Editing study

Reference

Huang et al., 2020
Context-dependent genetic architecture of Drosophila life span
[10.1371/journal.pbio.3000645][FBrf0245198]

Title

Context-dependent genetic architecture of Drosophila life span

Authors

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Status

Validated ⌄

Comments from curator

Phenotyping data are available from the S1 table found in the Supporting information section. Of note, raw data is also available from GitHub, so we primarily uploaded this data, instead of the summarized data.

The authors also created an Advanced Intercross Population (AIP) from a subset of extreme long-living DGRP lines that were maintained for over 100 generations with a large effective population size before performing "extreme quantitative trait locus (xQTL)" mapping for life span.

Description

In this study, the authors quantified variation in life span in males and females reared in 3 thermal environments. Quantitative genetic analyses of life span and the micro-environmental variance of life span in the DGRP revealed significant genetic variance for both traits within each sex and environment, as well as significant genotype-by-sex interaction (GSI) and genotype-by-environment interaction (GEI). We only kept the micro-environmental variance (ln<i>σ</i>_ε) summary calculation from the authors, but it's a simple logarithmic transformation of the standard deviation.

Other external data available

PRJNA577841: Whole Genome Sequencing of whole flies (24 samples) taken from Advanced Intercross Population (AIP) from a subset of DGRP lines with longest living (M & F, 3 different temperature environments)

Categories

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