Supplementary File S5

Title: A Global Meta-Analysis Reveals the Toxicity of Plastics on Insect Health

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Here is the Supplementary table

1. **Table S1.** EcoEvo PRISMA Checklist.

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Checklist item	Sub-item number	Sub-item	Reported by authors?	Notes
Title and abstract	1.1	Identify the review as a systematic review, meta-analysis, or both	Yes	Title
	1.2	Summarise the aims and scope of the review	Yes	Intro
	1.3	Describe the data set	Yes	Main paper and methods
	1.4	State the results of the primary outcome	Yes	Results
	1.5	State conclusions	Yes	Results and discussion
	1.6	State limitations		Discussion
Aims and questions	2.1	Provide a rationale for the review	Yes	Intro
	2.2	Reference any previous reviews or meta-analyses on the topic	Yes	Intro
	2.3	State the aims and scope of the review (including its generality)	Yes	Intro
	2.4	State the primary questions the review addresses (e.g. which moderators were tested)	Yes	Intro
	2.5	Describe whether effect sizes were derived from experimental and/or observational comparisons	Yes	We indicated if the studies were lab or field based
Review registration	3.1	Register review aims, hypotheses (if applicable), and methods in a time-stamped and publicly accessible archive and provide a link to the registration in the methods section of the manuscript. Ideally registration occurs before the search, but it can be done at any stage before data analysis.	No	We did not register the review
	3.2	Describe deviations from the registered aims and methods	NA	We did not register the review
	3.3	Justify deviations from the registered aims and methods	NA	We did not register the review

Eligibility criteria	4.1	Report the specific criteria used for including or excluding studies when screening titles and/or abstracts, and full texts, according to the aims of the systematic review (e.g. study design, taxa, data availability)	Yes	Methods
	4.2	Justify criteria, if necessary (i.e. not obvious from aims and scope)	NA	
Checklist item	**Sub-item number**	**Sub-item**	**Reported by authors?**	**Notes**
Finding studies	5.1	Define the type of search (e.g. comprehensive search, representative sample)	Yes	Methods
	5.2	State what sources of information were sought (e.g. published and unpublished studies, personal communications)	Yes	Methods
	5.3	Include, for each database searched, the exact search strings used, with keyword combinations and Boolean operators	Yes	Method
	5.4	Provide enough information to repeat the equivalent search (if possible), including the timespan covered (start and end dates)	Yes	Method
Study selection	6.1	Describe how studies were selected for inclusion at each stage of the screening process (e.g. use of decision trees, screening software)	Yes	Methods
	6.2	Report the number of people involved and how they contributed (e.g. independent parallel screening)	Yes	Methods (by name)
Data collection process	7.1	Describe where in the reports data were collected from (e.g. text or figures)	Yes	Both – but not described by paper but methods for both described
	7.2	Describe how data were collected (e.g. software used to digitize figures, external data sources)	Yes	Methods

	7.3	Describe moderator variables that were constructed from collected data (e.g. number of generations calculated from years and average generation time)	Yes	Methods
	7.4	Report how missing or ambiguous information was dealt with during data collection (e.g. authors of original studies were contacted for missing descriptive statistics, and/or effect sizes were calculated from test statistics)	Yes	Methods on effect sizes
	7.5	Report who collected data	Yes	Methods
	7.6	State the number of extractions that were checked for accuracy by co-authors	Yes	Methods
Checklist item	**Sub-item number**	**Sub-item**	**Reported by authors?**	**Notes**
Data items	8.1	Describe the key data sought from each study	Yes	Methods
	8.2	Describe items that do not appear in the main results, or which could not be extracted due to insufficient information	Yes	*Data extraction and effect size calculations* section
	8.3	Describe main assumptions or simplifications that were made (e.g. categorizing both 'length' and 'mass' as 'morphology')	Yes	Methods
	8.4	Describe the type of replication unit (e.g. individuals, broods, study sites)	No	Not recorded at study level in the paper
Assessment of individual study quality	9.1	Describe whether the quality of studies included in the systematic review or meta-analysis was assessed (e.g. blinded data collection, reporting quality, experimental *versus* observational)	No	We did not assess study quality, aside from SE and sample size from each study
	9.2	Describe how information about study quality was incorporated into analyses (e.g. meta-regression and/or sensitivity analysis)	Yes	Sensitivity analysis; Figure S5
	10.1	Describe effect size(s) used	Yes	Methods

Effect size measures	10.2	Provide a reference to the equation of each calculated effect size (e.g. standardized mean difference, log response ratio) and (if applicable) its sampling variance	Yes	Methods
	10.3	If no reference exists, derive the equations for each effect size and state the assumed sampling distribution(s)	Yes	Provided both references and explicit equations used, when possible
Missing data	11.1	Describe any steps taken to deal with missing data during analysis (e.g. imputation, complete case, subset analysis)	Yes	Methods, discussion on missing cells
	11.2	Justify the decisions made to deal with missing data	Yes	Discussion on missing cells
Meta-analytic model description	12.1	Describe the models used for synthesis of effect sizes	Yes	Methods
	12.2	The most common approach in ecology and evolution will be a random-effects model, often with a hierarchical/multilevel structure. If other types of models are chosen (e.g. common/fixed effects model, unweighted model), provide justification for this choice	NA	Hierarchical/multilevel model was used

Checklist item	Sub-item number	Sub-item	Reported by authors?	Notes
Software	13.1	Describe the statistical platform used for inference (e.g. *R*)	Yes	Methods
	13.2	Describe the packages used to run models	Yes	Methods and code
	13.3	Describe the functions used to run models	Yes	Methods and code
	13.4	Describe any arguments that differed from the default settings	NA	Defaults used
	13.5	Describe the version numbers of all software used	Yes	Methods

