Reviewer Report

Title: "De novo transcriptome assemblies of four xylem sap-feeding insects"

Version: Original Submission **Date:** 10/4/2016

Reviewer name: Sebastian Eves-van den Akke

Reviewer Comments to Author:

I recommend that manuscript GIGA-D-16-00077 entitled, "De novo transcriptome assemblies of four xylem sap-feeding insects" is accepted for publication following minor revisions. All the data associated with the submission appear to be available on the FTP, and the raw data associated with the manuscript is apparently uploaded to the SRA, although not yet available for inspection. The approaches seem technically sound, and I have only minor comments - page and line numbers refer to those in the pdf. Minor comments: Page 4 line 90. Am I correct in reading that total RNA was sequenced, or was poly A pull down part of the library preparation step. Regardless, should the authors comment on the assembly of endosymbiont reads within the dataset where appropriate? Page 5 line 106: Could the settings used for transdecoder be provided (whether or not PFAM domain information was included and what the CDHIT threshold was set to if not default). Given that all libraries were normalised to 50x coverage before assembly, is it necessary to comment on why the number of reads that assembled in G. actropunctata transcripts is much higher than the other species, while the size of the assembly (by any metric provided in table 2) is not? To be included in the methods, was transrate used to triage the transcripts (and thus help give rise to the "final" assembly, or simply asses their quality. If the later, can these data also be provided?

Level of Interest

Please indicate how interesting you found the manuscript: An article of importance in its field

Quality of Written English

Please indicate the quality of language in the manuscript: Acceptable

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