| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2019 | Block | 8.463 | **0.037\*** |
| Subtransect | 3.000 | 0.083 |
| Urbanization Score | 0.002 | 0.966 |
| Subtransect x Urbanization Score | 1.387 | 0.239 |

Table 4: Quantify variance explained by transect

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2019 | Family | 0.018 | 3.646 | 19.075 | 1 | **<0.001** |
| Ramets before flowering: 2019 | Population | 0.096 | 16.074 | 0.000 | 1 | 0.5 |

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

Urbanization = Urbanization Score

Table 3: Assess how much variance is explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2019 | Block | 8.183 | **0.042\*** |
| Subtransect | 3.129 | 0.077 |
| Distance to City Center | 0.002 | 0.961 |
| Subtransect x Distance to City Center | 0.151 | 0.698 |

Table 2: Quantify variance explained by transect

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2019 | Family | 0.021 | 4.120 | 18.724 | 1 | **<0.001** |
| Ramets before flowering: 2019 | Population | 0.097 | 16.277 | 0.000 | 1 | 0.5 |

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

Urbanization = Distance to the City Center

Table 1: Assess how much variance is explained by transect