Table S1. Parameter values from the density-independent (DI) model and density-dependent (DD) models for pooled and individual species. The DI model includes parameters for density-independent mortality, *P*0, overdispersion, , and the random effect of *Plot*. The DD model includes a parameter for the maximum number of seedlings, *R*max. The CIs for each parameter are 95% credible intervals. When parameter results of DD model between three months (3 mo.) and 24 months (24 mo.) are compared, the DI parameter usually differs from 0 at three months, but not after 24 months, suggesting that the effect of seed addition begins to disappear by 2 years. Species codes are *Pancovia laurentii* (Pala)*, Staudtia kamerunensis* (Stka)*, Manilkara mabokeensis* (Mama)*, Myrianthus arboreus* (Myar)*, and Entandophragma utile* (Enut). Bolded AIC values highlight the best model for each Species and time combination, based on a difference of at least four.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species | Time  mo. | Model | *P0* | *P0*  95% CIs | *k* | *k*  *95% CIs* | *Rmax* | *Rmax*  95% CIs | *Plot* | *Plot*  95% CIs | -2LL | AIC |
| Pooled | 3 | DI | 0.002 | 0.002, 0.002 | 3.205 | 2.867, 3.543 | . | . | 0.319 | 0.068, 0.569 | 6793.8 | 6799.8 |
|  |  | DD | 0.021 | 0.014, 0.028 | 2.549 | 2.273, 2.826 | 5.101 | 4.791, 5.410 | 3.508 | 0.898, 6.117 | **6573.5** | **6581.5** |
| Pooled | 24 | DI | 0.001 | 0.001, 0.002 | 4.093 | 3.477, 4.709 | . | . | 1.984 | 0.593, 3.374 | 4218.9 | 4224.9 |
|  |  | DD | 0.019 | 0.009, 0.030 | 3.448 | 2.920, 3.976 | 4.325 | 3.926, 4.724 | 7.009 | 1.802, 12.216 | **4120.7** | **4128.7** |
| Pala | 3 | DI | 0.001 | 0.001, 0.002 | 1.436 | 1.061, 1.811 | . | . | 0.182 | . | 1443.5 | 1449.5 |
|  |  | DD | 0.013 | 0.005, 0.021 | 0.981 | 0.704, 1.257 | 3.993 | 3.478, 4.507 | 1.794 | 0.061, 3.527 | **1398.3** | **1406.3** |
| Pala | 24 | DI | 0.001 | 0.001, 0.001 | 2.714 | 1.809, 3.619 | . | . | 0.664 | . | 1030.1 | 1036.1 |
|  |  | DD | 0.015 | 0.000, 0.03 | 1.931 | 1.239, 2.623 | 3.405 | 2.644, 4.166 | 3.728 | -0.092, 7.547 | **1011.3** | **1019.3** |
| Stka | 3 | DI | 0.001 | 0.001, 0.002 | 4.149 | 2.203, 6.096 | . | . | 6.113 | . | 636.4 | 642.4 |
|  |  | DD | 0.006 | -0.004, 0.016 | 3.636 | 1.875, 5.396 | 3.779 | 2.21, 5.349 | 9.247 | 0.542, 17.952 | 632.7 | 640.7 |
| Stka | 24 | DI | 0.001 | 0.001, 0.002 | 2.252 | 1.187, 3.317 | . | . | 11.750 | . | 650.6 | 656.6 |
|  |  | DD | 0.009 | -0.001, 0.018 | 1.784 | 0.875, 2.692 | 4.085 | 2.989, 5.181 | 17.770 | 1.68, 33.862 | **641.6** | **649.6** |
| Mama | 3 | DI | 0.001 | 0.001, 0.002 | 2.022 | 1.228, 2.816 | . | . | 5.314 | . | 847.2 | 853.2 |
|  |  | DD | 0.008 | 0.001, 0.015 | 1.626 | 0.949, 2.303 | 4.363 | 3.395, 5.33 | 9.392 | 1.222, 17.562 | **833.2** | **841.2** |
| Mama | 24 | DI | 0.001 | 0.000, 0.001 | 3.662 | 1.083, 6.24 | . | . | 14.628 | . | 402.4 | 408.4 |
|  |  | DD | 0.009 | -0.004, 0.022 | 2.706 | 0.724, 4.689 | 2.977 | 1.698, 4.256 | 23.584 | -0.085, 47.254 | **395.7** | **403.7** |
| Myar | 3 | DI | 0.002 | 0.002, 0.002 | 1.046 | 0.811, 1.281 | . | . | 0.745 | . | 2014.9 | 2020.9 |
|  |  | DD | 0.014 | 0.010, 0.018 | 0.484 | 0.353, 0.616 | 6.002 | 5.583, 6.42 | 1.305 | 0.257, 2.354 | **1858.6** | **1866.6** |
| Myar | 24 | DI | 0.002 | 0.002, 0.002 | 1.652 | 1.135, 2.169 | . | . | 1.834 | . | 1206.7 | 1212.7 |
|  |  | DD | 0.008 | 0.003, 0.012 | 1.405 | 0.957, 1.853 | 5.823 | 4.625, 7.022 | 3.914 | 0.466, 7.362 | **1189.0** | **1197.0** |
| Enut | 3 | DI | 0.001 | 0.001, 0.001 | 1.102 | 0.737, 1.466 | . | . | 2.061 | . | 1256.1 | 1262.1 |
|  |  | DD | 0.023 | 0.008, 0.037 | 0.554 | 0.328, 0.779 | 4.051 | 3.534, 4.567 | 7.336 | 1.441, 13.231 | **1180.6** | **1188.6** |
| Enut | 24 | DI | 0.001 | 0.001, 0.002 | 2.261 | 1.246, 3.277 | . | . | 6.377 | . | 739.9 | 745.9 |
|  |  | DD | 0.012 | -0.001, 0.024 | 1.517 | 0.732, 2.301 | 3.584 | 2.765, 4.403 | 12.126 | 1.484, 22.769 | **724.1** | **732.1** |