Appendix S7

Table S1: Linear selection gradients (’s from multiple regressions of relative fitness on standardized reproductive traits of the plant *G. pneumonanthe*) for each population with and without the butterfly *P. alcon* in 2010 and 2011.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Population ID | |  | 2010 | | |  | 2011 | | |
| Phenology | Flower  number | Shoot  height |  | Phenology | Flower  number | Shoot  height |
| With *P. alcon* | |  |  |  |  |  |  |  |  |
|  | A |  | -0.173 | 0.747\*\*\* | -0.101 |  | -0.129 | 0.766\*\*\* | -0.346\*\* |
|  | B |  | -0.580\* | 0.950\*\*\* | 0.186 |  | 0.047 | 0.411\* | 0.015 |
|  | C |  | 0.057 | 0.872\*\*\* | -0.068 |  | -0.003 | 0.263 | 0.305 |
|  | D |  | 0.004 | 0.354\* | 0.222 |  | -0.001 | 0.474 | -0.078 |
|  | E |  | -0.205 | 0.656\*\* | 0.125 |  | -0.271 | 1.076\*\*\* | -0.157 |
|  | F |  | -0.235 | 0.541\* | -0.040 |  | -0.287 | 0.525 | 0.001 |
|  | G |  | -0.355\*\* | 0.436\*\* | -0.011 |  | 0.215 | 0.222 | -0.467\* |
|  | H |  | -0.192 | 0.479\* | 0.119 |  | -0.154 | 0.668\*\*\* | -0.095 |
|  | I |  | -0.469\*\* | -0.095 | 0.250 |  | -0.473\* | 0.000 | -0.418 |
|  | J |  | 0.131 | 0.163 | 0.360\* |  | 0.073 | 0.137 | 0.114 |
|  | K |  | -0.034 | 0.651\*\*\* | -0.005 |  | -0.077 | 1.380\*\*\* | -0.374 |
| Without *P. alcon* | |  |  |  |  |  |  |  |  |
|  | L |  | 0.115 | 0.096 | 0.357\* |  | 0.368\*\* | 0.247\* | 0.156 |
|  | M |  | 0.197\* | -0.005 | 0.258\*\* |  | 0.234\*\* | 0.247\*\* | 0.121 |
|  | N |  | 0.520\*\*\* | 0.830\*\*\* | 0.203 |  | - | - | - |
|  | O |  | 0.059 | 0.573\*\*\* | 0.041 |  | - | - | - |
|  | P |  | 0.197 | 0.482\*\* | -0.278 |  | - | - | - |
|  | Q |  | 0.079 | 0.558\*\*\* | 0.058 |  | - | - | - |
|  | R |  | 0.581 | 0.344 | 0.120 |  | 0.440 | -0.019 | -0.244 |
|  | S |  | 0.155 | 0.952\*\*\* | 0.104 |  | 0.315 | 0.053 | 0.723\* |
|  | T |  | 0.038 | 0.827\*\*\* | -0.150\* |  | 0.133 | 0.482\*\*\* | 0.200\* |

\* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001