**Table 1.** Species in seedling plots.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Month planted** | **N per plot Guam** | **N per plot Rota** | **Native/ Introduced** | **Documented as food item** | |
| **Deer** | **Pigs** |
| *Carica papaya* | Apr 10 | 14 | 11 | Introduced | seeds, fruit (MW) | fruits (PC) |
| *Morinda citrifolia* | Jul 10 | 14 | 14 | Native |  | fruits (PC) |
| *Neisosp. oppositifolia* | Jun 10 | 7 | 9 | Native |  |  |
| *Premna obtusifolia* | Dec 10 | 14 | 14 | Native | seeds, foliage(MW) | fruits (PC) |
| *Aglaia mariannensis* | Nov 10 | 14 | 14 | Endemic to Marianas | not a preferred species (GW) |  |
| *Psych. mariannensis* | Mar 11 | 14 | 14 | Endemic to Marianas |  |  |

**GW:** Wiles et al 1999; **MW:** Wheeler 1979; **PC:** Conry 1989

**Table 2.** AIC values for combined species models for seedling plots. Species, and the interaction between species and treatment, improved AIC scores significantly (by > 2). Removing them increased AIC scores, indicated by ∆AIC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Fixed Effects** | **Interactions** | **Factor removed** | **AIC** | **∆AIC** |
| species, island, fencing | species x fencing, island x fencing | None | 776.7 |  |
| species, island, fencing | island x fencing | species x fencing | 790.9 | 14.3 |
| island, fencing | island x fencing | species, species x fencing | 1072.7 | 296.0 |

**Table 3.** Significant effects and interactions in generalized linear mixed models. Likelihood ratio tests were used to select the best fit model. For four out of six species, the best model (indicated by \*\*) included treatment by fencing.

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **Effects** | **AIC** |  |
| *Aglaia mariannensis* | full | 75.79 |  |
|  | no treatment | 77.27 |  |
| *Carica papaya* | full | 134.7 |  |
|  | no treatment | 182.4 | \*\* |
| *Morinda citrifolia* | full | 130.1 |  |
|  | no treatment | 141.3 | \*\* |
| *Neisosperma oppositifolia* | full | 76.05 |  |
|  | no treatment | 74.51 |  |
| *Premna obtusifolia* | full | 95.69 |  |
|  | no treatment | 108.4 | \*\* |
| *Psychotria mariannensis* | full | 71.98 |  |
|  | no treatment | 88.06 | \*\* |

**Table 4.** List and counts of species germinated in scats.A variety of species germinated from deer (n = 20) and pig scats (n = 31).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Species** | **Native/Exotic** | **Seedlings per deer scat** | **deer scats with** | **Seedlings per pig scat** | **pig scats with** |
| Vines | *Passiflora suberosa* | Exotic | 0.05 | 1 | 0.42 | 20 |
| *Mikania micrantha* | Exotic | 0.05 | 1 | 0 | 13 |
| *Coccinia grandis* | Exotic | 0 | 0 | 0.13 | 0 |
| Trees | *Morinda citrifolia* | Native | 0 | 0 | 33.58 | 3 |
| *Ficus prolixa* | Native | 0 | 0 | 7.97 | 0 |
| *Carica papaya* | Exotic | 0.4 | 1 | 8.45 | 3 |
| *Leucaena leucocephala* | Exotic | 0 | 0 | 0.03 | 1 |
| *Vitex parviflora* | Exotic | 0.05 | 0 | 0 | 3 |
| Shrubs | *Chromolaena odorata* | Exotic | 0 | 0 | 0.03 | 1 |
| Totals |  |  |  | 4 |  | 25 |

**Table 5.** Significance for Manly Selectivity Index values. Significant *χ2* values indicated selection occurred for seedlings from pig scats.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Site** | **Native / Exotic** | **n nature** | **prop. nature** | **n scat** | **prop. scat** | **χ2** | **P** |
| Anao North | exotic | 23 | 0.225 | 7 | 0.015 | 114.719 | <0.001 |
| Anao North | native | 79 | 0.775 | 447 | 0.980 |  |  |
| Ritidian Gate | exotic | 37 | 0.607 | 272 | 0.244 | 611.749 | <0.001 |
| Ritidian Gate | native | 24 | 0.393 | 841 | 0.756 |  |  |