

Additional file 4. Codebook for data extraction

Category	Variable	Description	Allowed values
1. Bibliographic information	Title	Title of the publication	Text
	First author	First author of the publication	Text
	Journal	Publication journal	Text
	Year	Year of publication	yyyy
	DOI	DOI of the publication	Alphanumeric string of characters
	Language	Language of the publication	Text
2. Environment where the study was conducted	Country	Country where the study was conducted. Not applicable for review and meta-analysis	ISO 3166 english short name / NA
	Study sites	Describe the location where the study was conducted, either "field sites", "laboratory", or "other"	text
3. Impacts on faunal abundance, species richness and diversity, and community evenness	Abundance of individuals of any species	State 0 or 1, whether or not there is a difference in abundance (i.e., number of individuals, number of individuals per unit effort or count per unit effort (CUE), or pooled biomass) of individuals in any species, and if 1 extract the information.	0/1, text and number
	Total abundance of individuals of all species present	State 0 or 1, whether or not there is a difference in total abundance of species using quantitative data (i.e., number of individuals, number of individuals per unit effort or count per unit effort (CUE), or pooled biomass), and if 1 extract the information.	0/1, text and number
	Species richness	State 0 or 1, whether or not there is a difference in species richness (i.e., number of species found in the study), and if 1 extract the information.	0/1, text and number
	Species diversity	State 0 or 1, whether or not there is a difference in species diversity measured with Shannon-Wiener or Simpson's indices, and if 1 extract the information.	0/1, text and number
	Community evenness	State 0 or 1, whether or not there is a difference in community evenness measured with Pielou's index, and if 1 extract the information.	0/1, text and number
4. Other potential impacts	Other impacts	Describe other (positive or negative) effects if the study reported.	0/1, text and number
5. Potential effect modifiers/ reasons for heterogeneity	Effect modifiers/ reasons for heterogeneity	State 0 or 1, whether the first five specified effect modifiers in the manuscript are identified and impact measured, and if 1 extract the information.	0/1, text and number
	Summary of methods	Summarize the study design, duration and sampling techniques	Text
6. Initial purpose of guppy introduction	Initial purpose	Initial purpose of introduction of guppy in the study area was mosquito vector control	0/1

* 0: no, 1: yes, N/A: not applicable, a: high validity, b: moderate validity, c: low validity, d: very low validity