Table 1: Test for variance among families and populations

Model: Herbivory\_mean\_early\_binary ~ Block + (1 | Population) + (1 | Population:Family)

PVE for population: 8.439. PVE for family: 0.589

| Variable | Group | p |
| --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Family | **0.0495** |
| Population | 0.5 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: Herbivory\_mean\_early\_binary ~ Block + (1 | Population) + (1 | Population:Family) + City\_dist

PVE for population: 8.195. PVE for family: 0.752

| Variable | Group | p |
| --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Family | 0.055 |
| Population | 0.5 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Block | 1.738 | 0.629 |
| Distance to City Center | 0.985 | 0.321 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: Herbivory\_mean\_early\_binary ~ Block + (1 | Population) + (1 | Population:Family) + Urb\_score

PVE for population: 8.252. PVE for family: 0.741

| Variable | Group | p |
| --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Family | 0.054 |
| Population | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Block | 1.732 | 0.63 |
| Urbanization Score | 0.701 | 0.402 |