed-effects model (GLMM). All continuous terms were centered by the mean and scaled by two standard deviations to be directly comparable to categorical terms.

Distribution	Term	Estimate	Std.error	Statistic	*p*.value	Model
NB2	Intercept	0.19321	0.202363	0.95477	0.339694	Chironomidae
NB2	Playback	0.03036	0.282295	0.107548	0.914355	Chironomidae
NB2	Site_poles	-0.38272	0.247796	-1.54452	0.122463	Chironomidae
NB2	Site_control	0.175634	0.239923	0.732041	0.464144	Chironomidae
NB2	Date	-2.86604	0.229423	-12.4924	8.22E-36	Chironomidae
NB2	Temp	0.836595	0.243357	3.437721	0.000587	Chironomidae
NB2	RH	-0.12999	0.213485	-0.60891	0.542586	Chironomidae
NB2	Intercept	-0.1652	0.321084	-0.51451	0.606892	Corixidae
NB2	Playback	-0.50717	0.477244	-1.06271	0.287915	Corixidae
NB2	Site_poles	-0.58899	0.407203	-1.44644	0.148054	Corixidae
NB2	Site_control	-0.90714	0.418238	-2.16896	0.030086	Corixidae
NB2	Date	0.898498	0.405215	2.217335	0.0266	Corixidae
NB2	Temp	-0.66858	0.378302	-1.76731	0.077177	Corixidae
NB2	RH	-0.19626	0.312669	-0.6277	0.530202	Corixidae
NB2	Intercept	-1.89752	0.522701	-3.63021	0.000283	Notonectidae
NB2	Playback	-0.04578	0.727773	-0.0629	0.949847	Notonectidae
NB2	Site_poles	-0.58081	0.648121	-0.89615	0.370174	Notonectidae

Distribution	Term	Estimate	Std.error	Statistic	*p*.value	Model
NB2	Site_control	-0.70576	0.673751	-1.04751	0.294864	Notonectidae
NB2	Date	2.089427	0.7676	2.722025	0.006488	Notonectidae
NB2	Temp	-0.23388	0.537206	-0.43536	0.663304	Notonectidae
NB2	RH	-0.61861	0.449885	-1.37503	0.169121	Notonectidae
NB2	Intercept	-0.61693	0.319693	-1.92977	0.053636	Carabidae
NB2	Playback	0.175407	0.447152	0.392275	0.694855	Carabidae
NB2	Site_poles	0.606916	0.380514	1.59499	0.110714	Carabidae
NB2	Site_control	0.343551	0.38449	0.893523	0.371577	Carabidae
NB2	Date	0.243441	0.332648	0.731827	0.464274	Carabidae
NB2	Temp	-0.77164	0.286415	-2.69412	0.007057	Carabidae
NB2	RH	0.027292	0.267623	0.10198	0.918773	Carabidae
NB1	Intercept	-1.44741	0.331263	-4.36937	1.25E-05	Ceratopogonidae
NB1	Playback	-0.24322	0.483693	-0.50284	0.615075	Ceratopogonidae
NB1	Site_poles	-0.29023	0.411126	-0.70594	0.480223	Ceratopogonidae
NB1	Site_control	0.548841	0.365092	1.503295	0.132763	Ceratopogonidae
NB1	Date	0.276355	0.347078	0.796233	0.425897	Ceratopogonidae
NB1	Temp	0.43977	0.259201	1.696635	0.089766	Ceratopogonidae
NB1	RH	-0.67498	0.261084	-2.58531	0.009729	Ceratopogonidae
NB1	Intercept	-0.38781	0.331367	-1.17035	0.241862	Formicidae
NB1	Playback	0.52563	0.463177	1.134835	0.256444	Formicidae
NB1	Site_poles	0.435777	0.399641	1.090421	0.275528	Formicidae
NB1	Site_control	0.479582	0.402025	1.192918	0.232902	Formicidae
NB1	Date	1.103661	0.354064	3.117126	0.001826	Formicidae
NB1	Temp	-0.51557	0.317697	-1.62284	0.104625	Formicidae
NB1	RH	0.12524	0.314889	0.397729	0.69083	Formicidae
NB1	Intercept	-1.42512	0.332107	-4.29116	1.78E-05	Staphylinidae
NB1	Playback	0.260162	0.441111	0.589788	0.555333	Staphylinidae
NB1	Site_poles	-0.13465	0.414826	-0.3246	0.745487	Staphylinidae
NB1	Site_control	0.191405	0.391692	0.488661	0.625082	Staphylinidae
NB1	Date	-0.02589	0.323912	-0.07992	0.9363	Staphylinidae
NB1	Temp	-0.13849	0.315177	-0.43939	0.660378	Staphylinidae
NB1	RH	0.114898	0.303661	0.378375	0.705152	Staphylinidae
Poisson	Intercept	-1.72893	0.323365	-5.34666	8.96E-08	Tetragnathidae
Poisson	Playback	0.217814	0.428226	0.508643	0.611002	Tetragnathidae
Poisson	Site_poles	0.157355	0.3788	0.415404	0.677846	Tetragnathidae
Poisson	Site_control	0.1129	0.3814	0.296014	0.767219	Tetragnathidae
Poisson	Date	0.835415	0.322102	2.593636	0.009497	Tetragnathidae
Poisson	Temp	-1.09693	0.328299	-3.34125	0.000834	Tetragnathidae
Poisson	RH	0.549338	0.273201	2.010745	0.044352	Tetragnathidae