Table 1: Test for variance among families and populations

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

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Height, before flowering: 2020 | Family:Population | 2.453 | 0.029 | 4.359 | 0.0585 |
| Population | 0.000 | 0.000 | 0.000 | 0.5 |
| Residual |  | 0.632 | 95.641 |  |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

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

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Height, before flowering: 2020 | Family:Population | 2.477 | 0.028 | 4.24 | 0.058 |
| Population | 0.000 | 0.000 | 0.00 | 0.5 |
| Residual |  | 0.631 | 95.76 |  |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Height, before flowering: 2020 | Block | 69.484 | **<0.001\*\*\*** |
| Distance to City Center | 3.222 | 0.073 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

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

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Height, before flowering: 2020 | Family:Population | 2.567 | 0.030 | 4.48 | 0.0545 |
| Population | 0.000 | 0.000 | 0.00 | 0.5 |
| Residual |  | 0.632 | 95.52 |  |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Height, before flowering: 2020 | Block | 69.452 | **<0.001\*\*\*** |
| Urbanization Score | 0.846 | 0.358 |