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: 2020 | Family | 0.039 | 5.095 | 18.093 | 1 | **<0.001** |
| Population | 0.091 | 10.954 | 0.312 | 1 | 0.2885 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Block | 61.374 | **<0.001\*\*\*** |
| Subtransect | 2.064 | 0.151 |
| Distance to City Center | 0.363 | 0.547 |
| Subtransect x Distance to City Center | 0.764 | 0.382 |

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: 2020 | Family | 0.036 | 4.656 | 18.183 | 1 | **<0.001** |
| Population | 0.087 | 10.597 | 0.091 | 1 | 0.3815 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Block | 62.056 | **<0.001\*\*\*** |
| Subtransect | 2.551 | 0.11 |
| Urbanization Score | 1.380 | 0.24 |
| Subtransect x Urbanization Score | 1.008 | 0.315 |