| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Weevil damage, binary: 2020 | Block | 5.932 | 0.115 |
| Subtransect | 0.000 | 0.997 |
| Urbanization Score | 0.102 | 0.749 |
| Subtransect x Urbanization Score | 0.248 | 0.618 |

Table 4: Quantify variance explained by transect

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Weevil damage, binary: 2020 | Family | 0.062 | 1.858 | 1.210 | 1 | 0.1355 |
| Weevil damage, binary: 2020 | Population | 0.180 | 5.197 | 0.137 | 1 | 0.356 |

Model: Scar\_binary ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

Urbanization = Urbanization Score

Table 3: Assess how much variance is explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Weevil damage, binary: 2020 | Block | 5.896 | 0.117 |
| Subtransect | 0.008 | 0.929 |
| Distance to City Center | 0.021 | 0.884 |
| Subtransect x Distance to City Center | 0.041 | 0.84 |

Table 2: Quantify variance explained by transect

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Weevil damage, binary: 2020 | Family | 0.069 | 2.059 | 1.209 | 1 | 0.136 |
| Weevil damage, binary: 2020 | Population | 0.187 | 5.376 | 0.202 | 1 | 0.3265 |

Model: Scar\_binary ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + City\_dist + Transect\_ID:City\_dist

Urbanization = Distance to the City Center

Table 1: Assess how much variance is explained by transect