Table 1: Test for variance among families and populations

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

PVE for population: 24.281. PVE for family: 7.755

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2021 | Family | **<0.001** |
| Population | 0.429 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

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

PVE for population: 24.019. PVE for family: 7.316

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2021 | Family | **<0.001** |
| Population | 0.485 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2021 | Block | 84.800 | **<0.001\*\*\*** |
| Distance to City Center | 1.894 | 0.169 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

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

PVE for population: 24.27. PVE for family: 7.74

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2021 | Family | **<0.001** |
| Population | 0.427 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2021 | Block | 84.373 | **<0.001\*\*\*** |
| Urbanization Score | 0.080 | 0.777 |