**Supplemental Material**

**Table S1**. Proportion of polychromatic erythrocytes (PE), and white blood cell differentials of yellow-breasted chats (*Icteria virens*). Each row is a group of individual hosts, and each cell represents the mean and standard deviation (in parenthesis) for all individuals within the groups. Proportions were calculated based on cell counts over 104 non-polychromatic erythrocytes.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **PE** | **Eosinophils** | **Lymphocytes** | **Thrombocytes** | **Haemosporidian** |
| Uninfected | 0.02(0.00) | 0.001(0) | 0.005(0.002) | 0.003(0.004) |  |
| Co-infected | 0.065(0.02) | 0.0002 (0.0004) | 0.004(0.002) | 0.001(0.001) | 0.001(0.001) |
| HaemosporidianInfected | 0.059(0.01) | 0.0002 (0.0004) | 0.005(0.002) | 0.002(0.0007) | 0.0007(0.0009) |
| Trypanosome Infected | 0.059 (0.007) | 0.001(0.001) | 0.002(0.0006) | 0.005(0.005) |  |

The average proportion of heterophils for uninfected individuals was 0.0004 (0.0005); monocytes were 0.0005 (0.0001) for trypanosome-infected birds. Basophil counts were zero as well as otherwise noted for heterophils and eosinophils. Only one trypanosome parasite was observed on a slide of an individual that tested negative for haemosporidian parasites.

**Table S2**. Post-hoc Tukey HSD test of comparisons of the proportion of polychromatic erythrocytes (PE) between the four groups of *Icteria virens* blood films analyzed. Represented on the table are the average differences between the groups, the lower and upper confidence intervals (CI), as well as the P-values. Significant comparisons were highlighted in bold.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Average Difference** | **Lower CI** | **Upper CI** | **P** |
| Co-infected *vs.* Uninfected | 0.04 | 0.02 | 0.07 | **0.0005** |
| *Plasmodium* infected *vs.* Uninfected | 0.04 | 0.02 | 0.06 | **0.002** |
| *Trypanosom*a infected *vs.* Uninfected | 0.04 | 0.01 | 0.07 | **0.003** |
| *Plasmodium* infected *vs.* Co-infected | -0.005 | -0.03 | 0.02 | 0.92 |
| *Trypanosom*a infected *vs*. Co-infected | -0.005 | -0.03 | 0.02 | 0.93 |
| *Plasmodium* infected *vs.* *Trypanosoma* infected | -0.0001 | -0.03 | 0.03 | 1.0 |