Table 1: Test for variance among families and populations

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Family | 0.164 | 4.415 | 2.865 | 1 | **0.0455** |
| Population | 0.739 | 16.196 | 0.000 | 1 | 0.4935 |

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 | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Family | 0.177 | 4.745 | 2.85 | 1 | **0.0455** |
| Population | 0.750 | 16.396 | 0.00 | 1 | 0.5 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Block | 9.065 | **0.028\*** |
| Distance to City Center | 0.197 | 0.657 |

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 | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Family | 0.140 | 3.794 | 2.864 | 1 | **0.0455** |
| Population | 0.712 | 15.710 | 0.000 | 1 | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2020 | Block | 9.236 | **0.026\*** |
| Urbanization Score | 0.263 | 0.608 |