Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: log(Scar\_length\_cm) ~ (1 | Population/Family) + Block + Transect\_ID + City\_dist + Transect\_ID:City\_dist

| Variable | Group | χ2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Weevil damage, quantitative: 2021 | Family:Population | 3.595 | 0.090 | 8.479 | **0.029** |
| Population | 2.144 | 0.046 | 4.356 | 0.0715 |
| Residual |  | 0.925 | 87.164 |  |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Weevil damage, quantitative: 2021 | Block | 7.132 | 0.068 |
| Subtransect | 0.840 | 0.359 |
| Distance to City Center | 0.082 | 0.774 |
| Subtransect x Distance to City Center | 0.211 | 0.646 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: log(Scar\_length\_cm) ~ (1 | Population/Family) + Block + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

| Variable | Group | χ2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Weevil damage, quantitative: 2021 | Family:Population | 3.715 | 0.092 | 8.672 | **0.027** |
| Population | 1.603 | 0.041 | 3.912 | 0.1025 |
| Residual |  | 0.925 | 87.416 |  |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Weevil damage, quantitative: 2021 | Block | 7.151 | 0.067 |
| Subtransect | 0.871 | 0.351 |
| Urbanization Score | 0.014 | 0.904 |
| Subtransect x Urbanization Score | 0.996 | 0.318 |