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: 2021 | Family | 0.138 | 70.981 | 214.626 | 1 | **<0.001** |
| Population | 0.380 | 85.987 | 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: 2021 | Family | 0.137 | 70.768 | 215.193 | 1 | **<0.001** |
| Population | 0.378 | 85.915 | 0.000 | 1 | 0.5 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mean flower count: 2021 | Block | 20.347 | **<0.001\*\*\*** |
| Distance to City Center | 1.054 | 0.305 |

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: 2021 | Family | 0.138 | 70.990 | 214.656 | 1 | **<0.001** |
| Population | 0.380 | 85.999 | 0.000 | 1 | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mean flower count: 2021 | Block | 21.107 | **<0.001\*\*\*** |
| Urbanization Score | 0.031 | 0.859 |