Table 1: Test for variance among families and populations

Model: Liriomyza\_asclepiadis ~ Block + (1 | Population) + (1 | Population:Fam\_uniq)

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Family | 0.013 | 1.976 | 0.575 | 1 | 0.224 |
| Liriomyza asclepiadis: 2020 | Population | 0.022 | 3.302 | 0.257 | 1 | 0.306 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: Liriomyza\_asclepiadis ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + City\_dist

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Family | 0.013 | 1.982 | 0.553 | 1 | 0.2285 |
| Liriomyza asclepiadis: 2020 | Population | 0.022 | 3.290 | 0.268 | 1 | 0.3025 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Block | 58.300 | **<0.001\*\*\*** |
| Distance to City Center | 0.021 | 0.884 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: Liriomyza\_asclepiadis ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Urb\_score

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Family | 0.012 | 1.853 | 0.497 | 1 | 0.2405 |
| Liriomyza asclepiadis: 2020 | Population | 0.021 | 3.121 | 0.250 | 1 | 0.3085 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Block | 58.243 | **<0.001\*\*\*** |
| Urbanization Score | 0.726 | 0.394 |