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 | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Date of first follicle: 2020 | Family | 0.018 | 100.000 | 208,748.1 | 1 | **<0.001** |
| Date of first follicle: 2020 | Population | 0.009 | 99.999 | 0.0 | 1 | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2020 | Block | 1.800 | 0.615 |
| Subtransect | 1.274 | 0.259 |
| Distance to City Center | 4.100 | **0.043\*** |
| Subtransect x Distance to City Center | 0.162 | 0.687 |

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 | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Date of first follicle: 2020 | Family | 0.006 | 99.999 | 208,746.2 | 1 | **<0.001** |
| Date of first follicle: 2020 | Population | 0.005 | 99.998 | 0.0 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2020 | (Intercept) | 15,118.618 | **<0.001\*\*\*** |
| Block | 8.296 | **0.04\*** |
| Subtransect | 7.771 | **0.005\*\*** |
| Urbanization Score | 13.038 | **<0.001\*\*\*** |
| Subtransect x Urbanization Score | 8.448 | **0.004\*\*** |