Table 1: Test for variance among families and populations

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Family | 0.041 | 3.062 | 3.082 | 1 | **0.0395** |
| Population | 0.093 | 6.681 | 1.317 | 1 | 0.1255 |

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 | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Family | 0.041 | 3.065 | 3.150 | 1 | **0.038** |
| Population | 0.094 | 6.742 | 1.275 | 1 | 0.1295 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Block | 35.584 | **<0.001\*\*\*** |
| Distance to City Center | 0.169 | 0.681 |

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 | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Family | 0.039 | 2.943 | 3.204 | 1 | **0.0365** |
| Population | 0.092 | 6.610 | 1.056 | 1 | 0.152 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Block | 35.824 | **<0.001\*\*\*** |
| Urbanization Score | 0.679 | 0.41 |