

Dear Diego A. Hartasánchez,

Thank you very much for your last comments. The whole manuscript has been carefully checked for English, spelling and grammar mistakes. All your comments were successfully addressed (see below).

All supplementary files have now been deposited in Zenodo and are available at <https://doi.org/10.5281/zenodo.14093547> (now indicated in the data availability section). A file describing the statistical analysis code associated with Fig 5 (mixed effect linear model) has also been added to the Zenodo archive. All other analyses are supported by basic statistical tests which we believe are sufficiently described in the manuscript.

The revised manuscript and supplementary files have been deposited on bioRxiv under BIORXIV/2024/587871 – V5 version (<https://doi.org/10.1101/2024.04.03.587871>)

The pdf of this ‘V5 revised version’ can be downloaded at <https://www.biorxiv.org/content/10.1101/2024.04.03.587871v5>

All the supplementary materials can be downloaded at <https://www.biorxiv.org/content/10.1101/2024.04.03.587871v5.supplementary-material> and at <https://doi.org/10.5281/zenodo.14093547>

Please also note that the BioRxiv V5 version has figures embedded within the manuscript. High resolution images are available upon request for further publication in PCI Journal.

We sincerely hope that these last changes will make this study suitable for your recommendation at PCI Evolutionary Biology.

Best wishes,

Jean-Philippe DAVID, on behalf of all co-authors.

Minor issues

Line 25: extra “and”

→ corrected

Line 100: please try to be consistent throughout the text in the use of mathematical signs and units. There is sometimes a space after “>”, and sometimes there is none (e.g. line 631). There is sometimes a space between number and unit (e.g. line 667) and sometimes there is none (e.g. line 668).

→ there is now always a space between the number and the sign/unit through the whole MS.

Line 104: please be consistent with the use of “kdr” vs. “Kdr” mutations

→ the spelling ‘*Kdr* mutations’ has been retained for the whole MS

Line 105 and 372: there appears to be a double space. Please check the entire manuscript.

→ all double spaces have been removed.

Line 119: “reverse genetics”?

→ corrected

Line 128: “insectaries”?

→ corrected

Line 145: I would suggest describing the 20% increase by saying from x% to y% to avoid the potential misunderstanding that the value increased in 20% of the previous value (i.e. from 5% to 6%)

→ corrected

Line 145: please be consistent with the use of “p-value” vs. “P value”

→ the spelling ‘P value’ has been retained for the whole MS

Line 196: please use “vs.” instead of “Vs” for “versus” throughout the text and be consistent with the use of italics

→ corrected

Line 180 and 206: “fold” instead of “folds”. Please be consistent with the use of “2 fold increase” vs. “2-fold increase” as in line 267

→ the spelling ‘2 fold’ has been retained for the whole MS

Line 229: “expresses”

→ corrected

Line 298: please avoid collapsing the text onto Figure 4. Also, please explain what “a”, “b”, and “c” mean in Figure 4 top right

→ the significance of letters is already explained in figure caption.

Line 310: “genes”

→ corrected

Line 351: “led”

→ corrected

Line 379: “through”

→ the term ‘though’ was correct

Line 358: “was”

→ corrected

Line 514: “Eppendorf”

→ corrected

Line 574: “manufacturer” or “manufacturer’s”

→ corrected

Line 587: 3’. I checked with several pdf viewers and I see a question mark inside a box symbol instead of the ’.

→ corrected

Line 609: “Oct.”

→ corrected

Line 659: “et al.”. Please check for consistency across the text.

→ corrected

Line 687: “Acknowledgements”

→ corrected

Line 696: “Author” or “Authors”

→ corrected

References: As for the case of 3’, there are multiple instances of this question mark sign, in particular (but not only) for the “-” in between page numbers. Potentially this could be solved by replacing “--” by “-”. Please check all references.

→ This problem has been solved and no question mark should remain in the references section.