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 | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Flower size: 2022 | Family:Population | 0.319 | 2.399 | 8.428 | 0.286 |
| Population | 1.331 | 3.009 | 10.569 | 0.1245 |
| Residual |  | 23.058 | 81.003 |  |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flower size: 2022 | Block | 1.662 | 0.645 |
| Subtransect | 0.578 | 0.447 |
| Distance to City Center | 1.394 | 0.238 |
| Subtransect x Distance to City Center | 0.188 | 0.665 |

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 | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Flower size: 2022 | Family:Population | 0.414 | 2.825 | 9.935 | 0.26 |
| Population | 0.845 | 2.568 | 9.030 | 0.179 |
| Residual |  | 23.044 | 81.035 |  |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flower size: 2022 | Block | 1.621 | 0.655 |
| Subtransect | 0.294 | 0.588 |
| Urbanization Score | 1.101 | 0.294 |
| Subtransect x Urbanization Score | 0.329 | 0.566 |