**Table 1**: Heritable genetic variation associated with urbanization and a green corridor

*Model: Trait ~ (1 | Population/Family) + Block + Distance to City Center\*Transect*

* Table 2 in individual trait word docs
* Values for last year included (e.g. relative growth rate measured 2019-2021; 2021 values are below)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Genetic variation within/among URBAN populations** | | | | | |
| Population level | | | Family level | | |
| χ² | *p* | PVE | χ² | *p* | PVE |
| ***Growth traits*** | | | | | | |
| Height, before flowering | 0 | 0.5 | 0 | 7.886 | **0.0025** | 10.055 |
| Height, after flowering | 0 | 0.5 | 0 | 7.154 | **0.0035** | 9.027 |
| LDMC | 0.05 | 0.4115 | 0.413 | 0.011 | 0.459 | 0.439 |
| Mortality\* | 0 | 0.5 | 8.951 | 3.952 | **0.0235** | 2.296 |
| Ramets, before flowering\* | 0 | 0.5 | 25.153 | 52.455 | **<0.001** | 7.599 |
| Ramets, after flowering\* | 0 | 0.5 | 15.202 | 22.59 | **<0.001** | 1.543 |
| Relative growth rate | 0.483 | 0.2435 | 1.389 | 0 | 0.5 | 0 |
| SLA | 0 | 0.5 | 0 | 0 | 0.5 | 0 |
| ***Herbivore community*** | | | | | | |
| *Danaus plexippus* abundance\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| *Labidomera clivicollis* abundance\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| *Liriomyza asclepiadis* abundance\* | 0.007 | 0.4566 | 8.917 | 5.651 | **0.0085** | 2.546 |
| ***Defense traits*** | | | | | | |
| Herbivory, before flowering: Binary\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| Herbivory, before flowering: Quantitative | 0 | 0.5 | 0 | 0 | 0.5 | 0 |
| Herbivory, after flowering: Binary\* | 0.001 | 0.4895 | 11.782 | 0.315 | 0.2875 | NA |
| Herbivory, after flowering: Quantitative | 0 | 0.5 | 0 | 1.076 | 0.1495 | 4.41 |
| Latex exudation | 2. | 0.055 | 3.946 | 3.074 | **0.04** | 7.114 |
| Weevil damage: Binary\* | 0 | 0.5 | 8.02 | 2.741 | **0.049** | NA |
| Weevil damage: Quantitative | 2.144 | 0.0715 | 4.356 | 3.595 | **0.029** | 8.479 |
| ***Reproductive traits*** | | | | | | |
| Date of first flower\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| Date of first follicle\* | 0 | 0.5 | 58.26 | 29.669 | **<0.001** | 34.29 |
| Flower size | 1.331 | 0.1245 | 10.569 | 0.319 | 0.286 | 8.428 |
| Flowering duration\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| Flowering success\* | 0.115 | 0.3675 | 12.384 | 2.696 | 0.0505 | 4.53 |
| Follicles\* | 0 | 0.5 | 0 | 0 | 0.5 | 0 |
| Inflorescences\* | 1.325 | 0.125 | 45.126 | 9.892 | **0.001** | 35.351 |
| Mean flowers per inflorescence\* | 0.359 | 0.2745 | NA | 0 | 0.5 | 3.848 |

**Table 2**: Heritable genetic variation associated with urbanization and a green corridor

*Model: Trait ~ (1 | Population/Family) + Block + Urbanization Score\*Transect*

* Table 4 in individual trait word docs
* Values for last year included (e.g. relative growth rate measured 2019-2021; 2021 values are below)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Genetic variation within/among URBAN populations** | | | | | |
| Population level | | | Family level | | |
| χ² | *p* | PVE | χ² | *p* | PVE |
| ***Growth traits*** | | | | | | |
| Height, before flowering | 0.102 | 0.375 | 0.7 | 7.619 | **0.003** | 10.179 |
| Height, after flowering | 0.05 | 0.411 | 0.485 | 7.029 | **0.004** | 9.265 |
| LDMC | 0.211 | 0.323 | 0.888 | 0.013 | 0.454 | 0.492 |
| Mortality\* | 0 | 0.5 | 8.67 | 3.965 | **0.023** | 1.859 |
| Ramets, before flowering\* | 0 | 0.5 | 25.536 | 52.334 | **<0.001** | 8.478 |
| Ramets, after flowering\* | 0 | 0.5 | 15.62 | 22.903 | **<0.001** | 2.123 |
| Relative growth rate | 0.237 | 0.3135 | 0.973 | 0 | 0.5 | 0 |
| SLA | 0 | 0.5 | 0 | 0 | 0.5 | 0 |
| ***Herbivore community*** | | | | | | |
| *Danaus plexippus* abundance\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| *Labidomera clivicollis* abundance\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| *Liriomyza asclepiadis* abundance\* | 0.024 | 0.4385 | 8.782 | 5.397 | **0.01** | 2.453 |
| ***Defense traits*** | | | | | | |
| Herbivory, before flowering: Binary\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| Herbivory, before flowering: Quantitative | 0 | 0.5 | 0 | 0 | 0.5 | 0 |
| Herbivory, after flowering: Binary\* | 0.001 | 0.4885 | 11.006 | 0.28 | 0.2985 | NA |
| Herbivory, after flowering: Quantitative | 0 | 0.5 | 0 | 0.743 | 0.1945 | 3.628 |
| Latex exudation | 0.504 | 0.239 | 1.722 | 3.228 | **0.036** | 7.465 |
| Weevil damage: Binary\* | 0 | 0.5 | 7.791 | 2.614 | 0.053 | NA |
| Weevil damage: Quantitative | 1.603 | 0.1025 | 3.912 | 3.715 | **0.027** | 8.672 |
| ***Reproductive traits*** | | | | | | |
| Date of first flower\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| Date of first follicle\* | 0 | 0.5 | 57.176 | 30.383 | **<0.001** | 30.552 |
| Flower size | 0.845 | 0.179 | 9.03 | 0.414 | 0.26 | 9.935 |
| Flowering duration\* | 0 | 0.5 | NA | 0 | 0.5 | NA |
| Flowering success\* | 0.025 | 0.437 | 11.763 | 2.814 | **0.0465** | 3.626 |
| Follicles\* | 0 | 0.5 | 0 | 0 | 0.5 | 0 |
| Inflorescences\* | 0.93 | 0.1675 | 41.717 | 9.238 | **0.001** | 30.973 |
| Mean flowers per inflorescence\* | 0 | 0.5 | 0 | 0 | 0.5 | 0 |