Table 1: Test for variance among families and populations

Model: Latex\_weight\_mg^(1/3) ~ Block + (1 | Population/Family)

| Variable | Group | χ2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Latex | Family:Population | 1.867 | 0.008 | 4.581 | 0.086 |
| Population | 4.169 | 0.006 | 3.848 | **0.0205** |
| Residual |  | 0.150 | 91.571 |  |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: Latex\_weight\_mg^(1/3) ~ Block + (1 | Population/Family) + City\_dist

| Variable | Group | χ2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Latex | Family:Population | 1.893 | 0.008 | 4.612 | 0.0845 |
| Population | 4.254 | 0.006 | 3.942 | **0.0195** |
| Residual |  | 0.150 | 91.446 |  |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Latex | Block | 27.248 | **<0.001\*\*\*** |
| Distance to City Center | 0.246 | 0.62 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: Latex\_weight\_mg^(1/3) ~ Block + (1 | Population/Family) + Urb\_score

| Variable | Group | χ2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Latex | Family:Population | 1.768 | 0.007 | 4.486 | 0.092 |
| Population | 2.784 | 0.005 | 3.078 | **0.0475** |
| Residual |  | 0.150 | 92.436 |  |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Latex | Block | 26.921 | **<0.001\*\*\*** |
| Urbanization Score | 4.042 | **0.044\*** |