Table 1: Test for variance among families and populations

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

PVE for population: 10.174. PVE for family: 2.877

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2020 | Family | **<0.001** |
| Population | 0.337 |

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: 10.029. PVE for family: 2.696

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2020 | Family | **<0.001** |
| Population | 0.3725 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2020 | Block | 11.594 | **0.009\*\*** |
| Distance to City Center | 1.386 | 0.239 |

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: 10.183. PVE for family: 2.885

| Variable | Group | p |
| --- | --- | --- |
| Ramets before flowering: 2020 | Family | **<0.001** |
| Population | 0.3355 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2020 | Block | 11.438 | **0.01\*\*** |
| Urbanization Score | 0.021 | 0.885 |