Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Family | 0.033 | 2.546 | 5.651 | 1 | **0.0085** |
| Liriomyza asclepiadis: 2021 | Population | 0.124 | 8.917 | 0.007 | 1 | 0.4655 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Block | 30.001 | **<0.001\*\*\*** |
| Subtransect | 0.298 | 0.585 |
| Distance to City Center | 0.428 | 0.513 |
| Subtransect x Distance to City Center | 0.159 | 0.69 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Family | 0.031 | 2.453 | 5.397 | 1 | **0.01** |
| Liriomyza asclepiadis: 2021 | Population | 0.122 | 8.782 | 0.024 | 1 | 0.4385 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Block | 29.475 | **<0.001\*\*\*** |
| Subtransect | 0.294 | 0.588 |
| Urbanization Score | 0.116 | 0.733 |
| Subtransect x Urbanization Score | 0.147 | 0.701 |