Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: Overall\_mean ~ (1 | Population/Family) + Block + Transect\_ID + City\_dist + Transect\_ID:City\_dist

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Flower size: 2020 | Family:Population | 0.000 | 0 | 0.5 |
| Population | 0.000 | 0 | 0.5 |
| Residual | 16.847 | 100 |  |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Flower size: 2020 | (Intercept) | 42.009 | **<0.001\*\*\*** |
| Block | 8.983 | **0.03\*** |
| Subtransect | 0.783 | 0.376 |
| Distance to City Center | 0.020 | 0.888 |
| Subtransect x Distance to City Center | 4.232 | **0.04\*** |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: Overall\_mean ~ (1 | Population/Family) + Block + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Flower size: 2020 | Family:Population | 0.000 | 0 | 0.5 |
| Population | 0.000 | 0 | 0.5 |
| Residual | 16.935 | 100 |  |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Flower size: 2020 | Block | 11.632 | **0.009\*\*** |
| Subtransect | 14.136 | **<0.001\*\*\*** |
| Urbanization Score | 8.224 | **0.004\*\*** |
| Subtransect x Urbanization Score | 2.199 | 0.138 |