Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: mean\_flower\_count ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + City\_dist + Transect\_ID:City\_dist

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Mean flower count: 2020 | Family | 0.366 | 86.578 | 66.974 | 1 | **<0.001** |
| Population | 0.655 | 90.745 | 0.000 | 1 | 0.4935 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mean flower count: 2020 | (Intercept) | 0.458 | 0.499 |
| Block | 17.932 | **<0.001\*\*\*** |
| Subtransect | 5.088 | **0.024\*** |
| Distance to City Center | 8.716 | **0.003\*\*** |
| Subtransect x Distance to City Center | 5.401 | **0.02\*** |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: mean\_flower\_count ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Mean flower count: 2020 | Family | 0.305 | 84.344 | 68.531 | 1 | **<0.001** |
| Population | 0.626 | 90.360 | 0.000 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mean flower count: 2020 | (Intercept) | 269.464 | **<0.001\*\*\*** |
| Block | 31.658 | **<0.001\*\*\*** |
| Subtransect | 21.603 | **<0.001\*\*\*** |
| Urbanization Score | 13.600 | **<0.001\*\*\*** |
| Subtransect x Urbanization Score | 10.218 | **0.001\*\*** |