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: 2021 | Family | 0.030 | 5.489 | 0.000 | 1 | 0.5 |
| Population | 0.012 | 2.278 | 0.243 | 1 | 0.311 |

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: 2021 | Family | 0.031 | 5.677 | 0.000 | 1 | 0.5 |
| Population | 0.012 | 2.302 | 0.248 | 1 | 0.309 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flower count: 2021 | Block | 3.844 | 0.279 |
| Distance to City Center | 0.006 | 0.94 |

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: 2021 | Family | 0.013 | 2.432 | 0.000 | 1 | 0.5 |
| Population | NA | NA | 0.045 | 1 | 0.4165 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flower count: 2021 | Block | 4.286 | 0.232 |
| Urbanization Score | 0.625 | 0.429 |