



Precision Fertilizer for Sugarcane cultivation using Image Processing Technique

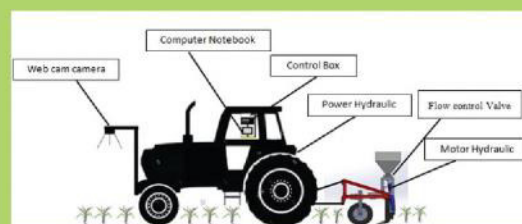


Product Feature

- This inventor is design and development of the precision fertilizer to apply of precision agricultural technology for the fertilizer management in sugarcane cultivation.
- The main goal is precisely applied the fertilizer to the sugarcane cultivation using image processing techniques.
- The principle is to use the image processing for obtaining the qualitative and quantitative image data of each sugarcane, quantitative of each sugarcane data are then created and analyzed for location and the number of fertilizer that suitable for each sugarcane in cultivation field.
- This research of precision fertilizer is able to reduce fertilizer loss and it reduces the cost of sugarcane production.
- The performance test of precision fertilizer through image processing using the educational indicators statistical value of height and the statistics the diameter of the sugar cane. Then the data above mentioned will be compared of using the data of before and after applied precision fertilizer. The percentage of green color from sugar cane samples are used to evaluate the fertilizer rate.
- This can save cost and save time for farmers. It also creates and applies new techniques to agriculture for farmers. And entrepreneurs are aware of the use of technology to help in the production of accurate and effective.

Innovation

- The inventor is an agricultural equipment that can be easily attached to any existing tractor and it works real-time and precisely for fertilizer spreading.
- The inventor is applied the image processing as a sensor to control a rate of fertilizer feeder in modern sugarcane cultivation.
- The inventor is used of Variable-rate technology (VRT) to vary the rate of fertilizer inputs in modern sugarcane cultivation.
- Precision Fertilizer for Sugarcane cultivation using Image Processing Technique is presented an effective of used such a precisely fertilizer feeder in Thai modern sugarcane cultivation. Therefore, it can reduce of the production time and costs of fertilizer processes in Thai modern sugarcane cultivation.



<p>Note book TOSHIBA Total inside cover 15 giga 2.60 64bit</p>	<p>Motor Type Roller Total Pressure: 2200 PSI cont. 3000 PSI int. Torque: 2.2 in-lbs. cont. 1000 in-lbs. int. Speed: 1.1 in RPM cont. 13.5 RPM int. Flow: 1.2 GPM cont. 1.6 GPM int.</p>	
<p>web cam 5 mega capture: Up to 640 x 480 pixels (VGA CCD) 1.3 megapixel</p>	<p>Control Box</p>	
<p>Power Hydraulic from tractor 2 port</p>	<p>3 port flow control valve with excess back to tank with check RFP3, 3/8" C/V, max inlet flow 50 L/min. max adjusted flow 30 L/min. max pressure 350 bar</p>	



Application

- Precision Fertilizer for Sugarcane cultivation using Image Processing Technique is presented an effective of used such a precisely fertilizer feeder in Thai modern sugarcane cultivation.
- This Precision Fertilizer can reduce of the production time and costs of fertilizer processes for farmers.
- This Precision Fertilizer is available for sugarcane cultivation in world of smart farm.
- This Precision Fertilizer is already moved to commercial scale by co-operative with C-Design co., Ltd., and Kasetkollakam Banpong Co., Ltd., Thailand for developing feature and commercial scale of a precisely fertilizer equipment. This would be launched in Thai agricultural market by a beginning of 2018
- This Precision Fertilizer is already presented to Thai sugar industries for improving their resources of sugarcane fields.

IP status

• Register (Pending)

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