Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Weevil damage, binary: 2021 | Family | NA | NA | 0.315 | 1 | 0.2875 |
| Population | 0.439 | 11.782 | 0.001 | 1 | 0.4895 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Weevil damage, binary: 2021 | Block | 4.543 | 0.208 |
| Subtransect | 2.430 | 0.119 |
| Distance to City Center | 1.691 | 0.194 |
| Subtransect x Distance to City Center | 0.001 | 0.978 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Weevil damage, binary: 2021 | Family | NA | NA | 0.280 | 1 | 0.2985 |
| Population | 0.407 | 11.006 | 0.001 | 1 | 0.4885 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Weevil damage, binary: 2021 | Block | 4.441 | 0.218 |
| Subtransect | 1.926 | 0.165 |
| Urbanization Score | 0.877 | 0.349 |
| Subtransect x Urbanization Score | 0.422 | 0.516 |