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 | 2.55 | 5.612 | 1 | **0.009** |
| Population | 0.123 | 8.89 | 0.008 | 1 | 0.4635 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Block | 30.721 | **<0.001\*\*\*** |
| Subtransect | 0.299 | 0.584 |
| Distance to City Center | 0.415 | 0.519 |
| Subtransect x Distance to City Center | 0.171 | 0.679 |

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 | 0.032 | 2.457 | 5.360 | 1 | **0.0105** |
| Population | 0.121 | 8.757 | 0.025 | 1 | 0.4365 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Block | 30.407 | **<0.001\*\*\*** |
| Subtransect | 0.293 | 0.588 |
| Urbanization Score | 0.120 | 0.729 |
| Subtransect x Urbanization Score | 0.156 | 0.693 |