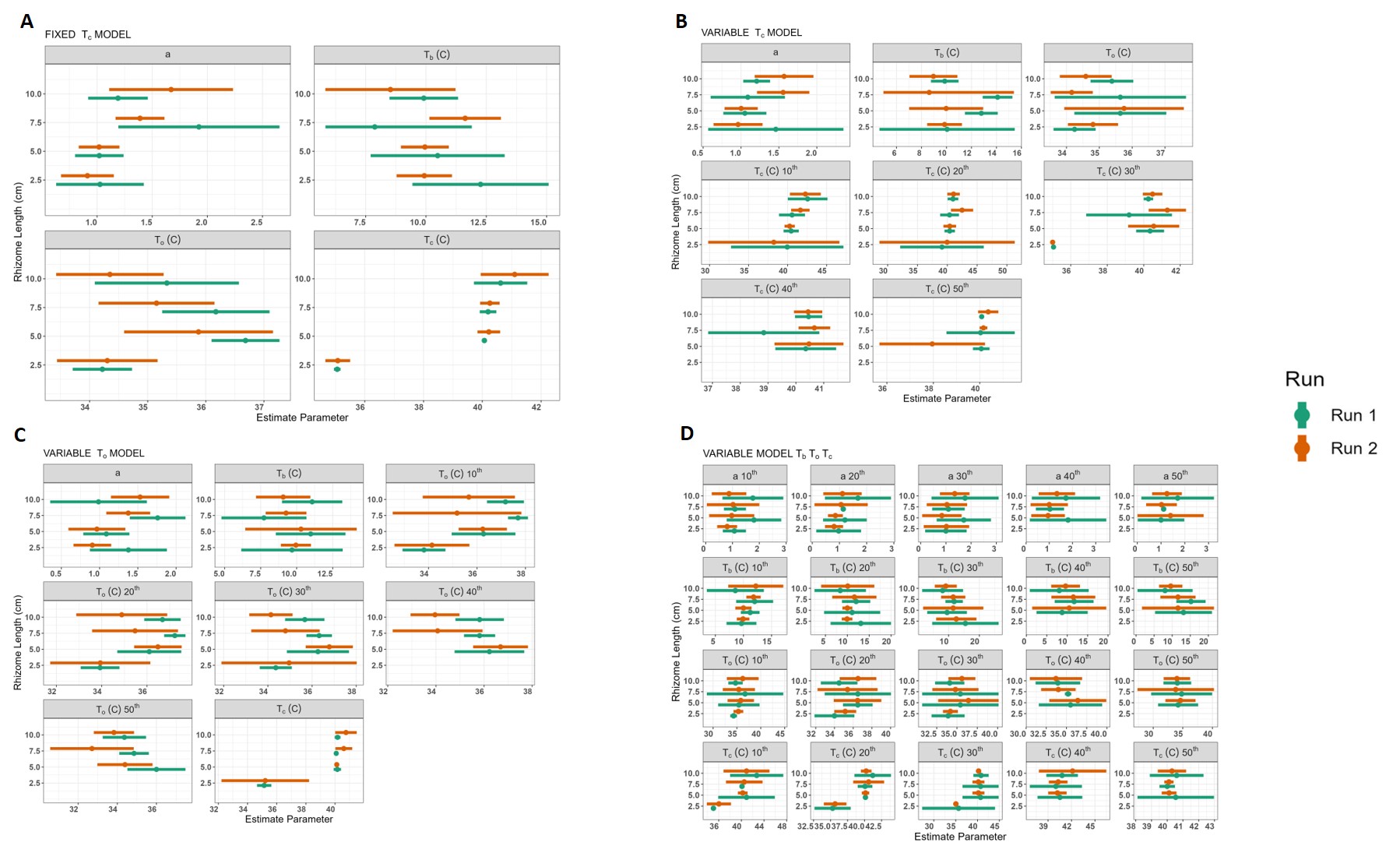
**Supplementary Table S1.** Comparing the differences, estimate and P-values, of the curve parameters *b*, *d* and *e* estimated in the two experiments (Run1 and Run2) using Equation [1]:, where *d* is the maximum sprouting; *e* is the time (days) at which 50% of the rhizomes had sprouted, and *b* is an absolute value proportional to the slope of *f* at time *t*, for different *Solanum elaeagnifolium* rhizome length (Length) and temperatures (Temp).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Parameter *e* comparison | | Parameter *d* comparison | | Parameter *b* comparison | | Temp | Length |
| P-value | Estimate | P-value | Estimate | P-value | Estimate | (C) | (cm) |
|  |  |  |  |  |  |  |  |
| **0.013\*** | **-1.93** | 0.405 | -0.082 | **0.03\*** | **-38.40** | 15 | 2.5 |
| 0.12 | 0.78 | 0.80 | -0.02 | **0.04\*** | **29.25** | 20 |  |
| **0.001\*** | **-2.74** | 0.81 | 0.02 | 0.54 | -2.62 | 25 |  |
| **0.018\*** | **-1.60** | 0.81 | -0.02 | 0.62 | 0.90 | 30 |  |
| **0.001\*** | **-2.03** | 0.78 | 0.02 | 0.4 | 1.55 | 35 |  |
| NA | NA | NA | NA | NA | NA | 40 |  |
|  |  |  |  |  |  |  |  |
| **0.001\*** | **-3.13** | 0.8 | -0.02 | 0.30 | -7.04 | 15 | 5 |
| 0.36 | 0.82 | 0.14 | -0.17 | **0.005\*** | **7.05** | 20 |  |
| 0.78 | -0.12 | 0.8 | 0.02 | 0.4 | 2.37 | 25 |  |
| 0.89 | -0.79 | 0.81 | 0.03 | 0.9 | 0.17 | 30 |  |
