

Reviewer Report

Title: Access to RNA seq data from 1,173 green plant species: the 1000 Plant Transcriptomes Initiative (1KP)

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Reviewer Comments to Author:

In this data note, the authors illuminate the dataset which can be used to study 'Evolutionary Complexity in Green Plants' using phylogenomics. This dataset includes 1342 transcriptomes. The authors provide the processes of sequencing, assembly, protein translation and validation.

Comments,

- 1, phylogenomic analyses need alignments of orthologous genes, but this data note didn't provide them. Can this dataset be used in phylogenomic analysis?
- 2, please explain the tables in Line109, 282 and 317.
- 3, for many species selected here, their transcriptomes had been sequenced before. Why don't use these pre-existing data? How to determine the superiority of the data provided in this paper?
- 4, evolutionary complexity includes many aspects, including variation in chromosomal structures and the numbers. Can the transcriptomic sequences capture the substantial phylogenomic signals of so many plants? Why?

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