Table 1: Test for variance among families and populations

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

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Ramets before flowering: 2020 | Family | 0.009 | 2.876 | **<0.001** |
| Population | 0.034 | 10.148 | 0.33 |

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 | p |
| --- | --- | --- | --- | --- |
| Ramets before flowering: 2020 | Family | 0.008 | 2.695 | **<0.001** |
| Population | 0.033 | 10.002 | 0.3655 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2020 | Block | 11.542 | **0.009\*\*** |
| Distance to City Center | 1.372 | 0.241 |

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 | p |
| --- | --- | --- | --- | --- |
| Ramets before flowering: 2020 | Family | 0.009 | 2.884 | **<0.001** |
| Population | 0.034 | 10.157 | 0.3285 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2020 | Block | 11.385 | **0.01\*\*** |
| Urbanization Score | 0.021 | 0.886 |