| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | Block | 2.571 | 0.463 |
| Urbanization Score | 0.199 | 0.656 |

Table 5: Quantify variance explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | Family | NA | NA | 0 | 1 | 0.5 |
| Labidomera clivicollis: 2021 | Population | NA | NA | 0 | 1 | 0.5 |

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

Urbanization = Urbanization Score

Table 4: Assess how much variance is explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | Block | 2.601 | 0.457 |
| Distance to City Center | 0.038 | 0.846 |

Table 3: Quantify variance explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | Family | NA | NA | 0 | 1 | 0.5 |
| Labidomera clivicollis: 2021 | Population | NA | NA | 0 | 1 | 0.5 |

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

Urbanization = Distance to the City Center

Table 2: Assess how much variance is explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Labidomera clivicollis: 2021 | Family | NA | NA | 0 | 1 | 0.5 |
| Labidomera clivicollis: 2021 | Population | NA | NA | 0 | 1 | 0.5 |

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

Table 1: Test for variance among families and populations