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: 2021 | Family:Population | 1.477 | 0.050 | 3.438 | 0.112 |
| Population | 0.000 | 0.000 | 0.000 | 0.5 |
| Residual |  | 1.412 | 96.562 |  |

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: 2021 | Family:Population | 1.485 | 0.050 | 3.454 | 0.1115 |
| Population | 0.000 | 0.000 | 0.000 | 0.5 |
| Residual |  | 1.411 | 96.546 |  |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Height, before flowering: 2021 | Block | 67.186 | **<0.001\*\*\*** |
| Distance to City Center | 1.275 | 0.259 |

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: 2021 | Family:Population | 1.565 | 0.052 | 3.552 | 0.1055 |
| Population | 0.000 | 0.000 | 0.000 | 0.5 |
| Residual |  | 1.412 | 96.448 |  |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Height, before flowering: 2021 | Block | 67.099 | **<0.001\*\*\*** |
| Urbanization Score | 0.304 | 0.581 |