Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: Julian\_first\_follicle^2 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + City\_dist + Transect\_ID:City\_dist

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Date of first follicle: 2022 | Family | 0.001 | 98.314 | 6,204.172 | 1 | **<0.001** |
| Date of first follicle: 2022 | Population | 0.003 | 99.298 | 0.000 | 1 | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2022 | Block | 545.445 | **<0.001\*\*\*** |
| Subtransect | 1.643 | 0.2 |
| Distance to City Center | 2.633 | 0.105 |
| Subtransect x Distance to City Center | 0.272 | 0.602 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: Julian\_first\_follicle^2 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Date of first follicle: 2022 | Family | 0.001 | 98.348 | 6,206.765 | 1 | **<0.001** |
| Date of first follicle: 2022 | Population | 0.003 | 99.276 | 0.000 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2022 | (Intercept) | 288,921.245 | **<0.001\*\*\*** |
| Block | 544.659 | **<0.001\*\*\*** |
| Subtransect | 0.998 | 0.318 |
| Urbanization Score | 2.856 | 0.091 |
| Subtransect x Urbanization Score | 4.864 | **0.027\*** |