Table 1: Test for variance among families and populations

Model: Labidomera\_clivicollis ~ Block + (1 | Population) + (1 | Population:Fam\_uniq)

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Family | 0.078 | 2.139 | 0.524 | 1 | 0.2345 |
| Population | 0.232 | 6.095 | 0.001 | 1 | 0.487 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Family | 0.088 | 2.407 | 0.509 | 1 | 0.238 |
| Population | 0.242 | 6.334 | 0.000 | 1 | 0.495 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Block | 8.519 | **0.036\*** |
| Distance to City Center | 0.140 | 0.708 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Family | 0.053 | 1.462 | 0.544 | 1 | 0.2305 |
| Population | 0.217 | 5.724 | 0.000 | 1 | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Block | 8.751 | **0.033\*** |
| Urbanization Score | 0.354 | 0.552 |