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(57) Abstract :

An automated fruits segregating device for trees comprising of a pair of hollow cylindrical bodies 1,2 arranged concentrically and divided into two halves 3,4, motorized hinges 12 is integrated between both halves 3,4 that provides opening and closing of bodies 1,2, artificial intelligence-based module 5 in synchronization with an ultrasonic sensor is mounted on the body 2 for detecting falling of fruits, thickness of trunk and density of branches, multiple drilling unit 6 is installed at inner periphery of the halves 3,4 for positioning bodies 1,2 around the trunk, multiple trapezoidal flaps 7 are installed on the one of halves 3,4 via a motorized slider 11 for creating a funnel shaped structure for collecting fruits, multiple chambers 8 are crafted in between both halves 3,4 for guiding fallen fruits within chamber 9, set of sensor is installed on the each chamber 8 for detecting odour and ripeness of stored fruit.

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