Metadata for data from "Fitness and host use remain stable in biological control agent after many years of hybridization"

Data1_ancestry.csv

Description: This spreadsheet contains the ancestry assignment data for all the individuals and reference individuals included in the study. Using genomic methods and Structure Analysis, each individual's genome is given as assignment score for each of the four *Diorhabda* spp., which represent the ancestry of that individual. 95% confidence intervals and medians are included for each of the four species. The collection site and label used in the paper is also denoted.

Data2_adultWeight.csv

Description: This dataset includes data on the weight of each adult at eclosion from three populations (Big Springs, Roswell, Ute Lake). These individuals are the first lab generation. The beetleID column matches with the sampID column in the ancestry data. The parentID column matches with the larval data in the follow dataset. The beetles were immediately paired following eclosion, so families could be tracked. The ave_weight column is the average between the male and female parent.

Data3_adultPosition.csv

Description: This data records the position of a female beetle at the end of a 24-hour feeding test where a single beetle was either presented with a single host plant or a choice between three host plants. The treatment column describes the type of test the beetle was assigned to: A=no choice athel; T=no choice tamarisk (target host); F=no choice Frankenia; 3=choice between athel, tamarisk, and Frankenia. The plant the beetle was found on was recorded at the end of the trial, and if eggs were found, their position and number were recorded (CA=trial not completed).

Data4_adultFrass.csv

Description: This dataset records the amount of frass that was recorded under each plant in the feeding tests. For no choice tests, there is only one measurement of frass. For choice tests, there are measurements of frass beneath each of the plants. Frass was analyzed using ImageJ and different parameters were recorded, frassArea being the one used in further analyses. The ID number of the photo was also included.

Data5_larvalPerformance.csv

Description: This dataset includes the performance data for larvae reared on each of the three plants. Due to low plant quality of the tamarisk (due to a spider mite outbreak in the greenhouse), the tamarisk treatment data were not included in any other analyses. The parent_ID column corresponds to the adult

weight and ancestry dataset, so that ancestry, weight, and feeding preferences of the mothers could be combined with this dataset. Larvae were reared on each host plant (no choice environment) for twelve days. Larvae were transferred on the day of hatching to each host plant in groups of six to ten in family groups. After twelve days, survival was recorded (no_added = number of newly hatched larvae added at start; no_alive = number of larvae alive after 12 days). Instar (1st, 2nd, or 3rd, as determined by head capsule width) and dry weight (after drying for 24 hours) of each larvae that was alive at day 12 was recorded. These data are recorded for all living full-sibling replicates.