**Supplementary Tables III**

These tables show the ANOVA results for all substances used in our experiment.

**Supplementary Table S21.** ANOVA results for effects of species (nested within family), family and concentration of pure moxidectin on germination percentage, mean germination time and synchrony of germination.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Germination Percentage | | |  | Mean Germination Time | | |  | Synchrony | | |
| Source of variation | d.f. | MQ | p |  | d.f. | MQ | p |  | d.f | MQ | p |
| Species(Family) [S(F)] | 12 | **5494.6** | **≤ 0.001** |  | 12 | **21.422** | **≤ 0.001** |  | 12 | **0.050** | **≤ 0.001** |
| Family [F] | 4 | **3906.7** | **≤ 0.001** |  | 4 | **153.162** | **≤ 0.001** |  | 4 | **0.081** | **≤ 0.001** |
| Concentration [C] | 3 | **99.1** | **≤ 0.001** |  | 3 | 0.025 | 0.925 |  | 3 | 0.010 | 0.094 |
| S(F) x C | 36 | 18.2 | 0.236 |  | 36 | 0.208 | 0.114 |  | 36 | **0.008** | **0.007** |
| F x C | 12 | **29.0** | **0.037** |  | 12 | 0.282 | **0.050** |  | 12 | 0.008 | 0.094 |
| Error | 408 | 15.4 |  |  | 395 | 0.159 |  |  | 377 | 0.005 |  |

d.f. = degrees of freedom; MQ = mean sum of squares. Significant results (p ≤ 0.05) are shown in bold.

**Supplementary Table S22.** ANOVA results for effects of species (nested within family), family and concentration of formulated moxidectin on germination percentage, mean germination time and synchrony of germination.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Germination Percentage | | |  | Mean Germination Time | | |  | Synchrony | | |
| Source of variation | d.f. | MQ | p |  | d.f. | MQ | p |  | d.f. | MQ | p |
| Species(Family) [S(F)] | 12 | **627.93** | **≤ 0.001** |  | 12 | **8.759** | **≤ 0.001** |  | 12 | **0.067** | **≤ 0.001** |
| Family [F] | 4 | **561.52** | **≤ 0.001** |  | 4 | **45.858** | **≤ 0.001** |  | 4 | **0.046** | **≤ 0.001** |
| Concentration [C] | 3 | **712.57** | **≤ 0.001** |  | 3 | **13.912** | **≤ 0.001** |  | 3 | **0.017** | **0.018** |
| S(F) x C | 36 | **17.28** | **≤ 0.001** |  | 35 | **0.746** | **≤ 0.001** |  | 32 | **0.012** | **≤ 0.001** |
| F x C | 12 | **81.15** | **≤ 0.001** |  | 12 | **0.958** | **≤ 0.001** |  | 12 | **0.028** | **≤ 0.001** |
| Error | 408 | 2.95 |  |  | 366 | 0.145 |  |  | 339 | 0.005 |  |

d.f. = degrees of freedom; MQ = mean sum of squares. Significant results (p ≤ 0.05) are shown in bold.

**Supplementary Table S23.** ANOVA results for effects of species (nested within family), family and concentration of pure ivermectin on germination percentage, mean germination time and synchrony of germination.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Germination Percentage | | |  | Mean Germination Time | | |  | Synchrony | | |
| Source of variation | d.f. | MQ | p |  | d.f. | MQ | p |  | d.f. | MQ | p |
| Species(Family) [S(F)] | 12 | **3024.7** | **≤ 0.001** |  | 12 | **18.482** | **≤ 0.001** |  | 12 | **0.039** | **≤ 0.001** |
| Family [F] | 4 | **2303.8** | **≤ 0.001** |  | 4 | **112.046** | **≤ 0.001** |  | 4 | **0.071** | **≤ 0.001** |
| Concentration [C] | 3 | **154.7** | **≤ 0.001** |  | 3 | 0.262 | 0.256 |  | 3 | 0.002 | 0.661 |
| S(F) x C | 36 | 11.5 | 0.587 |  | 36 | **0.503** | **≤ 0.001** |  | 36 | 0.006 | 0.051 |
| F x C | 12 | 14.1 | 0.326 |  | 12 | **0.691** | **≤ 0.001** |  | 12 | 0.007 | 0.078 |
| Error | 408 | 12.2 |  |  | 394 | 0.193 |  |  | 371 | 0.004 |  |

d.f. = degrees of freedom; MQ = mean sum of squares. Significant results (p ≤ 0.05) are shown in bold.

