Table S1. Effects of LPS challenge on hue, chroma and brightness of gape and flanges. Table shows final mixed models reporting the effects of treatment, sex and their interaction (where statistically significant) on hue, chroma and brightness of palate and flanges of barn swallows nestlings at both day 2 and 3 after LPS injection.

| Source of variation | Coefficient | $\chi^2$ | df | P |
|---|---|---|---|---|
| **Hue palate** | | | | |
| *Day 2 post-injection* (n = 148) | | | | |
| Treatment | -0.033 (0.020) | 2.660 | 1 | 0.103 |
| Sex | -0.036 (0.023) | 2.389 | 1 | 0.122 |
| *Day 3 post-injection* (n = 146) | | | | |
| Treatment | -0.010 (0.018) | 0.327 | 1 | 0.568 |
| Sex | 0.038 (0.021) | 3.359 | 1 | 0.067 |
| **Hue flange** | | | | |
| *Day 2 post-injection* (n = 148) | | | | |
| Treatment | -0.052 (0.036) | 2.169 | 1 | 0.141 |
| Sex | -0.101 (0.041) | 6.301 | 1 | 0.012 |
| *Day 3 post-injection* (n = 146) | | | | |
| Treatment | -0.053 (0.038) | 2.008 | 1 | 0.156 |
| Sex | -0.010 (0.042) | 0.054 | 1 | 0.815 |
| **Chroma palate** | | | | |
| *Day 2 post-injection* (n = 148) | | | | |
| Treatment | -0.015 (0.006) | 6.278 | 1 | 0.012 |
| Sex | 0.002 (0.007) | 0.116 | 1 | 0.733 |
| *Day 3 post-injection* (n = 146) | | | | |
| Treatment | -0.008 (0.005) | 2.231 | 1 | 0.135 |
| Sex | 0.011 (0.006) | 3.470 | 1 | 0.062 |
| **Chroma flange** | | | | |
| *Day 2 post-injection* (n = 148) | | | | |
| Treatment | -0.016 (0.007) | 5.591 | 1 | 0.018 |
| Sex | -0.020 (0.065) | 7.950 | 1 | 0.005 |
| Treatment × sex | 0.0023 (0.009) | 6.026 | 1 | 0.014 |
| *Day 3 post-injection* (n = 146) | | | | |
| Treatment | 0.004 (0.006) | 0.430 | 1 | 0.512 |
| Sex | -0.009 (0.006) | 2.029 | 1 | 0.154 |
| **Brightness palate** | | | | |
| *Day 2 post-injection* (n = 148) | | | | |
| Treatment | -0.011 (0.008) | 2.11 | 1 | 0.147 |
| Sex | -0.006 (0.009) | 0.442 | 1 | 0.506 |
| *Day 3 post-injection* (n = 146) | | | | |
| Treatment | 0.006 (0.007) | 0.929 | 1 | 0.335 |
| Sex | 0.002 (0.008) | 0.003 | 1 | 0.855 |
| **Brightness flange** | | | | |
| *Day 2 post-injection* (n = 148) | | | | |
| Treatment | 0.000 (0.001) | 2.18 | 1 | 0.996 |
| Sex | 0.013 (0.015) | 0.74 | 1 | 0.391 |
| *Day 3 post-injection* (n = 146) | | | | |
| Treatment | -0.008 (0.016) | 0.290 | 1 | 0.590 |
| Sex | 0.031 (0.029) | 2.983 | 1 | 0.084 |