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 | 2.033 | 0.008 | 4.748 | 0.077 |
| Population | 4.536 | 0.007 | 4.045 | **0.0165** |
| Residual |  | 0.150 | 91.207 |  |

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 | 2.052 | 0.008 | 4.770 | 0.076 |
| Population | 4.628 | 0.007 | 4.141 | **0.0155** |
| Residual |  | 0.150 | 91.088 |  |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Latex | Block | 23.578 | **<0.001\*\*\*** |
| Distance to City Center | 0.245 | 0.621 |

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 | 1.907 | 0.008 | 4.631 | 0.0835 |
| Population | 3.010 | 0.005 | 3.217 | **0.0415** |
| Residual |  | 0.150 | 92.152 |  |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Latex | Block | 23.438 | **<0.001\*\*\*** |
| Urbanization Score | 4.235 | **0.04\*** |