Table 1: Test for variance among families and populations

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

PVE for population: 13.624. PVE for family: 4.686

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2019 | Family | **<0.001** |
| Population | 0.455 |

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: 13.376. PVE for family: 4.398

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2019 | Family | **<0.001** |
| Population | 0.489 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2019 | Block | 9.043 | **0.029\*** |
| Distance to City Center | 0.920 | 0.337 |

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: 13.304. PVE for family: 4.313

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2019 | Family | **<0.001** |
| Population | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2019 | Block | 9.287 | **0.026\*** |
| Urbanization Score | 1.378 | 0.24 |