Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

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

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Height after flowering: 2021 | Family:Population | 7.154 | 0.434 | 9.027 | **0.0035** |
| Population | 0.000 | 0.000 | 0.000 | 0.5 |
| Residual |  | 4.378 | 90.973 |  |

Table 2: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Height after flowering: 2021 | Block | 49.754 | **<0.001\*\*\*** |
| Subtransect | 0.056 | 0.812 |
| Distance to City Center | 3.497 | 0.061 |
| Subtransect x Distance to City Center | 2.368 | 0.124 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

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

| Variable | Group | Ï‡2 | Variance | PVE | p |
| --- | --- | --- | --- | --- | --- |
| Height after flowering: 2021 | Family:Population | 7.029 | 0.450 | 9.265 | **0.004** |
| Population | 0.050 | 0.024 | 0.485 | 0.411 |
| Residual |  | 4.382 | 90.251 |  |

Table 4: Quantify variance explained by transect

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Height after flowering: 2021 | Block | 52.604 | **<0.001\*\*\*** |
| Subtransect | 0.228 | 0.633 |
| Urbanization Score | 0.025 | 0.875 |
| Subtransect x Urbanization Score | 1.648 | 0.199 |