Culex saltanensis and Culex interfor (Diptera: Culicidae) are susceptible and competent to transmit St. Louis encephalitis virus (Flavivirus: Flaviviridae) in central Argentina

Beranek MD, Quaglia AI, Peralta GC, Flores FS, Stein M, Diaz LA, Almirón WR and Contigiani MS

Anna Cohuet, 2019-11-14 11:53
Round #2

PCI entomology: revision requested

Dear Dr Beranek and co-authors I acknowledge the improvement of the revised manuscript according to the suggestions of the reviewers. However, I notice that the main comment from the first reviewer was not fully considered. Indeed, the first reviewer highlighted weakness in the statistical analyses. Each of the mosquito species was fed on a different chick individual for exposure to virus. This means that mosquito species and viremia are confounded and interpreting the levels of infection/dissemination/transmission between species as differences of vector competences does not make sense. Only the ratio between the 3 steps (infection/dissemination/transmission) could be compared. However, the sample size being very limited I do not recommend it. The manuscript reports for the first time experimental observations of the susceptibility of Culex interfor and Culex saltanensis for SLEV, from ingestion to release of viral particles in the saliva. This deserves attention by itself. Comparing the vectorial competences between species is not feasible with the current data, which is fine. I therefore strongly recommend to present the data without extrapolation on competence levels. The GLM analysis should be removed and the text and figure changed accordingly. Also, I strongly recommend the revised version to be corrected by an native English speaker. The new version of the discussion includes very long sentences; some of them are difficult to understand. Please make sure that the row data are available to readers through an open data repository.

Author’s Reply: changed as suggested.
We removed GLM analysis and figure were modified.