| **0.04\*** | **-0.87** | 0.74 | -0.02 | **0.05\*** | **3.05** | 35 |  |
| 0.97 | 0.02 | 0.63 | 0.05 | 0.46 | -1.54 | 40 |  |
|  |  |  |  |  |  |  |  |
| **0.001\*** | **1.57** | 0.33 | -0.11 | 0.30 | -9.63 | 15 | 7.5 |
| 0.16 | 0.78 | 0.62 | -0.05 | 0.8 | 0.64 | 20 |  |
| 0.24 | 0.38 | 0.86 | -0.01 | 0.65 | 1.12 | 25 |  |
| 0.07 | -0.07 | 0.75 | 0.02 | 0.64 | 1.14 | 30 |  |
| **0.001\*** | **-1.18** | 0.72 | 0.02 | 0.39 | 1.54 | 35 |  |
| **0.007\*** | **-1.16** | 0.81 | -0.02 | 0.06 | -3.87 | 40 |  |
|  |  |  |  |  |  |  |  |
| 0.7 | -0.20 | 0.33 | 0.03 | 0.66 | 1.70 | 15 | 10 |
| 0.48 | -0.37 | 0.76 | -0.02 | 0.08 | -2.82 | 20 |  |
| 0.7 | -0.2 | 0.81 | 0.03 | 0.2 | 2.00 | 25 |  |
| 0.65 | 0.13 | - | 0.00 | 0.46 | -0.88 | 30 |  |
| 0.18 | 0.34 | - | 0.00 | 0.69 | -0.56 | 35 |  |
| 0.40 | 0.40 | 0.46 | -0.08 | 0.1 | 2.70 | 40 |  |

**\***Significant comparisons P ≤ 0.05



**Supplementary Figure S1**. Comparison of estimated cardinal temperatures *Tb* (base temperature), *To* (optimal temperature), *Tc* (ceiling temperature) and *a* (shape parameter) and their corresponding 95% confidence intervals for different *Solanum elaeagnifolium* rhizome length in the two experiments (Run1 and Run2) according to the four tested models: (A) 'FIXED *Tc* MODEL', (B) 'VARIABLE *Tc* MODEL', (C) 'VARIABLE *To* MODEL', and (D) 'VARIABLE *Tb, To, Tc* MODEL'