**Supplementary Table S24.** ANOVA results for effects of species (nested within family), family and concentration of formulated ivermectin on germination percentage, mean germination time and synchrony of germination.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Germination Percentage | | |  | Mean Germination Time | | |  | Synchrony | | |
| Source of variation | d.f. | MQ | p |  | d.f. | MQ | p |  | d.f. | MQ | p |
| Species(Family) [S(F)] | 12 | **3030.4** | **≤ 0.001** |  | 12 | **4.727** | **≤ 0.001** |  | 12 | **0.126** | **≤ 0.001** |
| Family [F] | 4 | **2076.9** | **≤ 0.001** |  | 4 | **15.858** | **≤ 0.001** |  | 4 | **0.181** | **≤ 0.001** |
| Concentration [C] | 3 | **134.1** | **≤ 0.001** |  | 3 | **0.514** | **≤ 0.001** |  | 3 | 0.003 | 0.711 |
| S(F) x C | 36 | **41.9** | **≤ 0.001** |  | 36 | **0.100** | **≤ 0.001** |  | 36 | **0.011** | **≤ 0.001** |
| F x C | 12 | **29.3** | **0.017** |  | 12 | **0.128** | **0.002** |  | 12 | **0.016** | **≤ 0.001** |
| Error | 408 | 13.1 |  |  | 400 | 0.049 |  |  | 382 | 0.005 |  |

d.f. = degrees of freedom; MQ = mean sum of squares. Significant results (p ≤ 0.05) are shown in bold.

**Supplementary Table S25.** ANOVA results for effects of species (nested within family), family and concentration of pure abamectin on germination percentage, mean germination time and synchrony of germination.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Germination Percentage | | |  | Mean Germination Time | | |  | Synchrony | | |
| Source of variation | d.f. | MQ | p |  | d.f. | MQ | p |  | d.f. | MQ | p |
| Species(Family) [S(F)] | 12 | **2732.3** | **≤ 0.001** |  | 12 | **47.89** | **≤ 0.001** |  | 12 | **0.053** | **≤ 0.001** |
| Family [F] | 4 | **1892.5** | **≤ 0.001** |  | 4 | **330.81** | **≤ 0.001** |  | 4 | **0.123** | **≤ 0.001** |
| Concentration [C] | 3 | **145.5** | **≤ 0.001** |  | 3 | **9.22** | **≤ 0.001** |  | 3 | 0.009 | 0.178 |
| S(F) x C | 36 | **36.2** | **≤ 0.001** |  | 36 | **2.05** | **≤ 0.001** |  | 36 | 0.005 | 0.601 |
| F x C | 12 | **51.7** | **≤ 0.001** |  | 12 | **1.63** | **≤ 0.001** |  | 12 | 0.005 | 0.513 |
| Error | 408 | 9.5 |  |  | 395 | 0.58 |  |  | 380 | 0.006 |  |

d.f. = degrees of freedom; MQ = mean sum of squares. Significant results (p ≤ 0.05) are shown in bold.

**Supplementary Table S26.** ANOVA results for effects of species (nested within family), family and concentration of pure doramectin on germination percentage, mean germination time and synchrony of germination.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Germination Percentage | | |  | Mean Germination Time | | |  | Synchrony | | |
| Source of variation | d.f. | MQ | p |  | d.f. | MQ | p |  | d.f. | MQ | p |
| Species(Family) [S(F)] | 12 | **2184.83** | **≤ 0.001** |  | 12 | **14.511** | **≤ 0.001** |  | 12 | **0.067** | **≤ 0.001** |
| Family [F] | 4 | **2017.57** | **≤ 0.001** |  | 4 | **81.435** | **≤ 0.001** |  | 4 | **0.051** | **≤ 0.001** |
| Concentration [C] | 3 | **15.83** | **0.045** |  | 3 | 0.178 | 0.236 |  | 3 | **0.028** | **0.003** |
| S(F) x C | 36 | **10.53** | **0.004** |  | 36 | 0.130 | 0.406 |  | 36 | 0.007 | 0.218 |
| F x C | 12 | 6.79 | 0.309 |  | 12 | 0.103 | 0.624 |  | 12 | **0.012** | **0.019** |
| Error | 408 | 5.68 |  |  | 386 | 0.125 |  |  | 362 | 0.006 |  |

d.f. = degrees of freedom; MQ = mean sum of squares. Significant results (p ≤ 0.05) are shown in bold.