SUPPLEMENTARY MATERIALS

TABLE S1

Sample size for each experimental treatment considering only viable seeds. Non-viable seeds were determined by phytosanitary evaluation after the experiment

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Temperature | Substrate | Moisture | Replicate | Viable seeds | | | Non-viable seeds |
| Dead | Germinated | Not germinated |
| 18-22 °C | Soil | 25 % | A | 11 | 13 | 6 | 20 |
| B | 16 | 9 | 5 | 20 |
| C | 15 | 15 | 2 | 18 |
| 50 % | A | 20 | 16 | 5 | 9 |
| B | 14 | 11 | 4 | 21 |
| C | 13 | 10 | 6 | 21 |
| Premix | 25 % | A | 16 | 19 | 0 | 15 |
| B | 4 | 14 | 6 | 26 |
| C | 5 | 26 | 5 | 14 |
| 50 % | A | 5 | 27 | 7 | 11 |
| B | 12 | 21 | 7 | 10 |
| C | 9 | 19 | 6 | 16 |
| 25 °C | Soil | 25 % | A | 9 | 6 | 17 | 18 |
| B | 4 | 5 | 18 | 23 |
| C | 5 | 2 | 18 | 25 |
| 50 % | A | 11 | 5 | 6 | 28 |
| B | 16 | 6 | 1 | 27 |
| C | 32 | 2 | 0 | 16 |
| Premix | 25 % | A | 0 | 24 | 1 | 25 |
| B | 5 | 19 | 1 | 25 |
| C | 2 | 14 | 0 | 34 |
| 50 % | A | 0 | 23 | 3 | 24 |
| B | 2 | 26 | 0 | 22 |
| C | 0 | 18 | 0 | 32 |

Table S2. Cox proportional model comparison of germination in *Eriotheca vargasii.* The optimal model included substrate type and temperature, where the latter also determined different baseline functions at 25 °C and 18-22 °C. (\*\*\* denotes highly significant effects)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cox model | *logL* | Δ*logL* | *χ²* | *d.f.* | *P* |
| *h*(*t*, Germ) ~ *β1* (Sustrate) + *β2* (Temperature) + *β3* (Moisture) | -2048.6 |  |  |  |  |
| *h*(*t*, Germ) ~ *β1* (Sustrate)+ *β2* (Temperature) | -2049 | -0.4 | 0.68 | 1 | 0.41 |
| *h*(*t*, Germ) ~ *β1* (Sustrate)+ *strata* (Temperature) | -1845.1 | 203.9 | 407.71 | 1 | 2.2*e*-16 \*\*\* |
| *h*(*t*, Germ) ~ *β1* (Sustrate)+ *strata* (Temperature) + *β2* (Sustrate *x* Temperature) | -1824.3 | 20.8 | 41.57 | 1 | 1.14*e*-10 \*\*\* |