Table 1: Test for variance among families and populations

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2021 | Family | 0.023 | 7.781 | 68.465 | 1 | **<0.001** |
| Population | 0.089 | 24.557 | 0.050 | 1 | 0.4115 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2021 | Family | 0.021 | 7.340 | 68.472 | 1 | **<0.001** |
| Population | 0.088 | 24.291 | 0.007 | 1 | 0.467 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2021 | Block | 83.891 | **<0.001\*\*\*** |
| Distance to City Center | 1.836 | 0.175 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2021 | Family | 0.023 | 7.765 | 68.408 | 1 | **<0.001** |
| Population | 0.089 | 24.547 | 0.052 | 1 | 0.4095 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2021 | Block | 83.440 | **<0.001\*\*\*** |
| Urbanization Score | 0.078 | 0.78 |