**Appendix 1**

**Table A1.** Survival, Final Total Length of the tadpoles (except for *E. pustulosus* where we show snout to ventral length (SVL) of metamorphs), and stable isotopic values of the amphibian species included in each experimental treatment: with or without *A. callidryas* and within different predator scenarios. Survival is expressed in percentage (mean ± SE) and final TL in milimeters (mean ± SE) calculated from all survivors from each tank. Initial number of individuals is 10 for each species (in 8 replicates=80 individuals) and we show the final sum of individuals (n) per species and treatment (only shown in the survival, but it is the same for all parameters measured).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***D. ebraccatus*** | | ***D. microcephalus*** | | ***S. ruber*** | | ***E. pustulosus*** | | ***A. callidryas*** |
|  | **Survival** | | | | | | | | |
| Treatment | *Agalychnis* | No *Agalychnis* | *Agalychnis* | No *Agalychnis* | *Agalychnis* | No *Agalychnis* | *Agalychnis* | No *Agalychnis* |  |
| Control | 65 ± 6.55  (n = 52) | 66.25 ± 7.05  (n = 53) | 72.22 ± 6.97  (n = 57) | 68.75 ± 7.89  (n = 55) | 82.5 ± 10.81  (n = 66) | 77.5 ± 7.96  (n = 62) | 55 ± 7.79  (n = 44) | 50 ± 9.64  (n = 40) | 80 ± 10.18  (n = 65) |
| Caged Belostoma | 52.78 ± 9.07  (n = 42) | 61.25 ± 6.93  (n = 49) | 68.75 ± 3.5  (n = 55) | 69.09 ± 6.41  (n = 56) | 81.25 ± 7.42  (n = 65) | 76.25 ± 9.99  (n = 61) | 42.5 ± 10.13  (n = 34) | 42.5 ± 9.01  (n = 34) | 80 ± 7.56  (n = 64) |
| Free Belostoma | 50 ± 7.79  (n = 40) | 56.25 ± 5.65  (n = 45) | 63.75 ± 6.8  (n = 51) | 77.5 ± 6.48  (n = 62) | 48.75 ± 8.33  (n = 39) | 55 ± 5.67  (n = 44) | 20 ± 4.63  (n = 16) | 20 ± 5  (n = 16) | 76.25 ± 3.75  (n = 61) |
| Caged Dragonfly | 46.25 ± 8.85  (n = 37) | 52.5 ± 7.26  (n = 42) | 61.94 ± 9.63  (n = 49) | 70 ± 8.45  (n = 56) | 83.75 ± 5.96  (n = 68) | 81.25 ± 10.43  (n = 65) | 57.5 ± 5.9  (n = 46) | 57.5 ± 12.06  (n = 46) | 72.5 ± 7.5  (n = 58) |
| Free Dragonfly | 40 ± 7.32  (n = 32) | 48.75 ± 6.39  (n = 39) | 51.25 ± 8.75  (n = 41) | 67.5 ± 8.81  (n = 54) | 13.75 ± 6.8  (n = 11) | 7.5 ± 2.5  (n = 6) | 6.25 ± 2.63  (n = 5) | 3.75 ± 1.83  (n = 3) | 8.75 ± 4.41  (n = 7) |
|  | **Final Total Length (in *E. pustulosus*, SVL of metamorphs)** | | | | | | | | |
