

## 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 paper compares Yolov8 and Mask R-CNN models for instance segmentation under varying orchard environments across two datasets.

Point 1: Please indicate the motivation and innovation of your research.

Point 2: Please indicate the distance between the camera and the target.

**Point 3:** Please add the total images ofter augmentation.

Point 4: Please improve the quality of your figures and tables.

Point 5: Please indicate the model ( large, medium...) of Yolov8 used in this study

Point 6: Please check how to annotate equation in a paper and correct it

Point 7: Please can you add the mAP with IoU of 0.5 to 0.95 in your comparison table.

**Point 8:** In this study you are comparing just two algrithm on your datasets, which is the criteria of choosing those two algorithms? Please can you add one or two deep learning models (one and two stage) on your datasets and add it in your discussion part.

**Point 9 :** Your research is dealing in orchard environments which has different conditions ( lgthtning, shading, occluded...). Please provide a table comparing the deep learning models under those different conditions.