Table 1: Test for variance among families and populations

Model: as.numeric(flowering\_time) ~ Block + (1 | Population) + (1 | Population:Fam\_uniq)

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering duration: 2021 | Family | 0.299 | 100 | 3.265 | 1 | **0.0355** |
| Population | 0.333 | 100 | 10.972 | 1 | **<0.001** |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: as.numeric(flowering\_time) ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + City\_dist

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering duration: 2021 | Family | 0.287 | 100 | 3.402 | 1 | **0.0325** |
| Population | 0.320 | 100 | 9.750 | 1 | **0.001** |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flowering duration: 2021 | Block | 6.487 | 0.09 |
| Distance to City Center | 1.296 | 0.255 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: as.numeric(flowering\_time) ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Urb\_score

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering duration: 2021 | Family | 0.299 | 100 | 3.276 | 1 | **0.035** |
| Population | 0.334 | 100 | 10.945 | 1 | **<0.001** |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flowering duration: 2021 | Block | 6.250 | 0.1 |
| Urbanization Score | 0.023 | 0.878 |