Dietary rotenone and paraquat on larval development

PLOS Genetics

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Cage Studies

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EXTERNAL LINK

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THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Aw WC, Towarnicki SG, Melvin RG, Youngson NA, Garvin MR, Hu Y, Nielsen S, Thomas T, Pickford R, Bustamante S, Vila-Sanjurjo A, Smyth GK, Ballard JWO (2018) Genotype to phenotype: Diet-by-mitochondrial DNA haplotype interactions drive metabolic flexibility and organismal fitness. PLoS Genet 14(11): e1007735. doi: 10.1371/journal.pgen.1007735

PROTOCOL STATUS

Working

1 Rotenone (Sigma R8875) and paraquat were solubilised in DMSO to prepare a 5 mM stock.

2 Stock solutions were added to the diet to final treatment concentrations of 0, 3.125, 6.25, 12.5 and 25uM atÂ 50Â°C

3 From the dilution series, we determined an assay concentration of 3.13 Âµ for both chemicals.

4 The dietary rotenone and paraquat were used in larval development assays.

Rotenone treated larvae underwent Complex I activity assay (Refer to larval development and Complex I activity protocol)