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 | p |
| --- | --- | --- | --- | --- |
| Flowering duration: 2021 | Family | 0.301 | 100 | **0.0295** |
| Population | 0.337 | 100 | **<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 | p |
| --- | --- | --- | --- | --- |
| Flowering duration: 2021 | Family | 0.289 | 100 | **0.027** |
| Population | 0.324 | 100 | **0.001** |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flowering duration: 2021 | Block | 6.420 | 0.093 |
| Distance to City Center | 1.229 | 0.268 |

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 | p |
| --- | --- | --- | --- | --- |
| Flowering duration: 2021 | Family | 0.301 | 100 | **0.029** |
| Population | 0.338 | 100 | **<0.001** |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Flowering duration: 2021 | Block | 6.179 | 0.103 |
| Urbanization Score | 0.020 | 0.888 |