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 | 0.255 | 7.192 | 0.135 | 1 | 0.3565 |
| Population | 0.285 | 7.976 | 5.228 | 1 | **0.011** |

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 | 0.255 | 7.191 | 0.136 | 1 | 0.3565 |
| Population | 0.285 | 7.970 | 5.138 | 1 | **0.0115** |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flowering success: 2022 | Block | 29.97 | **<0.001\*\*\*** |
| Distance to City Center | 0.00 | 0.992 |

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 | 0.253 | 7.143 | 0.140 | 1 | 0.3545 |
| Population | 0.284 | 7.942 | 5.063 | 1 | **0.012** |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flowering success: 2022 | Block | 29.988 | **<0.001\*\*\*** |
| Urbanization Score | 0.019 | 0.89 |