

# MORE: Mosquito Olfactory Response Ensemble

## Help Manual

### Pages in the MORE website

The table below describes the set of pages within the MORE website, along with a description of the content in each page.

Tab	Sub-tab	Species	Description
Home	-		Home section or default page on the website
Behavior	Mosquito Preference Index	All mosquitoes	Preference indices of odors calculated from behavioral experiments.
	Drosophila Preference Index	Drosophila Melanogaster	Preference indices of odors calculated from behavioral experiments.
	Mosquito Oviposition Index	All mosquitoes	Oviposition preferences of odors calculated from behavioral experiments.
	Drosophila Oviposition Index	Drosophila Melanogaster	Oviposition preferences of odors calculated from behavioral experiments.
Single Sensillum Recording	-	All mosquitoes	Data from single sensillum recording experiments done in mosquitoes to measure the electrophysiological responses of the sensory neurons.
Electroantennography	-	All mosquitoes	Data from electroantennography experiments in mosquitoes to measure the overall activity of the antenna to various odors.
Odorant Receptor	Mosquito Empty-Neuron Recording	All mosquitoes	Responses of mosquito odorant receptors to various odors measured using the empty-neuron technique (in vivo)
	Mosquito Oocyte Recording	All mosquitoes	Responses of mosquito odorant receptors to various odors measured using the oocyte recording technique (in-vitro)
	Drosophila Empty-Neuron Recording	Drosophila Melanogaster	Responses of Drosophila odorant receptors to various odors measured using the empty-neuron technique (in vivo)

### Parameters

The table below describes the various fields in the tables.

Field	Description
Concentration	Concentration was added either in the form of a fraction or in g/ml.

Concentration-type	All the concentrations were divided into four concentration types W/V, V/V, W/W, or Dry. 'Dry' concentration type corresponds to the cases in which the pure odorant solution was used (for example: In Allan2006, 100 $\mu$ l of the odorant solution was used in a vial. In Klun2003, concentration was reported in $\mu$ mol/cm <sup>2</sup> ).
Odor amount	Amount of odor (in $\mu$ g) applied on filter paper or any other surface.
Odor volume	Volume of diluted or undiluted odor (in ml) used in the experiment.
Solvent	Solvent used to dilute the odor
Solvent evaporated	Status of solvent evaporation before the start of the experiment (Y: Yes; N: No)
Species	Species for which data was recorded
Gender	Gender of the animal used in the experiment (M: Male; F: Female; Both: both female and male were used)
Age	Average age of the animal used in the experiments (in days)
Starvation	Average number of hours for which animal was starved
Feeding status	Blood-feeding status (Y: blood-feed; N: non-blood-fed)
Assay	Type of assay used. In drosophila, trap-assay is written as dual-port, and in mosquitoes, arm-in-cage is considered as landing assay because of the similar architecture.
Reference	Reference code from which data was obtained
Response	Response is reported in terms of preference index ((Treatment – Control)/( Treatment + Control)). All the behavioral data points for which the responses were not reported in terms of preference index, were manually curated to the preference index.
Response	Responses were added in spikes/second. Again, all the responses which were reported in other formats were converted to spikes/second
Response	Responses are in –mV
Response original	This column contains the original response value, as reported in the study
Sfr status	Whether or not the spontaneous firing rate was subtracted from the responses by the study
OR	Odorant receptor. In drosophila, SSR data is added to OR response data using the OSN-OR mapping (Münch and Galizia, 2016).
Location	The location of the Sensillum from which the recording was performed (like antenna, palp, tarsus, wing, labellum)
Segment	The region of the olfactory organ from which the recording was performed (for example 6-13 in antenna or zone-3 in labellum)
Sensillum type	Type of Sensillum from which recordings were obtained (like grooved peg, trichoid, basiconic, capitate peg, S1)
Sensillum	The Sensillum in the olfactory organ from which recordings were performed.
Neuron	The neuron in the Sensillum from which recordings were performed
Preparation type	Preparation type used to record (isolated head, isolated antenna, intact animal)
Normalization odor original	Odor used by the study for the normalization of EAG response
Normalization odor concentration original	Concentration of odor used by the study for the normalization of EAG response
Normalization status	Whether or not the study does the normalization
Normalization odor	Odor used by us for normalization
Normalization odor concentration	Odor concentration used by us for the normalization
Remarks	Additional information

## Features of MORE

### 1. '+' icon

This icon allows you to see additional information related to the experiment. On clicking this icon, the row will expand.

### 2. Search/ Filter

The search bar allows you to search for a particular datapoints in the dataset. It also give you some flexibility to search for multiple keywords at the same time. For example, to find the behavioral response value corresponding to DEET in AAeg, you can simple write "DEET AAeg". Note: - the different keywords should be separated by space and this operation shows you all the datapoints containing all the input keywords.

### 3. Download Full Dataset

This button allows you to download the whole dataset in Excel format. This feature is available on the "Home" tab of the website.

### 4. Download Filtered Data

This button allows you to download only the filtered data in an excel format. This feature is available below the data tables.