Table 1: Test for variance among families and populations

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Family | 0.018 | 0.556 | 2.192 | 1 | 0.0695 |
| Population | 0.246 | 6.955 | 0.005 | 1 | 0.473 |

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:Fam\_uniq) + City\_dist

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Family | 0.024 | 0.712 | 2.052 | 1 | 0.076 |
| Population | 0.238 | 6.752 | 0.005 | 1 | 0.473 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Block | 1.656 | 0.647 |
| Distance to City Center | 0.965 | 0.326 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Family | 0.023 | 0.700 | 2.082 | 1 | 0.0745 |
| Population | 0.240 | 6.799 | 0.005 | 1 | 0.473 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Block | 1.651 | 0.648 |
| Urbanization Score | 0.687 | 0.407 |