Defining the larval habitat: abiotic, biological and chemical parameters associated with *Anopheles farauti* productivity

Description of data archiving for analysis

Larval surveys were conducted during January and August 2016 near villages in Western Province (Jack Harbour, Saeragi, Kinamara, and New Mala; -8.0° S, 157.0° E) and Central Province (Haleta; − 9°5′ 56″ S, 160°6′ 56″ E) of the Solomon Island. The data from the entire set of experiments has been archived into one database.

Larval distribution

Parameter	Details
Aim	To investigate the distribution of mosquitoes throughout the Provinces by larval surveys
Dates	The larval surveys were conducted during January to August 2016.
Tables	There are three linked tables that contain the larval distribution data 1. GIS data – This table details the Latitude and Longitude for each site that was surveyed. 2. Field data – This table contains the information that was recorded during each survey. 3. PCR data – This table contains the results of PCR analyses run for species identification of larval samples Data in the three tables is linked using the SiteID
ProjectID	MTC25, MTC27, ENT10 and ENT12
Trapping method	Dipping

Data dictionary for GIS data table

Parameter	Type	Details
Habitat ID	Text	The unique identifying code for the larval site
Site ID	Text	The unique identifying code for the survey station
Latitude	Double	Latitude for the larval site
Longitude	Double	Longitude for the larval site
Village	Text	Village name

Data dictionary for the Field data table

Parameter	Type	Details
ProjectID	Text	Identifier for the specific project
MthYr	Text	Month and Year that the survey was conducted
DateVisit	Date/Time	Date that the survey was conducted
Village	Text	Village where the survey was conducted
HabitatID	Text	The unique identifying code for the larval site
SiteID	Integer	The unique identifying code for the larval site
HabitatType	Text	The type of habitat that constitutes the survey site
HabitatTypeCat	Text	Categorisation of the habitat type
Substrate	Text	Description of the base of the larval habitat
Water Level (cm)	Integer	Distance from the bottom to the surface of an aquatic habitat measured approximately 30 cm from the perimeter of the habitat
Perimeter	Text	Perimeter of the habitat, described by its size
Slope (Degrees)	Text	The gradient of the land bank at the point where it meets the water surface
Canopy Type	Text	Vegetation coverage above the sampling site
Sunlight	Text	Amount of natural illumination of the larval habitat during the day
Vegetation	Text	Types of plants living in the sample site
Debris	Text	The remains of vegetation (non-living) and man-made materials (paper, plastic, metal) in or on the larval habitat
Predators	Text	Animals that naturally prey on immature mosquitoes
Dip 1	Integer	Number of larvae collected during dip 1
Stage 1	Text	Development stage of the larvae collected during dip 1
Dip 2	Integer	Number of larvae collected during dip 2
Stage 2	Text	Development stage of the larvae collected during dip 2
Dip 3	Integer	Number of larvae collected during dip 3
Stage 3	Text	Development stage of the larvae collected during dip 3
Dip 4	Integer	Number of larvae collected during dip 4
Stage 4	Text	Development stage of the larvae collected during dip 4
Dip 5	Integer	Number of larvae collected during dip 5
Stage 5	Text	Development stage of the larvae collected during dip 5
Dip 6	Integer	Number of larvae collected during dip 6
Stage 6	Text	Development stage of the larvae collected during dip 6
Dip 7	Integer	Number of larvae collected during dip 7
Stage 7	Text	Development stage of the larvae collected during dip 7
Dip 8	Integer	Number of larvae collected during dip 8
Stage 8	Text	Development stage of the larvae collected during dip 8

Dip 9	Integer	Number of larvae collected during dip 9
Stage 9	Text	Development stage of the larvae collected during dip 9
Dip 10	Integer	Number of larvae collected during dip 10
Stage 10	Text	Development stage of the larvae collected during dip 10
Total	Integer	Total number of larvae collected from 10 dips
Site Positive	Text	Categorisation of the site as positive or negative for larvae
Anophelines	Text	Development stage of all anopheline larvae collected
Culicines	Text	Development stage of all culicine larvae collected
Pupae	Text	Presence or absence of pupae from 10 dips
Temperature	Integer	Temperature recorded in degrees Celsius
pH	Integer	Measurement of the pH
Salinity	Integer	Salinity recorded in parts per hundred
Nitrite	Integer	Semi-quantitative measurement of nitrite
Nitrate	Integer	Semi-quantitative measurement of nitrate
Ammonia	Integer	Semi-quantitative measurement of ammonia
Phosphate	Integer	Semi-quantitative measurement of phosphate
AF_Total	Integer	The total number of *An. farauti s.s.* confirmed by PCR
AF_Positive	Text	Presence or absence of *An. farauti s.s.* in the sample site
AH_Total	Integer	The total number of *An. hinesorum* confirmed by PCR
AH_Positive	Text	Presence or absence of *An. hinesorum* in the sample site

Data dictionary for the Molecular table

Parameter	**Type**	**Details**
Date Visited	Date/Time	Date that the survey was conducted
Village	Text	Village name
SiteID	Integer	The unique identifying code for the larval site
PCR_Species	Text	Molecular identification to species

Data dictionary for Project Details table *(this table records the generalised details of each experiment)*

Parameter	**Type**	**Details**
Province	Text	Province name
ProjectID	Text	Identifier for the specific project
ProjectName	Text	Title for each project
DateStart	Date/Time	Date that the project commenced
DateCompleted	Date/Time	Date that the project was completed