Non-independence	14.1	Describe the types of non-independence encountered (e.g. phylogenetic, spatial, multiple measurements over time)	Yes	Methods, multiple effect sizes from the same study
	14.2	Describe how non-independence has been handled	Yes	Methods, random effect of study
	14.3	Justify decisions made	Yes	Methods
Meta-regression and model selection	15.1	Provide a rationale for the inclusion of moderators (covariates) that were evaluated in meta-regression models	Yes	Methods
	15.2	Justify the number of parameters estimated in models, in relation to the number of effect sizes and studies (e.g. interaction terms were not included due to insufficient sample sizes)	Yes	Methods
	15.3	Describe any process of model selection	Yes	Methods
Publication bias and sensitivity analyses	16.1	Describe assessments of the risk of bias due to missing results (e.g. publication, time-lag, and taxonomic biases)	Yes	Methods and Figure S5
	16.2	Describe any steps taken to investigate the effects of such biases (if present)	Yes	Methods and Figure S5
	16.3	Describe any other analyses of robustness of the results, e.g. due to effect size choice, weighting or analytical model assumptions, inclusion or exclusion of subsets of the data, or the inclusion of alternative moderator variables in meta-regressions	Yes	Methods and Figure S5
Clarification of *post hoc* analyses	17.1	When hypotheses were formulated after data analysis, this should be acknowledged.	NA	No post hoc analyses to report

Checklist item	**Sub-item number**	**Sub-item**	**Reported by authors?**	**Notes**

Metadata, data, and code	18.1	Share metadata (i.e. data descriptions)	Yes	Data + code available on Dryad and GitHub
	18.2	Share data required to reproduce the results presented in the manuscript	Yes	Data + code available on Dryad and GitHub
	18.3	Share additional data, including information that was not presented in the manuscript (e.g. raw data used to calculate effect sizes, descriptions of where data were located in papers)	Yes	Data + code available on Dryad and GitHub
	18.4	Share analysis scripts (or, if a software package with graphical user interface (GUI) was used, then describe full model specification and fully specify choices)	Yes	Data + code available on Dryad and GitHub
Results of study selection process	19.1	Report the number of studies screened	Yes	Figure S1, PRISMA plot
	19.2	Report the number of studies excluded at each stage of screening	Yes	Figure S1, PRISMA plot
	19.3	Report brief reasons for exclusion from the full text stage	Yes	Figure S1, PRISMA plot
	19.4	Present a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)-like flowchart (www.prisma-statement.org).	Yes	Figure S1, PRISMA plot
Sample sizes and study characteristics	20.1	Report the number of studies and effect sizes for data included in meta-analyses	Yes	Main Text Figure 1, Figure S4
	20.2	Report the number of studies and effect sizes for subsets of data included in meta-regressions	Yes	Main Text Figure 1, Figure S4
	20.3	Provide a summary of key characteristics for reported outcomes (either in text or figures; e.g. one quarter of effect sizes	Yes	Main Text Figure 1, Figure S4

		reported for vertebrates and the rest invertebrates)		
	20.4	Provide a summary of limitations of included moderators (e.g. collinearity and overlap between moderators)	Yes	
	20.5	Provide a summary of characteristics related to individual study quality (risk of bias)	Yes	
Checklist item	**Sub-item number**	**Sub-item**	**Reported by authors?**	**Notes**
Meta-analysis	21.1	Provide a quantitative synthesis of results across studies, including estimates for the mean effect size, with confidence/credible intervals	Yes	
Heterogeneity	22.1	Report indicators of heterogeneity in the estimated effect (e.g. I^2, tau^2 and other variance components)	Yes	
Meta-regression	23.1	Provide estimates of meta-regression slopes (i.e. regression coefficients) and confidence/credible intervals	Yes	Data + code available on Dryad and GitHub
	23.2	Include estimates and confidence/credible intervals for all moderator variables that were assessed (i.e. complete reporting)	Yes	Data + code available on Dryad and GitHub
	23.3	Report interactions, if they were included	Yes	Data + code available on Dryad and GitHub
	23.4	Describe outcomes from model selection, if done (e.g. R2 and AIC)	Yes	Data + code available on Dryad and GitHub

Outcomes of publication bias and sensitivity analyses	24.1	Provide results for the assessments of the risks of bias (e.g. Egger's regression, funnel plots)	Yes	Methods and Figure S5
	24.2	Provide results for the robustness of the review's results (e.g. subgroup analyses, meta-regression of study quality, results from alternative methods of analysis, and temporal trends)	Yes	Methods and Figure S5
Discussion	25.1	Summarise the main findings in terms of the magnitude of effect	yes	
	25.2	Summarise the main findings in terms of the precision of effects (e.g. size of confidence intervals, statistical significance)	Yes	
	25.3	Summarise the main findings in terms of their heterogeneity	Yes	
	25.4	Summarise the main findings in terms of their biological/practical relevance	Yes	
	25.5	Compare results with previous reviews on the topic, if available	Yes	
	25.6	Consider limitations and their influence on the generality of conclusions, such as gaps in the available evidence (e.g. taxonomic and geographical research biases)	Yes	

Checklist item	Sub-item number	Sub-item	Reported by authors?	Notes
Contributions and funding	26.1	Provide names, affiliations, and funding sources of all co-authors	Yes	
	26.2	List the contributions of each co-author	Yes	
	26.3	Provide contact details for the corresponding author	Yes	
	26.4	Disclose any conflicts of interest	Yes	
References	27.1	Provide a reference list of all studies included in the systematic review or meta-analysis	Yes	Included as column in database