**Table 1**. Germination (%) and index of germination speed (IGS) of *Ipomoea triloba* under the influence of temperature*.*

|  |  |  |
| --- | --- | --- |
| **Temperature** **(oC)** | **Germination (%)** | **IGS** |
| Dormancy Overcome | Mean | Dormancy Overcome |
| Yes | No | Yes | No |
| **15.5 - 17.1** | 21 | 11 | 16.0 b | 0.53 A e | 0.26 A d |
| **17.2 - 19.3** | 62 | 45 | 53.5 a | 2.62 A de | 1.50 A cd |
| **19.4 - 21.5** | 69 | 37 | 53.0 a | 3.47 A cd | 1.43 B cd |
| **21.6 - 23.6** | 72 | 41 | 56.5 a | 5.57 A bc | 2.37 B bcd |
| **23.7 - 25.8** | 68 | 40 | 54.0 a | 6.74 A ab | 2.91 B abc |
| **25.9 - 28.0** | 69 | 49 | 59.0 a | 8.11 A a | 4.15 B ab |
| **28.1 - 30.2** | 77 | 50 | 63.5 a | 8.67 A a | 4.82 B a |
| **30.3 - 32.4** | 66 | 55 | 60.5 a | 5.71 A b | 4.15 B ab |
| **32.5 - 35.0** | 58 | 43 | 50.5 a | 5.41 A bc | 2.99 B abc |
| **Mean** | 62.4 A | 41.2 B |   | --- | --- |
| **Fint** | 1.499NS |  4.075\* |
| **Ftemp** | 16.334\* |  37.790\* |
| **Fover** | 83.864\* |  126.644\* |
| **CV** | 18.97 |  23.47 |

NSF-test not significant; \*Test F significant at 5% of probability. Means followed by upper case letters in the rows or lowercase letters in the columns are not different according to Tukey’s test, with 5% of significance.

**Table 2**. Germination (%) and index of germination speed (IGS) of *Ipomoea hederifolia* under the influence of temperature*.*

|  |  |  |
| --- | --- | --- |
| **Temperature** **(oC)** | **Germination (%)** | **IGS** |
| DormancyOvercome | DormancyOvercome |
| Yes | No | Yes | No |
| **15.5 - 17.1** |  8 A b |  6 A c | 0.18 A c | 0.15 A de |
| **17.2 - 19.3** | 22 A b | 11 A c | 0.52 A c | 0.25 A e |
| **19.4 - 21.5** | 64 A a | 42 B b | 2.60 A b | 1.73 B d |
| **21.6 - 23.6** | 77 A a | 55 B ab | 5.91 A a | 3.60 B c |
| **23.7 - 25.8** | 61 A a | 65 A a | 5.53 A a | 5.40 A a |
| **25.9 - 28.0** | 71 A a | 62 A a | 5.61 A a | 5.02 A ab |
| **28.1 - 30.2** | 64 A a | 56 A ab | 5.37 A a | 4.48 B abc |
| **30.3 - 32.4** | 68 A a | 54 B ab | 5.40 A a | 4.07 B bc |
| **32.5 - 35.0** | 74 A a  | 49 B ab | 5.63 A a | 3.59 B c |
| **Fint** |  5.298\*  | 4.979\* |
| **Ftemp** |  53.693\* | 96.162\* |
| **Fover** |  24.625\*\* | 35.793\* |
| **CV** | 16.67 | 16.57 |

\*Test F significant at 5% of probability. Means followed by upper case letters in the rows or lowercase letters in the columns are not different according to Tukey’s test, with 5% of significance.

**Table 3**. Germination (%) and index of germination speed (IGS) of *Merremia cissoides* under the influence of temperature*.*

|  |  |  |
| --- | --- | --- |
| **Temperature** **(oC)** | **Germination (%)** | **IGS** |
| DormancyOvercome | DormancyOvercome |
| Yes | No | Yes | No |
| **15.5 - 17.1** | 21 A b |  2 B d | 0.44 A e | 0.04 A f |
| **17.2 - 19.3** | 56 A a | 21 B cd | 1.36 A de | 0.49 B df |
| **19.4 - 21.5** | 63 A a | 50 B a | 2.05 A cd | 1.57 A cde |
| **21.6 - 23.6** | 60 A a  | 40 B abc | 3.55 A bc | 1.99 B bcd |
| **23.7 - 25.8** | 57 A a | 39 B bcd | 4.66 A ab | 1.31 B def |
| **25.9 - 28.0** | 63 A a | 42 B abc | 5.01 A ab | 3.01 B ab |
| **28.1 - 30.2** | 60 A a | 41 B abc | 4.94 A ab | 3.06 B ab |
| **30.3 - 32.4** | 60 A a | 39 B abc | 5.81 A a | 2.85 B abc |
| **32.5 - 35.0** | 55 A a | 44 A ab | 3.93 A b | 3.52 A a |
| **Fint** | 2.127\* | 6.740\* |
| **Ftemp** | 22.904\* | 7.556\* |
| **Fover** | 103.953\* | 18.642\* |
| **CV** | 19.91 | 21.79 |

