Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

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

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Ramets before flowering: 2020 | Family | 0.009 | 2.768 | **0.01** |
| Population | 0.030 | 8.962 | 0.3145 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2020 | Block | 8.236 | **0.041\*** |
| Subtransect | 1.392 | 0.238 |
| Distance to City Center | 0.764 | 0.382 |
| Subtransect x Distance to City Center | 0.844 | 0.358 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

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

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Ramets before flowering: 2020 | Family | 0.003 | 1.069 | **0.0105** |
| Population | 0.025 | 7.458 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2020 | Block | 8.050 | **0.045\*** |
| Subtransect | 2.979 | 0.084 |
| Urbanization Score | 4.604 | **0.032\*** |
| Subtransect x Urbanization Score | 1.628 | 0.202 |