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(57) Abstract :

An automated plants uprooting device comprises of a cuboidal platform 1 placed on surface, multiple wheels 2 are attached with the platform 1 for movement of platform 1, a touch interactive display panel 3 for detecting location of plants, an artificial intelligence imaging module 4 in synchronization with an ultrasonic sensor for detecting height of plant, a pair of telescopic semicircular plates 5 to get penetrate in soil, a set of tactile and a moisture sensors for determining hardness, moisture content present in soil, an electronic nozzle for dispensing water over soil for penetration of soil, a cylindrical body 6 configured with a primary robotic arm 7 for placing body 6 over plant to wrapping a plastic strap, a roller 8 wrapped with strap to translate over slider 9 for wrapping of root, and a secondary robotic arm 10 to pick and place wrapped plants within a storage chamber 11.

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