\*Test F significant at 5% of probability. Means followed by upper case letters in the rows or lowercase letters in the columns are not different according to Tukey’s test, with 5% of significance.

**Table 4**. Germination (%) and index of germination speed (IGS) of *Ipomoea nil* under the influence of temperature*.*

|  |  |  |
| --- | --- | --- |
| **Temperature** **(oC)** | **Germination (%)** | **IGS** |
| DormancyOvercome | Mean | DormancyOvercome |
| Yes | No | Yes | No |
| **15.5 - 17.1** | 26 | 20 | 23.0 d | 0.69 A e | 0.53 A d |
| **17.2 - 19.3** | 58 | 36 | 47.0 ab | 2.04 A cde | 1.21 B cd |
| **19.4 - 21.5** | 49 | 41 | 45.0 ab | 1.72 A de | 1.60 A bc |
| **21.6 - 23.6** | 59 | 47 | 53.0 ab | 3.73 A ab | 2.54 B ab |
| **23.7 - 25.8** | 61 | 44 | 52.5 ab | 3.81 A ab | 2.84 B a |
| **25.9 - 28.0** | 68 | 42 | 55.0 a | 4.62 A a | 2.69 B a |
| **28.1 - 30.2** | 59 | 43 | 51.0 ab | 4.82 A a | 2.97 B a |
| **30.3 - 32.4** | 50 | 43 | 46.5 ab | 3.30 A abc | 2.95 A a |
| **32.5 - 35.0** | 41 | 24 | 32.5 cd | 2.36 A bcd | 1.23 B cd |
| **Mean** | 51 A | 37 B |  | **---** | **---** |
| **Fint** | 1.568NS | 2.932\* |
| **Ftemp** | 53.426\* | 33.895\* |
| **Fover** | 13.412\* | 53.103\* |
| **CV** | 18.48 | 21.71 |

NSF-test not significant; \*Test F significant at 5% of probability. Means followed by upper case letters in the rows or lowercase letters in the columns are not different according to Tukey’s test, with 5% of significance.

**Table 5**. Germination (%) and index of germination speed (IGS) of *Ipomoea quamoclit* under the influence of temperature*.*

|  |  |  |
| --- | --- | --- |
| **Temperature** **(oC)** | **Germination (%)** | **IVG** |
| DormancyOvercome | DormancyOvercome |
| Yes | No | Yes | No |
| **15.5 - 17.1** |  0 A b |  0 A b | 0.00 A d | 0.00 A e |
| **17.2 - 19.3** |  1 A b |  3 A b | 0.04 A d | 0.09 A de |
| **19.4 - 21.5** | 68 A a | 27 B a | 3.15 A c | 1.09 B cde |
| **21.6 - 23.6** | 73 A a | 28 B a | 3.77 A bc | 1.20 B cd |
| **23.7 - 25.8** | 74 A a | 30 B a | 5.29 A ab | 1.75 B bc |
| **25.9 - 28.0** | 78 A a | 36 B a | 5.75 A a | 2.42 B ab |
| **28.1 - 30.2** | 74 A a | 29 B a | 6.17 A a | 2.17 B abc |
| **30.3 - 32.4** | 74 A a | 46 B a | 5.59 A ab | 3.24 B a |
| **32.5 - 35.0** | 77 A a | 29 B a | 6.24 A a | 1.91 B bc |
| **Fint** | 10.218\* | 11.239\* |
| **Ftemp** | 230.934\* | 53.455\* |
| **Fover** | 52.311\* | 240.328\* |
| **CV** | 21.84 | 24.24 |

\*Test F significant at 5% of probability. Means followed by upper case letters in the rows or lowercase letters in the columns are not different according to Tukey’s test, with 5% of significance.