
Your submission to Parasites & Vectors - PARV-D-18-00429

18 messages

David Weetman <em@editorialmanager.com>
Reply-To: David Weetman <davidweetman151@gmail.com>
To: Michelle Evans <mvevans@uga.edu>

Thu, May 31, 2018 at 3:10 PM

CC: eric.penea@biomedcentral.com

PARV-D-18-00429

Carry-over effects of urban larval environments on the transmission potential of a mosquito-borne pathogen
Michelle V Evans; Justine C Shiau; Nicole Solano; Melinda A Brindley; John M Drake; Courtney C Murdock
Parasites & Vectors

Dear Ms. Evans,

Your manuscript "Carry-over effects of urban larval environments on the transmission potential of a mosquito-borne pathogen" (PARV-D-18-00429) has been assessed by our reviewers. Based on these reports, and my own assessment as Editor, I am pleased to inform you that it is potentially acceptable for publication in Parasites & Vectors, once you have carried out some essential revisions suggested by our reviewers.

Their reports, together with any other comments, are below. Please also take a moment to check our website at <https://parv.editorialmanager.com/> for any additional comments that were saved as attachments.

Once you have made the necessary corrections, please submit a revised manuscript online at:

<https://parv.editorialmanager.com/>

Your username is: mvevans

If you forgot your password, you can click the 'Send Login Details' link on the EM Login page at <https://parv.editorialmanager.com/>.

Please include a point-by-point response within the 'Response to Reviewers' box in the submission system and highlight (with 'tracked changes'/coloured/underlines/highlighted text) all changes made when revising the manuscript. Please ensure you describe additional experiments that were carried out and include a detailed rebuttal of any criticisms or requested revisions that you disagreed with. Please also ensure that your revised manuscript conforms to the journal style, which can be found in the Submission Guidelines on the journal homepage.

The due date for submitting the revised version of your article is 30 Jun 2018.

Please note, if your manuscript is accepted you will not be able to make any changes to the authors, or order of authors, of your manuscript once the editor has accepted your manuscript for publication. If you wish to make any changes to authorship before you resubmit your revisions, please reply to this email and ask for a 'Request for change in authorship' form which should be completed by all authors (including those to be removed) and returned to this email address. Please ensure that any changes in authorship fulfil the criteria for authorship as outlined in BioMed Central's editorial policies (<http://www.biomedcentral.com/about/editorialpolicies#authorship>).

Once you have completed and returned the form, your request will be considered and you will be advised whether the requested changes will be allowed.

By resubmitting your manuscript you confirm that all author details on the revised version are correct, that all authors have agreed to authorship and order of authorship for this manuscript and that all authors have the appropriate permissions and rights to the reported data.

Please be aware that we may investigate, or ask your institute to investigate, any unauthorised attempts to change authorship or discrepancies in authorship between the submitted and revised versions of your manuscript.

We look forward to receiving your revised manuscript soon.

Best wishes,

David

David Weetman

Parasites & Vectors

<https://parasitesandvectors.biomedcentral.com/>

Reviewer reports:

Reviewer #1: Evans et al present an interesting preliminary study on the carry-over effects of urban larval environment on the transmission potential of *Aedes albopictus*.

The study is quite novel and interesting. The the study design and the statistical analysis seem adequate to give reliable estimate of the subject. The study suffers of the typical difficulties of dealing with mosquito field collection, but authors seem to have adequately account for that. However, I suggest authors to further stress the limitation of the study in the discussion. In my opinion the number of field collections is a bit on the short-hand for the estimation of site-level parameter within the proposed statistical methods. Nevertheless, I find the study reasonably solid and interesting as a whole. However, there are some issues in the manuscript that should be addressed or modified before being accepted for publication.

First, some general comments.

