



## Dietary rotenone and paraquat on larval development [↗](#)

PLOS Genetics

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Cage Studies

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### EXTERNAL LINK

<https://doi.org/10.1371/journal.pgen.1007735>

### 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](https://doi.org/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 25µM at 50°C
- 3 From the dilution series, we determined an assay concentration of 3.13 µM 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)



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