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: 2022 | Family | 0.016 | 4.558 | 0.000 | 1 | 0.5 |
| Population | NA | NA | 0.833 | 1 | 0.1805 |

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: 2022 | Family | 0.008 | 2.338 | 0.000 | 1 | 0.5 |
| Population | NA | NA | 0.203 | 1 | 0.326 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mean flower count: 2022 | Block | 10.713 | **0.013\*** |
| Distance to City Center | 2.123 | 0.145 |

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: 2022 | Family | 0.004 | 1.321 | 0.00 | 1 | 0.5 |
| Population | NA | NA | 0.06 | 1 | 0.403 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mean flower count: 2022 | Block | 10.816 | **0.013\*** |
| Urbanization Score | 3.568 | 0.059 |