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: 2020 | Family:Population | 0 | 0.000 | 0 | 0.5 |
| Population | 0 | 0.000 | 0 | 0.5 |
| Residual |  | 1.291 | 100 |  |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Weevil damage, quantitative: 2020 | Block | 16.948 | **<0.001\*\*\*** |
| Subtransect | 5.015 | **0.025\*** |
| Distance to City Center | 0.160 | 0.689 |
| Subtransect x Distance to City Center | 0.134 | 0.715 |

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: 2020 | Family:Population | 0 | 0.000 | 0 | 0.5 |
| Population | 0 | 0.000 | 0 | 0.5 |
| Residual |  | 1.289 | 100 |  |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Weevil damage, quantitative: 2020 | Block | 16.643 | **<0.001\*\*\*** |
| Subtransect | 5.570 | **0.018\*** |
| Urbanization Score | 0.301 | 0.583 |
| Subtransect x Urbanization Score | 0.373 | 0.541 |