| Control | 20.82 ± 0.61 | 23.63 ± 0.59 | 34.96 ± 0.37 | 33.94 ± 0.52 | 33.09 ± 0.64 | 32.04 ± 0.88 | 10.31 ± 0.1 | 9.65 ± 0.17 | 35.8 ± 0.52 |
| Caged Belostoma | 20.55 ± 0.62 | 22.48 ± 0.65 | 33.48 ± 0.43 | 34.91 ± 0.37 | 34.15 ± 0.43 | 34.75 ± 0.55 | 9.75 ± 0.23 | 10.3 ± 0.16 | 34.27 ± 0.71 |
| Free Belostoma | 20.07 ± 0.67 | 20.73 ± 0.67 | 33.87 ± 0.42 | 35.09 ± 0.43 | 32.75 ± 0.81 | 34.07 ± 0.71 | 10 ± 0.16 | 9.97 ± 0.17 | 32.02 ± 0.56 |
| Caged Dragonfly | 20.22 ± 0.71 | 20.17 ± 0.6 | 30.64 ± 0.92 | 33.08 ± 0.52 | 29.72 ± 0.76 | 33.24 ± 0.64 | 9.1 ± 0.13 | 9.55 ± 0.15 | 30.7 ± 0.83 |
| Free Dragonfly | 24.74 ± 0.78 | 24.9 ± 0.61 | 36.26 ± 1.01 | 38.8 ± 0.46 | 39.95 ± 0.63 | 33.99 ± 2.78 | 8.83 ± 0.2 | 8.49 ± 0.56 | 36.07 ± 1.68 |
|  | **Stable Isotopes: *δ*13C** | | | | | | | | |
| Control | -31.29 ± 0.45 | -30.9 ± 0.58 | -31.48 ± 0.21 | -31.72 ± 0.84 | -32.57 ± 0.49 | -33.8 ± 1.22 | -31.72 ± 1.09 | -32.37 ± 0.66 | -32.56 ± 0.64 |
| Caged Belostoma | -30.85 ± 0.35 | -30.72 ± 0.33 | -31.7 ± 0.31 | -31.7 ± 0.53 | -33.14 ± 0.72 | -32.63 ± 0.74 | -32.79 ± 0.84 | -31.76 ± 0.66 | -32.66 ± 0.79 |
| Free Belostoma | -30.71 ± 0.16 | -31.28 ± 0.43 | -31.88 ± 0.21 | -31.92 ± 0.3 | -32.98 ± 0.5 | -34.97 ± 0.92 | -31.96 ± 0.5 | -32.4 ± 0.64 | -32.72 ± 0.29 |
| Caged Dragonfly | -30.55 ± 0.27 | -30.67 ± 0.38 | -31.4 ± 0.32 | -31.46 ± 0.21 | -34.57 ± 1.5 | -33.25 ± 0.81 | -32.36 ± 0.41 | -32.16 ± 0.44 | -31.4 ± 0.81 |
| Free Dragonfly | -30.66 ± 0.37 | -30.4 ± 0.36 | -30.97 ± 0.2 | -30.98 ± 0.31 | -31.46 ± 0.2 | -34.2 ± 1.75 | -31.11 ± 0.76 | -32.09 ± 1.49 | -32.8 ± 0.55 |
|  | **Stable Isotopes: *δ*15N** | | | | | | | | |
| Control | 7.79 ± 0.37 | 8.62 ± 0.23 | 6.17 ± 0.14 | 6.2 ± 0.22 | 6.5 ± 0.2 | 6.47 ± 0.51 | 6.29 ± 0.39 | 6.61 ± 0.38 | 6.5 ± 0.22 |
| Caged Belostoma | 8.72 ± 0.24 | 8.25 ± 0.49 | 6.33 ± 0.24 | 6.19 ± 0.23 | 6.29 ± 0.17 | 5.7 ± 0.39 | 6.4 ± 0.29 | 6.56 ± 0.2 | 6.63 ± 0.21 |
| Free Belostoma | 9.25 ± 0.31 | 9.16 ± 0.16 | 6.5 ± 0.2 | 6.38 ± 0.18 | 5.93 ± 0.38 | 6.88 ± 0.26 | 6.19 ± 0.18 | 6.46 ± 0.39 | 6.33 ± 0.27 |
| Caged Dragonfly | 9.03 ± 0.19 | 8.2 ± 0.36 | 6.68 ± 0.21 | 6.51 ± 0.29 | 6.4 ± 0.18 | 6.82 ± 0.44 | 6.3 ± 0.22 | 6.29 ± 0.19 | 7.28 ± 0.15 |
| Free Dragonfly | 7.99 ± 0.36 | 8.8 ± 0.17 | 5.93 ± 0.27 | 6.39 ± 0.16 | 5.29 ± 0.04 | 6.5 ± 0.61 | 6.21 ± 0.22 | 5.8 ± 0.23 | 5.44 ± 0.34 |