The authors should clearly state the number of females tested. In the text, the initial number of larvae and the overall number of mosquito is reported. However, I completely missed (if present) the number of emerged females which is the relevant quantity for growth rate and should comply with the assumption of the N_0 parameter of the model. Moreover, as they honestly reported (e.g. line 293), for some analysis the sample size was low (also considering the number of parameter estimated in the models i.e. 2 qualitative covariates (2 and 3 levels) and their interaction. I suggest authors include in the discussion section a paragraph addressing the difficulties of obtaining appropriate sample size and that in the conclusion section, the results on the carry-over effect on vectorial capacity should be taken as a first indication that it is needed to take in account site-specific characteristic that could impact survival, development and carry-over effect. Moreover, only dengue virus-2 was tested and maybe it should be explicitly indicated in the title rather than the more general "a mosquito-borne pathogen". This should be highlighted also in the discussion and conclusion section

Second, some specific comments

Line 94. In-text authors used "miles", in the cited figure "kilometres", please unify. Also throughout the text authors use unit (e.g.: "feet" line 104) that are not unit of the International System of Units (SI). I would suggest to use SI units or at least include the equivalent unit in brackets to help the reader (e.g. line 104 ..at approximately 3 feet (0.9 m) ...)

Line 157/163/172, I suggest adding "Equation 1/2/3" near the equation

Line 158 Why did you assume $N_0 = 50\%$ and instead of using the observed proportion? Please explain

Table 1 and line 183. Please clearly state what $b(T)$ and $c(T)$ are and give a short explanation on why your measure (the proportion of infectious mosquitoes per site) should be considered an acceptable estimate. Also, Table 1 should include some summary statistics for each parameter, (e.g. the mean and the range or the mean and the 95% interval) to help the reader understand the variation in each parameter and also help understand and compare some estimate (e.g. egg-to-adult survival) to other settings.

Line 195 Please specify the distribution used. I supposed that being a generalized linear mixed model that it is not the Normal distribution.

Line 202 Could you please further address the reason why you switched to two-way ANOVA rather than analysing vectorial capacity by regression modelling?

Line 210. I failed to understand over which period the mean temperature was calculated. I think the reader would appreciate if the authors include the period over which the mean was calculated. In the following sentence they stated "over the season", but this refer to the sampling period or all the summer and all the fall?

Line 221 you included in the methods section that model validation (checking residuals) was carried out but then you did not include a short statement indicating that there was not any violation of model statistical assumptions. I assumed everything was reasonably fine, can you confirm?

Line 222 include R version and cite both R and lme4 accordingly

I appreciated that in the result section authors reported the mean and the standard error for all effects. However, I will suggest some improvements. First, the notation SE is not used consistently in the text (e.g. line 232 used SE, line 248 used, line 290 SE at the end). Second, when presenting percentage (%) as in line 240-241 I suggest authors to show 95% confidence intervals rather than SE because the latter could be misleading. As an example, I will expect in line 241 that that the 95% confidence interval of the fall egg-survival is $0.297 \pm 1.96 \cdot 0.160$ which results in negative values. Please compute and report appropriate confidence interval for proportion (you will find extensively example using lme4)

Figure 3 is not clear. The points representing site-level means and vertical bands are not visible. Moreover, it is not clear if the points would be the mean of the 4 trays per site or the mean of the 3 sites within the selected landscape

(rural/suburban/urban)

Reviewer #2: 1. It is necessary to review the whole article is in accordance with the regulations of the International System of Units, since there are some errors in the article, including the tables, where they do not mention what type of system are using. It must be specified in tables that are °C.

2. In line 104 it is mentioned as "feet" measurement unit, but it must be changed to meters.

3. On line 94, "miles" is mentioned, it must be changed to kilometers.

4. Sometimes it uses "minutes" and other "min". standardize Lines 105, 120, 143, 150

5. The value of a quantity is written as a number followed by a space. This rule explicitly includes the percent sign (%) and the symbol for degrees of temperature (°C). Exceptions are the symbols for plane angular degrees, minutes, and seconds (°, ', and "), which are placed immediately after the number with no intervening space.

