Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: (Julian\_first\_follicle - 200) ~ 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 | 0.035 | 34.29 | 29.669 | 1 | **<0.001** |
| Date of first follicle: 2022 | Population | 0.093 | 58.26 | 0.000 | 1 | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2022 | Block | 17.770 | **<0.001\*\*\*** |
| Subtransect | 0.943 | 0.331 |
| Distance to City Center | 3.315 | 0.069 |
| Subtransect x Distance to City Center | 0.149 | 0.699 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: (Julian\_first\_follicle - 200) ~ 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 | 0.030 | 30.552 | 30.383 | 1 | **<0.001** |
| Date of first follicle: 2022 | Population | 0.089 | 57.176 | 0.000 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2022 | (Intercept) | 252.919 | **<0.001\*\*\*** |
| Block | 16.790 | **<0.001\*\*\*** |
| Subtransect | 1.118 | 0.29 |
| Urbanization Score | 2.117 | 0.146 |
| Subtransect x Urbanization Score | 4.485 | **0.034\*** |