

Reviewer Report

Title: Single-molecule sequencing and optical mapping yields an improved genome of woodland strawberry (*Fragaria vesca*) with chromosome-scale contiguity

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Reviewer Comments to Author:

1. This manuscript provides a beautiful example of lots of existing short-read based genome sequences that need significant improvement so that more authentic biology can be revealed from studies and analysis based on the reference genome sequences. 2. The cost for 80X Pacbio sequence reads, and the optical maps generated by BioNanoGenomic systems could be a hurdle for lots of genome sequencing projects to gain all these kinds of datasets, therefore, new affordable technologies need to be in place in order to improve the quality for all genome sequencing projects. 3. Excited to see that more than 10% new sequences and genes were detected from new data and new assembly. 4. It is very interesting to see that how different genome assemblies affect the profiles of methylation and gene expression, and their effect on the biological explanation of the experiment result.

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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