**Appendix 2 (Tables B1-B5).**

Statistical results of the multiple comparisons among treatments with and without predators on survival, size (final total length, in mm) and stable isotopes. We distinguished the effect of free predators and caged predators on each of the amphibian species: *A. callidryas* (Table B1), *D. ebraccatus* (Table B2), *D. microcephalus* (Table B3), *S. ruber* (Table B4) and *E. pustulosus* (Table B5). P-values of the statistical z tests are corrected with FDR method. Values in bold indicate *P* <0.05 and the asterisk indicates P<0.1.

Table B1.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***A. callidryas*** | | | | | | | | |
| *Variable* | **Survival** | | **Toltal Length** | | **δ13C** | | **δ15N** | |
| Statistical Models | z | *p* | z | *p* | z | *p* | z | *p* |
| **Predation: Free Predators** | | | | | | | | |
| NP vs. WB-Free | -0.611 | 0.541 | -1.98 | 0.13 | -0.12 | 0.967 | -0.51 | 0.611 |
| NP vs. D-Free | -7.63 | **<0.0001** | 0.35 | 0.73 | -0.06 | 0.967 | -2.65 | **0.024** |
| WB-Free vs. D-Free | -7.3 | **<0.0001** | 1.72 | 0.13 | 0.04 | 0.967 | -2.15 | **0.0476** |
| **Predation: Caged Predators** | | | | | | | | |
| NP vs. WB-Cage | -0.023 | 0.344 | -0.72 | 0.47 | -0.24 | 0.813 | 0.48 | 0.63 |
| NP vs. D-Cage | -1.23 | 0.344 | -2.39 | 0.051 \* | 2.18 | **0.043** | 2.52 | **0.035** |
| WB-Cage vs. D-Cage | -1.2 | 0.344 | -1.67 | 0.14 | 2.39 | **0.043** | 2.09 | 0.055 \* |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***D. ebraccatus*** | | | | | | | | | |
|  | **Survival** | | **Total Length** | | | **δ13C** | | **δ15N** | |
| Statistical Models | z | *p* | z | *p* | | z | *p* | z | *p* |
| **Predation: Free Predators** | | | | | | | | | |
| NP vs. WB-Free | -1.94 | 0.078 \* | -0.41 | | 0.68 | 1.88 | 0.09 \* | 3.27 | **0.0016** |
| NP vs. D-Free | -3.17 | **0.0045** | 2.01 | | 0.06 \* | 2.03 | 0.09 \* | 0.41 | 0.682 |
| WB-Free vs. D-Free | -1.29 | 0.197 | 2.38 | | 0.051 \* | 0.17 | 0.86 | -3.27 | **0.0016** |
| **Predation: Caged Predators** | | | | | | | | | |
| NP vs. WB-Cage | -1.51 | 0.195 | 0.067 | 0.95 | | 0.799 | 0.425 | 2.52 | **0.017** |
| NP vs. D-Cage | -2.37 | 0.053 \* | -0.89 | 0.55 | | 1.542 | 0.369 | 3.22 | **0.0038** |
| WB-Cage vs. D-Cage | -0.87 | 0.384 | --0.96 | 0.55 | | 0.9 | 0.425 | 0.9 | 0.368 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***D. microcephalus*** | | | | | | | | |
|  | **Survival** | | **Total Length** | | **δ13C** | | **δ15N** | |
| Statistical Models | z | *p* | z | *p* | z | *p* | z | *p* |
| **Predation: Free Predators** | | | | | | | | |
| NP vs. WB-Free | -1.17 | 0.24 | -0.72 | 0.7 | -1.49 | 0.135 | 1.3 | 0.289 |
| NP vs. D-Free | -2.76 | **0.017** | 0.103 | 0.91 | 1.814 | 0.1 | -0.9 | 0.366 |
| WB-Free vs. D-Free | -1.64 | 0.15 | 0.82 | 0.7 | 3.23 | **0.0037** | -2.14 | 0.097 \* |
| **Predation: Caged Predators** | | | | | | | | |
| NP vs. WB-Cage | -0.48 | 0.63 | -0.57 | 0.57 | -0.83 | 0.66 | 0.99 | 0.32 |
| NP vs. D-Cage | -1.37 | 0.51 | --2.56 | **0.03** | -0.007 | 0.994 | 3.12 | **0.005** |
| WB-Cage vs. D-Cage | -0.9 | 0.55 | -2 | 0.07\* | 0.77 | 0.66 | 2.2 | **0.042** |

Table B2.

Table B3.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***E. pustulosus*** | | | | | | | | |
|  | **Survival** | | **SVL** | | **δ13C** | | **δ15N** | |
| Statistical Models | z | *p* | z | *p* | z | *p* | z | *p* |
| **Predation: Free Predators** | | | | | | | | |
| NP vs. WB-Free | -4.42 | **<0.0001** | -0.75 | 0.45 | -0.21 | 0.834 | -0.256 | 0.99 |
| NP vs. D-Free | -5.66 | **<0.0001** | -3.42 | **0.002** | 0.47 | 0.834 | -0.23 | 0.99 |
| WB-Free vs. D-Free | -2.45 | **0.014** | 2.79 | **0.008** | 0.65 | 0.834 | -0.01 | 0.99 |
| **Predation: Caged Predators** | | | | | | | | |
| NP vs. WB-Cage | -1.615 | 0.159 | -0.87 | 0.38 | -1.35 | 0.53 | 0.27 | 0.87 |
| NP vs. D-Cage | 0.327 | 0.744 | -2.68 | **0.02** | -0.93 | 0.53 | -0.16 | 0.87 |
| WB-Cage vs. D-Cage | 1.935 | 0.159 | -1.61 | 0.16 | 0.5 | 0.614 | -0.45 | 0.87 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***S. ruber*** | | | | | | | | |
|  | **Survival** | | **Total Length** | | **δ13C** | | **δ15N** | |
| Statistical Models | z | *p* | z | *p* | z | *p* | z | *p* |
| **Predation: Free Predators** | | | | | | | | |
| NP vs. WB-Free | -4.54 | **<0.0001** | -0.12 | 0.89 | -1 | 0.314 | -1.33 | 0.27 |
| NP vs. D-Free | -7.66 | **<0.0001** | 2.45 | **0.02** | 1.18 | 0.314 | -1.97 | 0.147 |
| WB-Free vs. D-Free | -4.74 | **<0.0001** | 2.45 | **0.02** | 1.83 | 0.2 | -1.08 | 0.28 |
| **Predation: Caged Predators** | | | | | | | | |
| NP vs. WB-Cage | -0.235 | 0.814 | 0.13 | 0.89 | -0.83 | 0.408 | -0.85 | 0.71 |
| NP vs. D-Cage | 0.25 | 0.814 | -1.89 | 0. 09 \* | -2.38 | 0.052 \* | -0.38 | 0.71 |
| WB-Cage vs. D-Cage | 0.48 | 0.814 | -2.03 | 0.09 \* | -1.66 | 0.145 | 0.38 | 0.71 |

Table B4.

Table B5.