Supplementary Table 1. Statistical result without false discovery rate control.

Fig	Data	Stat. meth.	Pairwise		p value	
1C	*CS*/M/Int/Rec PS of *D. mel*	WSR	Before	After	3.62E-05	***
	CS/M/Int/WN	WSR	Before	After	0.986	
	CS/M/Int/PT (167 Hz)	WSR	Before	After	0.485	
	CS/M/Int/PS (15-ms IPI)	WSR	Before	After	1.000	
	CS/M/Int/PS (35-ms IPI)	WSR	Before	After	0.005	**
	CS/M/Int/PS (75-ms IPI)	WSR	Before	After	0.837	
	CS/M/Int/PS (105-ms IPI)	WSR	Before	After	0.686	
1D	*CS*/M/Int	KW	-	-	3.73E-05	***
		SD	Recorded PS	White noise	0.003	*
			Recorded PS	PT (167 Hz)	0.011	*
			Recorded PS	PS (15-ms IPI)	0.343	
			Recorded PS	PS (35-ms IPI)	0.991	
			Recorded PS	PS (75-ms IPI)	0.017	*
			Recorded PS	PS (105-ms IPI)	0.132	
			White noise	PT (167 Hz)	0.995	
			White noise	PS (15-ms IPI)	0.194	
			White noise	PS (35-ms IPI)	0.010	**
			White noise	PS (75-ms IPI)	0.961	
			White noise	PS (105-ms IPI)	0.705	*
			PT (167 Hz)	PS (15-ms IPI)	0.503	
			PT (167 Hz)	PS (35-ms IPI)	0.040	
			PT (167 Hz)	PS (75-ms IPI)	1.000	
			PT (167 Hz)	PS (105-ms IPI)	0.926	
			PS (15-ms IPI)	PS (35-ms IPI)	0.685	
			PS (15-ms IPI)	PS (75-ms IPI)	0.630	
			PS (15-ms IPI)	PS (105-ms IPI)	0.999	
			PS (35-ms IPI)	PS (75-ms IPI)	0.053	
			PS (35-ms IPI)	PS (105-ms IPI)	0.380	
			PS (75-ms IPI)	PS (105-ms IPI)	0.965	
2A	*CS*/M/Wc/Rec PS of *D.mel*	WSR	Before	After	0.001	***
	CS/M/Wc/PS (15-ms IPI)	WSR	Before	After	0.134	
	CS/M/Wc/PS (35-ms IPI)	WSR	Before	After	5.25E-07	***
	CS/M/Wc/PS (105-ms IPI)	WSR	Before	After	0.012	*
	CS/M/Wc/PS (35-ms IPI)/FR	WSR	Before	After	6.33E-08	***
	CS/M/Wc, Ac /PS (35-ms IPI)	WSR	Before	After	0.028	*
2B	*CS*/M/Wc	KW	-	-	8.25E-10	***
		SD	Recorded PS	PS (15-ms IPI)	4.72E-05	***
			Recorded PS	PS (35-ms IPI)	0.479	
			Recorded PS	PS (105-ms IPI)	0.005	**
			Recorded PS	PS (35-ms IPI) /FR	0.278	
			Recorded PS	PS (35-ms IPI)/Ac	0.001	***
			PS (15-ms IPI)	PS (35-ms IPI)	1.62E-05	***
			PS (15-ms IPI)	PS (105-ms IPI)	0.550	
			PS (15-ms IPI)	PS (35-ms IPI)/FR	1.52E-05	***
			PS (15-ms IPI)	PS (35-ms IPI)/Ac	0.956	
			PS (35-ms IPI)	PS (105-ms IPI)	0.024	*
			PS (35-ms IPI)	PS (35-ms IPI)/FR	0.998	
			PS (35-ms IPI)	PS (35-ms IPI)/Ac	0.001	**
			PS (105-ms IPI)	PS (35-ms IPI)/FR	0.041	*

