Table 1: Test for variance among families and populations

Model: mean\_poll^(1/2) ~ Block + (1 | Population/Family)

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Pollinaria removed: 2022 | Family:Population | 3.304 | 0.026 | 27.192 | **0.0345** |
| Population | 0.017 | 0.001 | 1.003 | 0.449 |
| Residual |  | 0.068 | 71.805 |  |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: mean\_poll^(1/2) ~ Block + (1 | Population/Family) + City\_dist

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Pollinaria removed: 2022 | Family:Population | 2.918 | 0.023 | 25.028 | **0.044** |
| Population | 0.103 | 0.002 | 2.328 | 0.3745 |
| Residual |  | 0.068 | 72.644 |  |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Pollinaria removed: 2022 | Block | 23.900 | **<0.001\*\*\*** |
| Distance to City Center | 3.804 | 0.051 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: mean\_poll^(1/2) ~ Block + (1 | Population/Family) + Urb\_score

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Pollinaria removed: 2022 | Family:Population | 2.722 | 0.023 | 24.373 | **0.0495** |
| Population | 0.088 | 0.002 | 2.174 | 0.3835 |
| Residual |  | 0.069 | 73.453 |  |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Pollinaria removed: 2022 | Block | 23.943 | **<0.001\*\*\*** |
| Urbanization Score | 3.460 | 0.063 |