

**Table S1**Figure 2C

LIGHT

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	2414	2	1207	$F(2, 6) = 316.0$	$P < 0.0001$
Residual (within columns)	22.92	6	3.820		
Total	2437	8			

DARK

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	7.410	2	3.705	$F(2, 6) = 0.1894$	$P = 0.8322$
Residual (within columns)	117.4	6	19.56		
Total	124.8	8			

Figure 2D

LIGHT

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	1152	2	575.9	$F(2, 6) = 24.31$	$P = 0.0013$
Residual (within columns)	142.1	6	23.69		
Total	1294	8			

DARK

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	7.410	2	3.705	$F(2, 6) = 0.1894$	$P = 0.8322$
Residual (within columns)	117.4	6	19.56		
Total	124.8	8			

Figure 3B

LIGHT

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	3035	2	1517	$F(2, 9) = 486.3$	$P < 0.0001$
Residual (within columns)	28.08	9	3.120		
Total	3063	11			

DARK

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	66.22	2	33.11	$F(2, 6) = 8.241$	$P = 0.0190$
Residual (within columns)	24.11	6	4.018		
Total	90.33	8			

Figure 3C

LIGHT

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	1018	2	509.1	$F(2, 12) = 39.31$	$P < 0.0001$
Residual (within columns)	155.4	12	12.95		
Total	1174	14			

DARK

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	0.1053	2	0.05267	$F(2, 12) = 0.005571$	$P = 0.9944$
Residual (within columns)	113.4	12	9.454		
Total	113.5	14			

Figure 3D

LIGHT

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	3713	2	1856	$F(2, 6) = 717.7$	$P < 0.0001$
Residual (within columns)	15.52	6	2.587		
Total	3728	8			

DARK

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	3.877	2	1.938	$F(2, 6) = 1.376$	$P = 0.3222$
Residual (within columns)	8.452	6	1.409		
Total	12.33	8			

Figure 3E

LIGHT

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	3637	2	1819	$F(2, 6) = 173.4$	$P < 0.0001$
Residual (within columns)	62.95	6	10.49		
Total	3700	8			

DARK

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	66.84	2	33.42	$F(2, 6) = 0.6509$	$P = 0.5548$
Residual (within columns)	308.1	6	51.35		
Total	374.9	8			

### Figure S4

ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	765.6	2	382.8	$F(2, 6) = 303.2$	$P < 0.0001$
Residual (within columns)	7.575	6	1.263		
Total	773.1	8			

#### **Legend:**

SS: Sum of squares

DF: Degree of freedom

MS: Mean square

DFn: Degree of freedom from between the columns

DFd: Degree of freedom from within the columns

F: F-statistic