# Urbanization = Distance to City Center

ANOVA with all years of data

Model: log(Herbivory\_mean\_early) ~ Block + Year + (1 | Population/Family) + City\_dist \* Transect\_ID

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis abundance | Block | 2.441 | 0.486 |
| Year | 14.709 | **<0.001\*\*\*** |
| Sample | 10.099 | **0.001\*\*** |
| Distance to City Center | 2.162 | 0.141 |
| Subtransect | 0.392 | 0.531 |
| Distance to City Center x Subtransect | 2.102 | 0.147 |

ANOVA with one year of data

Model: Labidomera\_clivicollis ~ Block + (1 | Population/Family) + Sample + City\_dist + Transect\_ID + City\_dist:Transect\_ID

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis abundance | Block | 2.684 | 0.443 |
| Sample | 0.190 | 0.663 |
| Distance to City Center | 0.930 | 0.335 |
| Subtransect | 0.123 | 0.725 |
| Distance to City Center x Subtransect | 0.000 | 0.983 |

# Urbanization = Urbanization Score

ANOVA with all years of data

Model: Labidomera\_clivicollis ~ Block + (1 | Population/Family) + Year + Sample + Urb\_score + Transect\_ID + Transect\_ID:Urb\_score

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis abundance | Block | 2.495 | 0.476 |
| Year | 16.259 | **<0.001\*\*\*** |
| Sample | 10.142 | **0.001\*\*** |
| Urbanization Score | 1.777 | 0.183 |
| Subtransect | 0.867 | 0.352 |
| Urbanization Score x Subtransect | 0.961 | 0.327 |

ANOVA with one year of data

Model: Labidomera\_clivicollis ~ Block + (1 | Population/Family) + Sample + Urb\_score + Transect\_ID + Urb\_score:Transect\_ID

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Labidomera clivicollis abundance | (Intercept) | 14.970 | **<0.001\*\*\*** |
| Block | 2.537 | 0.469 |
| Sample | 0.255 | 0.614 |
| Urbanization Score | 0.509 | 0.475 |
| Subtransect | 1.812 | 0.178 |
| Urbanization Score x Subtransect | 2.832 | 0.092 |