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: 2021 | Family | 0.005 | 99.998 | 1,369,566 | 1 | **<0.001** |
| Population | 0.015 | 99.999 | 0 | 1 | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2021 | Block | 121,733.823 | **<0.001\*\*\*** |
| Subtransect | 0.213 | 0.645 |
| Distance to City Center | 3.913 | **0.048\*** |
| Subtransect x Distance to City Center | 0.012 | 0.911 |

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: 2021 | Family | 0.005 | 99.998 | 1,369,566 | 1 | **<0.001** |
| Population | 0.016 | 99.999 | 0 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Date of first follicle: 2021 | Block | 121,733.474 | **<0.001\*\*\*** |
| Subtransect | 0.763 | 0.382 |
| Urbanization Score | 3.322 | 0.068 |
| Subtransect x Urbanization Score | 0.120 | 0.729 |