Table 1: Test for variance among families and populations

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

| Variable | Group | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Height, before flowering: 2019 | Family:Population | 0.022 | 10.920 | **<0.001** |
| Population | 0.005 | 2.304 | 0.131 |
| Residual | 0.174 | 86.776 |  |

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 | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Height, before flowering: 2019 | Family:Population | 0.022 | 10.918 | **<0.001** |
| Population | 0.005 | 2.484 | 0.118 |
| Residual | 0.174 | 86.598 |  |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Height, before flowering: 2019 | Block | 4.902 | 0.179 |
| Distance to City Center | 0.098 | 0.754 |

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 | Variance | PVE | p |
| --- | --- | --- | --- | --- |
| Height, before flowering: 2019 | Family:Population | 0.022 | 10.899 | **<0.001** |
| Population | 0.005 | 2.526 | 0.114 |
| Residual | 0.174 | 86.576 |  |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Height, before flowering: 2019 | Block | 4.875 | 0.181 |
| Urbanization Score | 0.029 | 0.864 |