Table 1: Test for variance among families and populations

Model: Flowered ~ Block + (1 | Population) + (1 | Population:Fam\_uniq)

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering success: 2022 | Family | 0.259 | 7.307 | 0.267 | 1 | 0.3025 |
| Population | 0.343 | 9.450 | 4.855 | 1 | **0.014** |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: Flowered ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + City\_dist

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering success: 2022 | Family | 0.259 | 7.307 | 0.268 | 1 | 0.3025 |
| Population | 0.343 | 9.448 | 4.766 | 1 | **0.0145** |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flowering success: 2022 | Block | 30.776 | **<0.001\*\*\*** |
| Distance to City Center | 0.001 | 0.978 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: Flowered ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Urb\_score

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering success: 2022 | Family | 0.258 | 7.259 | 0.274 | 1 | 0.3005 |
| Population | 0.342 | 9.417 | 4.695 | 1 | **0.015** |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flowering success: 2022 | Block | 30.800 | **<0.001\*\*\*** |
| Urbanization Score | 0.024 | 0.876 |