| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2020 | Block | 11.438 | **0.01\*\*** |
| Urbanization Score | 0.021 | 0.885 |

Table 5: Quantify variance explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2020 | Family | 0.009 | 2.885 | 12.113 | 1 | **<0.001** |
| Ramets before flowering: 2020 | Population | 0.034 | 10.183 | 0.180 | 1 | 0.3355 |

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

Urbanization = Urbanization Score

Table 4: Assess how much variance is explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2020 | Block | 11.594 | **0.009\*\*** |
| Distance to City Center | 1.386 | 0.239 |

Table 3: Quantify variance explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2020 | Family | 0.008 | 2.696 | 12.107 | 1 | **<0.001** |
| Ramets before flowering: 2020 | Population | 0.034 | 10.029 | 0.106 | 1 | 0.3725 |

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

Urbanization = Distance to the City Center

Table 2: Assess how much variance is explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2020 | Family | 0.009 | 2.877 | 12.107 | 1 | **<0.001** |
| Ramets before flowering: 2020 | Population | 0.034 | 10.174 | 0.177 | 1 | 0.337 |

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

Table 1: Test for variance among families and populations