Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: (SLA)^(1/3) ~ (1 | Population/Family) + Block + Transect\_ID + City\_dist + Transect\_ID:City\_dist

| Variable | Group | χ2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| SLA | Family:Population | 0.037 | 0.001 | 0.785 | 0.4235 |
| Population | 2.440 | 0.004 | 3.728 | 0.059 |
| Residual |  | 0.111 | 95.487 |  |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| SLA | Block | 33.846 | **<0.001\*\*\*** |
| Subtransect | 0.960 | 0.327 |
| Distance to City Center | 0.435 | 0.509 |
| Subtransect x Distance to City Center | 0.470 | 0.493 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: (SLA)^(1/3) ~ (1 | Population/Family) + Block + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

| Variable | Group | χ2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| SLA | Family:Population | 0.006 | 0.000 | 0.319 | 0.4685 |
| Population | 2.258 | 0.004 | 3.486 | 0.0665 |
| Residual |  | 0.111 | 96.195 |  |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| SLA | Block | 35.219 | **<0.001\*\*\*** |
| Subtransect | 1.679 | 0.195 |
| Urbanization Score | 1.547 | 0.214 |
| Subtransect x Urbanization Score | 1.727 | 0.189 |