

Review of: "Comparing YOLOv8 and Mask RCNN for object segmentation in complex orchard environments"

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Potential competing interests: No potential competing interests to declare.

The authors have collected datasets from two stages of plant growth and compared the instance segmentation performance of YOLOv8 and Mask R-CNN on these datasets. The results indicate that YOLOv8 outperforms Mask R-CNN. The experimental design is robust, and the narration is accurate. Although no new model has been proposed, the research still has reference significance for the study and implementation of smart agriculture. Therefore, I suggest a Major Revision for the paper.

Major issues:

Mask R-CNN was proposed in 2017, while YOLOv8 was proposed in 2023. There is a significant time difference between the two models. I suggest comparing YOLOv8 with the latest two-stage models. Additionally, it would be beneficial to compare YOLOv8 with more instance segmentation models.