6. The article does not mention the safety conditions in the insectary for the management of mosquitoes infected with DENV-2. Is there a security protocol?

7. It is not clear whether the strain of the mosquitoes used was from the field or came from a colony previously established in the laboratory. Which generation was used, geographical origin. If it is a strain established in the laboratory, are there standardized procedures for reproduction, mainly for the feeds of females?

If improvements to the English language within your manuscript have been requested, you should have your manuscript reviewed by someone who is fluent in English. If you would like professional help in revising this manuscript, you can use any reputable English language editing service. We can recommend our affiliates Nature Research Editing Service (%CUSTOM_NATURE_EDITING_SERVICE_URL%) and American Journal Experts (%CUSTOM_AMERICAN_JOURNAL_EXP_URL%) for help with English usage. Please note that use of an editing service is neither a requirement nor a guarantee of publication. Free assistance is available from our English language tutorial (%CUSTOM_SPRINGER_ENG_LANG_TUTORIAL_URL%) and our Writing resources (%CUSTOM_BMC_WRITING_RESOURCES_URL%). These cover common mistakes that occur when writing in English.

Michelle Evans <mvevans@uga.edu>

Fri, Jun 1, 2018 at 8:29 AM

To: "John M. Drake" <jdrake@uga.edu>, Courtney Murdock <cmurdock@uga.edu>

John and Courtney,

I've heard back from reviewers for the carry-over effects manuscript that I submitted to Parasites and Vectors.

Most of the comments are pretty straight-forward and I think will genuinely improve the manuscript. I'm currently working through revisions on the YF manuscript, but will get to these sometime in the next two weeks and send along a draft of the responses to you both.

We also have several other co-authors on this manuscript, including another faculty. Should I send this to them as well and request edits for the response letter? Not sure of the norms in this situation.

Best,
Michelle

[Quoted text hidden]

--

Michelle Evans
PhD Student, Integrative Conservation and Ecology
University of Georgia, Odum School of Ecology
mvevans@uga.edu | mvevans89.github.io

John M. Drake <jdrake@uga.edu>

Fri, Jun 1, 2018 at 9:48 AM

To: Michelle V Evans <mvevans@uga.edu>

Cc: Courtney Murdock <cmurdock@uga.edu>

I will defer to Courtney as the senior author, but I would say it is a matter of courtesy to send the reviews to all the authors with a note along the lines of: "Here are the reviews of our paper. I will take the lead on revisions and crafting a response and will send around to everyone in due course. Meanwhile any thoughts/suggestions are welcome."

John

On Fri, Jun 1, 2018 at 8:29 AM, Michelle V Evans <mvevans@uga.edu> wrote:

John and Courtney,

I've heard back from reviewers for the carry-over effects manuscript that I submitted to Parasites and Vectors.

Most of the comments are pretty straight-forward and I think will genuinely improve the manuscript. I'm currently working through revisions on the YF manuscript, but will get to these sometime in the next two weeks and send along a draft of the responses to you both.

We also have several other co-authors on this manuscript, including another faculty. Should I send this to them as well and request edits for the response letter? Not sure of the norms in this situation.

Best,
Michelle

----- Forwarded message -----

From: **David Weetman** <em@editorialmanager.com>

Date: Thu, May 31, 2018 at 3:10 PM

Subject: Your submission to Parasites & Vectors - PARV-D-18-00429

To: Michelle Evans <mvevans@uga.edu>

[Quoted text hidden]

--

John M. Drake, Ph.D.

Associate Dean of Academic Affairs & Professor, [Odum School of Ecology](#), [University of Georgia](#)
Director, [Center for the Ecology of Infectious Diseases](#) & [Population Biology of Infectious Diseases REU Site](#)

phone: 706.818.4452

fax: 706.542.4819

email: jdrake@uga.edu

skype: john.drake.uga

lab: <http://daphnia.ecology.uga.edu/drakelab>

--

John M. Drake, Ph.D.

