Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: Julian\_first\_follicle^3 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + City\_dist + Transect\_ID:City\_dist

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Date of first follicle: 2022 | Family | 0.003 | 99.997 | 3,126,285 | 1 | **<0.001** |
| Population | 0.007 | 99.999 | 0 | 1 | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2022 | Block | 264,101.422 | **<0.001\*\*\*** |
| Subtransect | 1.639 | 0.201 |
| Distance to City Center | 2.565 | 0.109 |
| Subtransect x Distance to City Center | 0.262 | 0.609 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: Julian\_first\_follicle^3 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

| Variable | Group | Variance | PVE | Ï‡2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Date of first follicle: 2022 | Family | 0.003 | 99.997 | 3,126,288 | 1 | **<0.001** |
| Population | 0.007 | 99.999 | 0 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2022 | (Intercept) | 290,625.212 | **<0.001\*\*\*** |
| Block | 264,100.650 | **<0.001\*\*\*** |
| Subtransect | 0.990 | 0.32 |
| Urbanization Score | 2.851 | 0.091 |
| Subtransect x Urbanization Score | 4.835 | **0.028\*** |