**Table S4**: Statistical summary for linear regressions of laboratory measured larval development time and growth rate with respect to average winter rainfall and grass growth of source population. Raw climate data were extracted from the “AussieGRASS” database (Carter, 2000), for years spanning (1960-2007). Results for each physiological trait are sorted by sex, and laboratory rearing temperature (T). No significant correlations were detected.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |   |   |  | Female |  |  |   |  | Male |  |  |
|   |   | T (°C) | R2 | SE | t | p |  | R2 | SE | t | p |
| ln(larval development) |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Grass growth | 15 | 0.014 | 2.9523 | 0.206 | 0.850 |  | 0.225 | 1.913 | 0.932 | 0.420 |
|  | Rainfall |  | 0.533 | 5.017 | 1.850 | 0.161 |  | 0.162 | 4.911 | 0.760 | 0.502 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Grass growth | 20 | 0.041 | 2.7709 | 0.359 | 0.743 |  | 0.095 | 3.112 | 0.562 | 0.614 |
|  | Rainfall |  | 0.242 | 6.083 | 0.978 | 0.400 |  | 0.215 | 7.156 | 0.907 | 0.431 |
| Growth rate |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Grass growth | 15 | 0.001 | 0.07077 | -0.038 | 0.972 |  | 0.181 | 0.08267 | -0.814 | 0.475 |
|  | Rainfall |  | 0.494 | 0.1243 | -1.711 | 0.186 |  | 0.029 | 0.22225 | -0.298 | 0.785 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Grass growth | 20 | 0.030 | 0.12931 | -0.306 | 0.779 |  | 0.094 | 0.16769 | -0.557 | 0.616 |
|   | Rainfall |  | 0.116 | 0.3048 | -0.627 | 0.575 |   | 0.252 | 0.3761 | -1.006 | 0.389 |