Professor, [Odum School of Ecology](#), [University of Georgia](#)
Director, [Center for the Ecology of Infectious Diseases](#) &
[Population Biology of Infectious Diseases REU Site](#)

phone: 706.818.4452

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email: jdrake@uga.edu

skype: john.drake.uga

lab: <http://daphnia.ecology.uga.edu/drakelab>

Courtney Murdock <cmurdock@uga.edu>

Fri, Jun 1, 2018 at 12:07 PM

To: John M Drake <jdrake@uga.edu>, Michelle V Evans <mvevans@uga.edu>

Hi Michelle,

Yes, I agree with John on this point. I would send along. These are great and fairly straight forward. Shouldn't take too long to address. I know you have the yellow fever ms to do and I am traveling so

won't be able to weigh in until early next week, but it would be great if we could try to submit this soon, as I will be resubmitting a grant for a July 5 deadline and it would be really nice to say that this is accepted for publication.

Thanks, and good work!

Courtney

From: john@drakeresearchlab.com <john@drakeresearchlab.com> on behalf of John M. Drake <jdrake@uga.edu>
Sent: Friday, June 1, 2018 9:48:35 AM
To: Michelle V Evans
Cc: Courtney Murdock
Subject: Re: Your submission to Parasites & Vectors - PARV-D-18-00429

[Quoted text hidden]

Michelle Evans <mvevans@uga.edu> Fri, Jun 1, 2018 at 12:11 PM
To: Melinda Brindley <mbrindle@uga.edu>, "John M. Drake" <jdrake@uga.edu>, Courtney Murdock <cmurdock@uga.edu>, Nicole Solano <nsolano@uga.edu>, Justine C Shiau <Justine.Shiaue@uga.edu>

Hello co-authors,

We've just gotten back the reviews for our manuscript on carry-over effects and dengue that was submitted to Parasites and Vectors (see below). Minor revision were requested and should be pretty straightforward to implement.

I will take the lead on drafting a response and revising the ms, and plan on sending both out to co-authors for edits in the next few weeks. In the meantime, if you have any comments or suggestions, please send them my way.

Best,
Michelle

----- Forwarded message -----
From: David Weetman <em@editorialmanager.com>
Date: Thu, May 31, 2018 at 3:10 PM
Subject: Your submission to Parasites & Vectors - PARV-D-18-00429
To: Michelle Evans <mvevans@uga.edu>

[Quoted text hidden]

--
Michelle Evans
PhD Student, Integrative Conservation and Ecology
University of Georgia, Odum School of Ecology
mvevans@uga.edu | [mvevans89.github.io](https://github.com/mvevans89)

Melinda Brindley <mbrindle@uga.edu>
To: Michelle V Evans <mvevans@uga.edu>

Fri, Jun 1, 2018 at 12:42 PM

Congrats! Looks pretty straight forward.

Melinda Brindley

From: Michelle V Evans

Sent: Friday, June 01, 2018 12:12 PM

To: Melinda Brindley <mbrindle@uga.edu>; John M Drake <jdrake@uga.edu>; Courtney Murdock <cmurdock@uga.edu>; Nicole Solano <nsolano@uga.edu>; Justine C Shiau <Justine.Shiiau@uga.edu>

Subject: Fwd: Your submission to Parasites & Vectors - PARV-D-18-00429

[Quoted text hidden]

Michelle Evans <mvevans@uga.edu>

Tue, Jun 5, 2018 at 7:20 PM

To: Michelle Evans <mvevans@uga.edu>

Cc: Melinda Brindley <mbrindle@uga.edu>, "John M. Drake" <jdrake@uga.edu>, Courtney Murdock <cmurdock@uga.edu>, Nicole Solano <nsolano@uga.edu>, Justine C Shiau <Justine.Shiiau@uga.edu>

Hi all,

Attached is a copy of the revised manuscript. Please take a look and let me know if you have additional comments or edits. Because I need to track changes in the document for the publisher, it may be easier if you just email me the edits with the line numbers as I've been having issues with track changes in Word and don't want to lose the ones I have.

