Table 1: Test for variance among families and populations

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Mean flower count: 2020 | Family | 0.503 | 91.208 | 68.891 | 1 | **<0.001** |
| Population | 0.722 | 92.551 | 0.000 | 1 | 0.4925 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Mean flower count: 2020 | Family | 0.263 | 84.443 | 65.446 | 1 | **<0.001** |
| Population | 0.560 | 90.600 | 0.000 | 1 | 0.5 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mean flower count: 2020 | Block | 20.382 | **<0.001\*\*\*** |
| Distance to City Center | 9.319 | **0.002\*\*** |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Mean flower count: 2020 | Family | 0.300 | 86.068 | 67.282 | 1 | **<0.001** |
| Population | 0.593 | 91.075 | 0.000 | 1 | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mean flower count: 2020 | Block | 18.985 | **<0.001\*\*\*** |
| Urbanization Score | 4.154 | **0.042\*** |