

ABSTRACT**A SYSTEM FOR ASSESSING FRUIT BUNCH QUALITY**

5 The present invention discloses a system for assessing fruit bunch quality, the system comprising an image capturing module (100), for capturing images of one or more fruit bunches; a processing module (200), for processing the captured images, the processing module (200) comprising a calibration module (300), for performing pixel calibration within a field of view of the captured images; an object detection module (400), for
10 generating at least one bounding box on the captured images, such that each bounding box contains one or more regions of interest on the fruit bunch; and a segmentation module (800), for generating at least one polygon on the captured images, such that each polygon contains one or more regions of interest on the fruit bunch; wherein the region of interests within the bounding boxes corresponds to further characteristics of
15 the fruit bunch, including ripeness, damage type, or cleanliness of the fruit bunch, whereas the regions of interests within the polygons corresponds to physical characteristics of the fruit bunch including a size of the fruit bunch and a type of the fruit bunch, in which information from both of the object detection module (400) and the segmentation module (800) are collectively assess and evaluated to be output
20 thereafter. The present invention also discloses a method for assessing fruit bunch quality based on said system.

*(The most illustrative figure: **FIG. 1**)*