			PS (105-ms IPI)	PS (35-ms IPI)/Ac	0.966	
			PS (35-ms IPI) FR	PS (35-ms IPI)/Ac	0.002	**
		FM	-	-	2.29E-10	***
3E	*CS*/M/Wc	WNMT	1st PT (167 Hz)	1st PS (105-ms IPI)	0.281	
			1st PT (167 Hz)	1st PS (15-ms IPI)	0.690	
			1st PT (167 Hz)	1st PS (35-ms IPI)	1.17E-04	***
			1st PT (167 Hz)	2nd PT (167 Hz)	0.979	
			1st PT (167 Hz)	2nd PS (105-ms IPI)	1.000	
			1st PT (167 Hz)	2nd PS (15-ms IPI)	0.423	
			1st PT (167 Hz)	2nd PS (35-ms IPI)	0.017	
			1st PS (105-ms IPI)	1st PS (15-ms IPI)	0.001	**
			1st PS (105-ms IPI)	1st PS (35-ms IPI)	0.325	
			1st PS (105-ms IPI)	2nd PT (167 Hz)	0.023	*
			1st PS (105-ms IPI)	2nd PS (105-ms IPI)	0.152	
			1st PS (105-ms IPI)	2nd PS (15-ms IPI)	2.92E-04	***
			1st PS (105-ms IPI)	2nd PS (35-ms IPI)	0.968	
			1st PS (15-ms IPI)	1st PS (35-ms IPI)	6.69E-09	***
			1st PS (15-ms IPI)	2nd PT (167 Hz)	0.996	
			1st PS (15-ms IPI)	2nd PS (105-ms IPI)	0.853	
			1st PS (15-ms IPI)	2nd PS (15-ms IPI)	1.000	
			1st PS (15-ms IPI)	2nd PS (35-ms IPI)	1.35E-05	***
			1st PS (35-ms IPI)	2nd PT (167 Hz)	1.56E-06	***
			1st PS (35-ms IPI)	2nd PS (105-ms IPI)	4.17E-05	***
			1st PS (35-ms IPI)	2nd PS (15-ms IPI)	3.19E-10	***
			1st PS (35-ms IPI)	2nd PS (35-ms IPI)	0.932	
			2nd PT (167 Hz)	2nd PS (105-ms IPI)	0.998	
			2nd PT (167 Hz)	2nd PS (15-ms IPI)	0.952	
			2nd PT (167 Hz)	2nd PS (35-ms IPI)	4.35E-04	***
			2nd PS (105-ms IPI)	2nd PS (15-ms IPI)	0.619	
			2nd PS (105-ms IPI)	2nd PS (35-ms IPI)	0.006	**
			2nd PS (15-ms IPI)	2nd PS (35-ms IPI)	1.14E-06	***
5A	*D. sec*/Int/Rec PS of *D. sec*	WSR	Before	After	0.024	*
	D. sec/Int/PS (35-ms IPI)	WSR	Before	After	0.424	
	D. sec/Int/PS (85-ms IPI)	WSR	Before	After	0.931	
	D. sec/Int/PS (105-ms IPI)	WSR	Before	After	0.363	
5B	*D. sim*/Int/ Rec PS of *D. sim*	WSR	Before	After	0.750	
	D. sim/Int/PS (35-ms IPI)	WSR	Before	After	0.199	
	D. sim/Int/PS (55-ms IPI)	WSR	Before	After	0.835	
	D. sim/Int/PS (105-ms IPI)	WSR	Before	After	0.747	
S2D	*CS*/F/Int/PS (35-ms IPI)	WSR	Before	After	0.065	
	OR/M/Int/PS (35-ms IPI)	WSR	Before	After	0.022	*
	OR/M/Wc/PS (35-ms IPI)	WSR	Before	After	0.147	
S3A	*CS*/M/Int/PS (15-ms IPI)	WRS	±0±45	±90±45	0.272	
S3B	*CS*/M/Int/PS (35-ms IPI)	WRS	±0±45	±90±45	0.241	
S3C	*CS*/M/Int/PS (105-ms IPI)	WRS	±0±45	±90±45	0.427	

Asterisks indicate statistical significance (*p<0.05, **p<0.01, **p<0.001). Stat. meth. = statistical methods; *CS* = *Canton-S*; *OR* = *Oregon-R*; *D. mel* = *D. mel*; *D. sim* = *D. simulans*; *D. sec* = *D. sechellia*; M = male; F = female; Int = intact; Wc = wing-clipped; Ac = arista-clipped; FR = Far-red light; PS = pulse song; PT = pure tone; WN = white noise; Rec = recorded; WSR = Wilcoxon signed-rank test; WRS = Wicoxon rank sum test; KW = Kruskal-Wallis test; SD = Steel-Dwass test; FM = Friedman test; WNMT = Wilcoxon-Nemenyi-McDonalds-Thompson test.