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: 2020 | Family | 0.010 | 1.466 | 1.937 | 1 | 0.082 |
| Liriomyza asclepiadis: 2020 | Population | 0.032 | 4.697 | 0.000 | 1 | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Block | 39.842 | **<0.001\*\*\*** |
| Subtransect | 1.022 | 0.312 |
| Distance to City Center | 0.491 | 0.484 |
| Subtransect x Distance to City Center | 0.598 | 0.439 |

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: 2020 | Family | 0.006 | 0.969 | 1.879 | 1 | 0.085 |
| Liriomyza asclepiadis: 2020 | Population | 0.029 | 4.362 | 0.000 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Liriomyza asclepiadis: 2020 | Block | 40.410 | **<0.001\*\*\*** |
| Subtransect | 1.398 | 0.237 |
| Urbanization Score | 1.510 | 0.219 |
| Subtransect x Urbanization Score | 0.690 | 0.406 |