Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

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

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Height before flowering: 2021 | Family:Population | 7.886 | 0.294 | 10.055 | **0.0025** |
| Population | 0.000 | 0.000 | 0.000 | 0.5 |
| Residual |  | 2.633 | 89.945 |  |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Height before flowering: 2021 | Block | 36.357 | **<0.001\*\*\*** |
| Subtransect | 0.003 | 0.953 |
| Distance to City Center | 3.948 | **0.047\*** |
| Subtransect x Distance to City Center | 1.245 | 0.265 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

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

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Height before flowering: 2021 | Family:Population | 7.619 | 0.301 | 10.179 | **0.003** |
| Population | 0.102 | 0.021 | 0.700 | 0.375 |
| Residual |  | 2.633 | 89.121 |  |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Height before flowering: 2021 | Block | 38.694 | **<0.001\*\*\*** |
| Subtransect | 0.010 | 0.921 |
| Urbanization Score | 0.118 | 0.731 |
| Subtransect x Urbanization Score | 1.043 | 0.307 |