# R-squared estimates for LDMC Models

|  | **Distance to City Center** | | | | | | **Urbanization Score** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Best Models** | | | | **Alternative Models** | | **Best Models** | | | | **Alternative Models** | |
|  | **All Populations** | | **Urban Populations** | | | | **All Populations** | | **Urban Populations** | | | |
|  | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | | **Model 6** | |
| **Type** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** |
| 1 | 0.058 | 0.058 | 0.006 | 0.019 | 0.006 | 0.021 | 0.056 | 0.056 | 0.059 | 0.072 | 0.06 | 0.075 |

# R-squared estimates for SLA Models

|  | **Distance to City Center** | | | | | | **Urbanization Score** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Best Models** | | | | **Alternative Models** | | **Best Models** | | | | **Alternative Models** | |
|  | **All Populations** | | **Urban Populations** | | | | **All Populations** | | **Urban Populations** | | | |
|  | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | | **Model 6** | |
| **Type** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** |
| 1 | 0.042 | 0.042 | 0.045 | 0.045 | 0.046 | 0.046 | 0.041 | 0.041 | 0.047 | 0.047 | 0.049 | 0.049 |

# R-squared estimates for Height before flowering Models

|  | **Distance to City Center** | | | | | | **Urbanization Score** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Best Models** | | | | **Alternative Models** | | **Best Models** | | | | **Alternative Models** | |
|  | **All Populations** | | **Urban Populations** | | | | **All Populations** | | **Urban Populations** | | | |
|  | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | | **Model 6** | |
| **Type** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** |
| 1 | 0.524 | 0.575 | 0.519 | 0.57 | 0.519 | 0.571 | 0.523 | 0.575 | 0.516 | 0.571 | 0.516 | 0.571 |

# R-squared estimates for Height after flowering Models

|  | **Distance to City Center** | | | | | | **Urbanization Score** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Best Models** | | | | **Alternative Models** | | **Best Models** | | | | **Alternative Models** | |
|  | **All Populations** | | **Urban Populations** | | | | **All Populations** | | **Urban Populations** | | | |
|  | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | | **Model 6** | |
| **Type** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** |
| 1 | 0.213 | 0.296 | 0.209 | 0.303 | 0.211 | 0.304 | 0.211 | 0.296 | 0.205 | 0.302 | 0.207 | 0.304 |

# R-squared estimates for Relative growth rate Models

|  | **Distance to City Center** | | | | | | **Urbanization Score** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Best Models** | | | | **Alternative Models** | | **Best Models** | | | | **Alternative Models** | |
|  | **All Populations** | | **Urban Populations** | | | | **All Populations** | | **Urban Populations** | | | |
|  | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | | **Model 6** | |
| **Type** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** |
| 1 | 0.005 | 0.008 | 0.007 | 0.015 | 0.008 | 0.017 | 0.005 | 0.008 | 0.008 | 0.016 | 0.008 | 0.016 |

# R-squared estimates for Ramets before flowering Models

|  | **Distance to City Center** | | | | | | **Urbanization Score** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Best Models** | | | | **Alternative Models** | | **Best Models** | | | | **Alternative Models** | |
|  | **All Populations** | | **Urban Populations** | | | | **All Populations** | | **Urban Populations** | | | |
|  | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | | **Model 6** | |
| **Type** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** |
| delta | 0.201 | 0.320 | 0.185 | 0.325 | 0.186 | 0.327 | 0.200 | 0.320 | 0.183 | 0.324 | 0.183 | 0.326 |
| lognormal | 0.224 | 0.357 | 0.206 | 0.363 | 0.208 | 0.365 | 0.223 | 0.358 | 0.204 | 0.361 | 0.205 | 0.363 |
| trigamma | 0.175 | 0.279 | 0.161 | 0.283 | 0.163 | 0.285 | 0.174 | 0.279 | 0.159 | 0.282 | 0.160 | 0.284 |

# R-squared estimates for Ramets, after flowering Models

|  | **Distance to City Center** | | | | | | **Urbanization Score** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Best Models** | | | | **Alternative Models** | | **Best Models** | | | | **Alternative Models** | |
|  | **All Populations** | | **Urban Populations** | | | | **All Populations** | | **Urban Populations** | | | |
|  | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | | **Model 6** | |
| **Type** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** |
| delta | 0.059 | 0.125 | 0.060 | 0.133 | 0.063 | 0.135 | 0.058 | 0.125 | 0.058 | 0.131 | 0.059 | 0.133 |
| lognormal | 0.071 | 0.150 | 0.072 | 0.159 | 0.075 | 0.162 | 0.069 | 0.150 | 0.069 | 0.157 | 0.070 | 0.159 |
| trigamma | 0.047 | 0.099 | 0.048 | 0.106 | 0.050 | 0.108 | 0.046 | 0.099 | 0.046 | 0.104 | 0.047 | 0.106 |

# R-squared estimates for Mortality Models

|  | **Distance to City Center** | | | | | | **Urbanization Score** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Best Models** | | | | **Alternative Models** | | **Best Models** | | | | **Alternative Models** | |
|  | **All Populations** | | **Urban Populations** | | | | **All Populations** | | **Urban Populations** | | | |
|  | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | | **Model 6** | |
| **Type** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** | **R2m** | **R2c** |
| theoretical | 0.190 | 0.367 | 0.198 | 0.396 | 0.190 | 0.394 | 0.190 | 0.367 | 0.192 | 0.396 | 0.184 | 0.395 |
| delta | 0.136 | 0.262 | 0.143 | 0.287 | 0.138 | 0.285 | 0.136 | 0.262 | 0.139 | 0.287 | 0.134 | 0.286 |