The response to reviewers is currently in a google doc: https://docs.google.com/document/d/17ck2qsU_G-2MGyOIPxH54nCKm10JPUjxy8uEUoufpaM/edit. Feel free to edit this as necessary. Some line numbers may be slightly off but I'm waiting to correct them until all corrections are in the manuscript.

I'd like to get this resubmitted as soon as possible, so please try and have these to me by **next Monday (June 11)**, if possible.

Thanks,
Michelle

[Quoted text hidden]



Evans_BMC_Revise.docx

104K

John M. Drake <john@drakeresearchlab.com>

Tue, Jun 5, 2018 at 8:25 PM

To: Michelle V Evans <mvevans@uga.edu>

Cc: cmurdock@uga.edu

Hi Michelle,

This looks good. A few comments

- missing space after sucrose
- double period after saliva
- I would delete "and is an accurate approximation" and remainder of the sentence (there is already a typo - additionally, who is to say it is accurate? What evidence?)
- is GLZMM standard? I am more familiar with GLMM
- strictly speaking, we don't "meet assumptions of normality" but "no evidence that data failed to meet assumptions of normality" (I'm splitting hairs here)
- suggest "nine was the maximum number of sites"

Best of luck !

John

John M. Drake

Odum School of Ecology
University of Georgia

On Jun 5, 2018, at 7:20 PM, Michelle V Evans <mvevans@uga.edu> wrote:

Hi all,

Attached is a copy of the revised manuscript. Please take a look and let me know if you have additional comments or edits. Because I need to track changes in the document for the publisher, it may be easier if you just email me the edits with the line numbers as I've been having issues with track changes in Word and don't want to lose the ones I have.

The response to reviewers is currently in a google doc: https://docs.google.com/document/d/17ck2qsU_G-2MGyOIPxH54nCKm10JPUjxy8uEUoufpaM/edit. Feel free to edit this as necessary. Some line numbers may be slightly off but I'm waiting to correct them until all corrections are in the manuscript.

I'd like to get this resubmitted as soon as possible, so please try and have these to me by **next Monday (June 11)**, if possible.

Thanks,
Michelle

On Fri, Jun 1, 2018 at 12:11 PM, Michelle Evans <mvevans@uga.edu> wrote:

[Quoted text hidden]

[Quoted text hidden]

<Evans_BMC_Revised.docx>

Melinda Brindley <mbrindle@uga.edu>
To: Michelle V Evans <mvevans@uga.edu>

Wed, Jun 6, 2018 at 10:03 AM

Hi Michelle,

Can you add author affiliation # 6(Center for Vaccines and Immunology, University of Georgia, Athens, GA, USA) to my name

Line 162 change ASL2 to ACL2 (you also may want to add the biosafety protocol number from UGA IBC)

Everything else looks good or is out of my expertise to comment.

Good luck,

Melinda

From: Michelle V Evans

Sent: Tuesday, June 05, 2018 7:20 PM

To: Michelle V Evans <mvevans@uga.edu>

Cc: Melinda Brindley <mbrindle@uga.edu>; John M Drake <jdrake@uga.edu>; Courtney Murdock <cmurdock@uga.edu>; Nicole Solano <nsolano@uga.edu>; Justine C Shiau <Justine.Shiiau@uga.edu>

Subject: Re: Your submission to Parasites & Vectors - PARV-D-18-00429

[Quoted text hidden]

Courtney Murdock <cmurdock@uga.edu>
To: "John M. Drake" <john@drakeresearchlab.com>, Michelle V Evans <mvevans@uga.edu>

Wed, Jun 6, 2018 at 3:40 PM

Hi Michelle,

I agree with John's edits and have attached some of mine in the ms and made comments on the online response to reviewers' comments.

Thanks for the quick turn around time!

