Supplementary Material for

Demasculinisation of male guppiesincreases resistance to a common and harmful ectoparasite

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**Table S1:** Mean guppy standard length (SL) by treatment

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| --- | --- | --- | --- |
|  | Treatment | Initial SL (mm ± s.e.m.) | Infection SL (mm ± s.e.m.) |
|  |  |  |  |
| Exp. 1 | Untreated males | 15.75 (±0.19) | 15.60 (±0.2) |
|  | Feminisation males | 15.47 (±0.23) | 15.49 (±0.2) |
|  |  |  |  |
| Exp. 2 | Untreatedmales | 15.36 (±0.26) | 15.44 (±0.23) |
|  | Untreatedfemales | 17.97 (±0.3) | 18.57 (±0.28) |
|  | Demasculinisation males | 15.79 (±0.29) | 15.80 (±0.23) |
|  | Feminisation males | 15.24 (±0.27) | 15.44 (±0.26) |
|  |  |  |  |

**Table S2:** Mean guppy mass by treatment

|  |  |  |  |
| --- | --- | --- | --- |
|  | Treatment | Initial mass (g ± s.e.m.) | Infection mass(g ± s.e.m.) |
|  |  |  |  |
| Exp. 1 | Untreated males | 0.077 (±0.004) | 0.074 (±0.003) |
|  | Feminisation males | 0.074 (±0.003) | 0.075 (±0.003) |
|  |  |  |  |
| Exp. 2 | Untreatedmales | 0.085 (±0.004) | 0.082 (±0.003) |
|  | Untreatedfemales | 0.127 (±0.006) | 0.136 (±0.006) |
|  | Demasculinisation males | 0.091 (±0.006) | 0.085 (±0.005) |
|  | Feminisation males | 0.084 (±0.006) | 0.081 (±0.005) |
|  |  |  |  |

**Table S3:** Sample size by population, treatment and day post-infection (Experiment 1).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Treatment | Day 0 | Day 6 | Day 8 | Day 10 |
|  |  |  |  |  |
| Untreated males | 15 | 15 | 14 | 12 |
| Feminisation males | 14 | 14 | 14 | 14 |
|  |  |  |  |  |

**Table S4:** Sample size by treatment and day post-infection (Experiment 2).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Treatment | Day 0 | Day 6 | Day 8 | Day 10 |
|  |  |  |  |  |
| Untreatedmales | 17 | 17 | 11 | 2 |
| Untreatedfemales | 19 | 19 | 17 | 13 |
| Demasculinisation males | 18 | 18 | 16 | 13 |
| Feminisation males | 18 | 18 | 18 | 12 |
|  |  |  |  |  |

**Figure S1:** *Gyrodactylus turnbulli* population growth trajectories on individual *Poecilia reticulata* hosts by hormone treatment (Experiment 1). Each line represents a separate individual.

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**Figure S2:** *Gyrodactylus turnbulli* population growth trajectories on individual *Poecilia reticulata* hosts by hormone treatment (Experiment 2): A) Untreated control males, B) untreated control females, C) males under feminisation, and D) males under demasculinisation. Each line represents a separate individual.

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