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 | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Family | 0.028 | 3.233 | 3.365 | 1 | **0.0335** |
| Liriomyza asclepiadis: 2021 | Population | 0.092 | 9.786 | 0.034 | 1 | 0.4275 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Block | 28.820 | **<0.001\*\*\*** |
| Subtransect | 0.173 | 0.677 |
| Distance to City Center | 0.302 | 0.583 |
| Subtransect x Distance to City Center | 0.206 | 0.65 |

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 | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Family | 0.027 | 3.116 | 3.181 | 1 | **0.0375** |
| Liriomyza asclepiadis: 2021 | Population | 0.090 | 9.600 | 0.055 | 1 | 0.407 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2021 | Block | 28.316 | **<0.001\*\*\*** |
| Subtransect | 0.153 | 0.696 |
| Urbanization Score | 0.178 | 0.673 |
| Subtransect x Urbanization Score | 0.255 | 0.614 |