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

PVE for population: 16.176. PVE for family: 9.187

| Variable | Group | p |
| --- | --- | --- |
| Labidomera clivicollis: 2020 | Family | 0.0555 |
| Population | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Block | 6.888 | 0.076 |
| Subtransect | 0.576 | 0.448 |
| Distance to City Center | 7.734 | **0.005\*\*** |
| Subtransect x Distance to City Center | 0.720 | 0.396 |

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

PVE for population: 25.817. PVE for family: 21.695

| Variable | Group | p |
| --- | --- | --- |
| Labidomera clivicollis: 2020 | Family | **0.042** |
| Population | 0.2935 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Block | 5.276 | 0.153 |
| Subtransect | 1.103 | 0.294 |
| Urbanization Score | 0.040 | 0.842 |
| Subtransect x Urbanization Score | 0.273 | 0.602 |