Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Family | NA | NA | 0.679 | 1 | 0.205 |
| Herbivory before flowering, binary: 2020 | Population | 0.175 | 5.049 | 0.000 | 1 | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Block | 0.229 | 0.973 |
| Subtransect | 0.039 | 0.844 |
| Distance to City Center | 4.790 | **0.029\*** |
| Subtransect x Distance to City Center | 1.738 | 0.187 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Family | NA | NA | 0.931 | 1 | 0.1675 |
| Herbivory before flowering, binary: 2020 | Population | 0.203 | 5.807 | 0.000 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Herbivory before flowering, binary: 2020 | Block | 0.210 | 0.976 |
| Subtransect | 0.218 | 0.64 |
| Urbanization Score | 3.499 | 0.061 |
| Subtransect x Urbanization Score | 1.131 | 0.288 |