Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: Labidomera\_clivicollis ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + City\_dist + Transect\_ID:City\_dist

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | Family | NA | NA | 0.5 |
| Population | NA | NA | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | Block | 2.711 | 0.438 |
| Subtransect | 0.123 | 0.725 |
| Distance to City Center | 0.978 | 0.323 |
| Subtransect x Distance to City Center | 0.001 | 0.974 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: Labidomera\_clivicollis ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | Family | NA | NA | 0.5 |
| Population | NA | NA | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | (Intercept) | 15.753 | **<0.001\*\*\*** |
| Block | 2.560 | 0.465 |
| Subtransect | 1.800 | 0.18 |
| Urbanization Score | 0.497 | 0.481 |
| Subtransect x Urbanization Score | 2.891 | 0.089 |