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 | 0.000 | 0 | 0.5 |
| Population | 0 | 0.000 | 0 | 0.5 |
| Residual |  | 0.144 | 100 |  |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| SLA | Block | 19.963 | **<0.001\*\*\*** |
| Subtransect | 2.678 | 0.102 |
| Distance to City Center | 0.788 | 0.375 |
| Subtransect x Distance to City Center | 0.596 | 0.44 |

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 | 0.000 | 0 | 0.5 |
| Population | 0 | 0.000 | 0 | 0.5 |
| Residual |  | 0.144 | 100 |  |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| SLA | Block | 20.845 | **<0.001\*\*\*** |
| Subtransect | 3.951 | **0.047\*** |
| Urbanization Score | 2.003 | 0.157 |
| Subtransect x Urbanization Score | 1.131 | 0.288 |