Table 1: Test for variance among families and populations

Model: Total\_Height\_late^(1/3) ~ (1 | Population/Family) + Block

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Height, after flowering: 2021 | Family:Population | 0.313 | 6.616 | **0.009** |
| Population | 0.068 | 1.442 | 0.189 |
| Residual | 4.356 | 91.942 |  |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: Total\_Height\_late^(1/3) ~ (1 | Population/Family) + Block + City\_dist

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Height, after flowering: 2021 | Family:Population | 0.316 | 6.666 | **0.0085** |
| Population | 0.064 | 1.349 | 0.205 |
| Residual | 4.356 | 91.985 |  |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Height, after flowering: 2021 | Block | 83.529 | **<0.001\*\*\*** |
| Distance to City Center | 1.329 | 0.249 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: Total\_Height\_late^(1/3) ~ (1 | Population/Family) + Block + Urb\_score

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Height, after flowering: 2021 | Family:Population | 0.314 | 6.618 | **0.009** |
| Population | 0.073 | 1.547 | 0.175 |
| Residual | 4.356 | 91.835 |  |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Height, after flowering: 2021 | Block | 83.303 | **<0.001\*\*\*** |
| Urbanization Score | 0.358 | 0.55 |