Table 1: Test for variance among families and populations

Model: total\_flower\_count ~ Block + (1 | Population) + (1 | Population:Fam\_uniq)

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flower count: 2022 | Family | 0.002 | 0.468 | 0.000 | 1 | 0.5 |
| Population | NA | NA | 0.011 | 1 | 0.459 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flower count: 2022 | Family | NA | NA | 0 | 1 | 0.5 |
| Population | NA | NA | 0 | 1 | 0.5 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flower count: 2022 | Block | 9.072 | **0.028\*** |
| Distance to City Center | 3.048 | 0.081 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flower count: 2022 | Family | NA | NA | 0 | 1 | 0.5 |
| Population | NA | NA | 0 | 1 | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flower count: 2022 | Block | 9.287 | **0.026\*** |
| Urbanization Score | 3.259 | 0.071 |