

IMAGE PROCESSING METHOD FOR ATOMIZATION OF SUGAR CANE PLANTER

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Abstract

Sugarcane planting with traditional methods is costly, time consuming, it needs great human force, more numbers of sugarcane stalk. Also because of unskilled labor stressed or diseased bud may get planted. To solve this problem we designed algorithm for atomization of sugarcane planting machine using image processing. It detects the nodes efficiently and locates the cut point for stalk cutting. It reject to cut the stalk if sugarcane suffered by Stress or disease like Pokkehha Boeng, Red Rot. In this research paper we are using the Sobel and horizontal mask for edge detection for node identification and vertical mask for to identify the crack on the stalk if any. The success rate of normal node identification in sugarcane stalk by mentioned algorithm is 100 % and the defective node identification is 93.3%.

Keywords : Digital image; Edge detection; Image processing; Sugarcane node; Segmentation; Water stress.

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