Courtney

From: John M. Drake <john@drakeresearchlab.com>
Sent: Tuesday, June 5, 2018 8:25:38 PM
To: Michelle V Evans
Cc: Courtney Murdock
Subject: Re: Your submission to Parasites & Vectors - PARV-D-18-00429

[Quoted text hidden]

 **Evans_Parasites&Vectors_Revised_CCM.docx**
106K

Michelle Evans <mvevans@uga.edu>
To: Courtney Murdock <cmurdock@uga.edu>

Wed, Jun 6, 2018 at 6:33 PM

Thanks Courtney!

One more quick question:

Do you have more information on where our laboratory colony is from? The information included in my manuscript is based on a manuscript from Kerri Coon and where her laboratory colony was from, but they may have more than one Ae. albopictus colony from the US.

Thanks,
Michelle

[Quoted text hidden]

Courtney Murdock <cmurdock@uga.edu>
To: Michelle V Evans <mvevans@uga.edu>

Wed, Jun 6, 2018 at 8:26 PM

I actually emailed Mike Strand about this one today...I am waiting to hear back. I'll let you know once I hear.

Court

From: Michelle V Evans
Sent: Wednesday, June 6, 2018 6:33:17 PM
To: Courtney Murdock

[Quoted text hidden]

[Quoted text hidden]

Michelle Evans <mvevans@uga.edu>
To: Michelle Evans <mvevans@uga.edu>
Cc: Nicole Solano <nsolano@uga.edu>, Justine C Shiau <Justine.Shiiau@uga.edu>

Thu, Jun 7, 2018 at 10:47 AM

Hello non-faculty co-authors!

I just wanted to send you this e-mail specifically in case you thought I don't care about your comments. I do! Also, if you don't have any comments or don't think you'll have time to look over this before Monday, what I do need is your approval of the manuscript (for publishing requirements). You can look over the changes from last time and make sure you're cool with them, and then just let me know. Courtney wants to be able to include this on a grant she is submitting, so that is why we're trying to move forward so quickly.

Thanks,
Michelle

[Quoted text hidden]

Justine Shiau <Justine.Shiau@uga.edu>
To: Michelle Evans <mvevans@uga.edu>

Thu, Jun 7, 2018 at 12:07 PM

Hi Michelle,

What do I to give you the approval? I will read through the changes by tomorrow, I don't know how helpful I will be though. :)

Thanks!

Justine

[Quoted text hidden]

Michelle Evans <mvevans@uga.edu>
To: Justine Shiau <Justine.Shiau@uga.edu>
Cc: Michelle Evans <mvevans@uga.edu>

Thu, Jun 7, 2018 at 12:09 PM

Just say you approve really. I hadn't heard anything and didn't feel comfortable checking the box that says all authors have read and approve this manuscript if I hadn't talked to you.

[Quoted text hidden]

Justine Shiau <Justine.Shiau@uga.edu>
To: Michelle Evans <mvevans@uga.edu>

Thu, Jun 7, 2018 at 12:40 PM

You have my approval (you always have)! :)

Justine

[Quoted text hidden]

Nicole Solano <nsolano@uga.edu>
To: Michelle V Evans <mvevans@uga.edu>
Cc: Justine C Shiau <Justine.Shiau@uga.edu>

Fri, Jun 8, 2018 at 2:48 PM

Hey Michelle,

Great job! I don't have any comments to add. I approve of the manuscript draft you have sent.

Thanks,

Nikki Solano

Ph.D. Student

IDEAS Program

Odum School of Ecology

University of Georgia

From: Michelle V Evans
Sent: Thursday, June 7, 2018 10:47:27 AM
To: Michelle V Evans
Cc: Nicole Solano; Justine C Shiau
Subject: Re: Your submission to Parasites & Vectors - PARV-D-18-00429

[Quoted text hidden]

Michelle Evans <mvevans@uga.edu>
To: Nicole Solano <nsolano@uga.edu>

Fri, Jun 8, 2018 at 5:03 PM

Awesome. Thanks!
[Quoted text hidden]