Reviewer Report

Title: Pseudomolecule-level assembly of the Chinese oil tree yellowhorn (Xanthoceras sorbifolium)

genome

Version: Original Submission Date: 11/30/2018

Reviewer name: Pedro Martinez Garcia

Reviewer Comments to Author:

Thank you for the opportunity to review this Data Note for GigaScience. The MS GICA-D-18-00337 entitled "Reference genome of a Chinese yellowhorn Xanthoceras sorbifolium provides insights into its conservation of original chromosomes" reports on a study aiming to present a high quality genome and to determine the evolutionary history of this species. The presence of whole genome duplication is not detected and the genome structure has received a detailed explanation.

That said, I would like to ask if does the accumulation of LTR-retrotransposons enriched with specific protein coding genes?. Also, I would like to know (if it is possible, I think so) which category is younger? Copia or Gypsy?.

I think a better description about K-mer analysis must be provided, in addition, to cite the paper Marçais et al. Also some minor changes must be addressed before this MS can be accepted. Some minor edits

Page 3 Line 33: change the word Alzheimerand

Page 6 Line 24: please check the N50 number: 1.39Mb or 1.04Mb, please clarify it.

Page 12, Line1: please add a short comment about MCScan's representation, circular shape or circle plot.

Page 12 Line 57, please improve the sentence "as mentioned above analysis of genes ...,", something as: "as mentioned before,"

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