

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 1, March 2024

## **Solar Seed Sowing Machine**

Arnav Deshpande, Shriyaa Gaikwad, Aditya Naidu, Shamruddhi Varkhade, Priyanka Javkar STES's Sou. Venutai Chavan Polytechnic, Pune, Maharashtra, India

Abstract: In the farming process, often used conventional seeding operation takes more time and more labor. The seed feed rate is more but the time required for the total operation is more and the total cost is increased due to labor, hiring of equipment. The conventional seed sowing machine is less efficient, time consuming. Today's era is marching towards the rapid growth of all sectors including the agricultural sector. To meet the future food demands, the farmers have to implement the new techniques which will not affect the soil texture but will increase the overall crop production. In the farming process, often used conventional seeding operation takes more time and more labor. The seed feed rate is more but the time required for the total operation is also more and the total cost is increased due to labor, hiring of equipment. This is a solar powered system, it runs on the renewable energy which is free in nature. This machine reduces the efforts and total cost of sowing the seeds and fertilizer placement.

Keywords: Seed sowing machine (SSM), Agriculture Automation, Farminginnovation, Sustainable farming

## REFERENCES

- [1]. Swati D. Sambare and S. S. Belsare, "Seed Sowing Using Robotics Technology", International Journal of scientific research and management (IJSRM), vol. 3, no. 5, pp. 2889-2892, 2015.
- [2]. "Arduino Nano 3.0 version", Data sheet..
- [3]. [online] Available: https://io.adafruit.com/.
- [4]. "Wi-Fi Module CC3000", Data Sheet..
- [5]. "Digital Compass Sensor HoneywellHMC5883L", Data Sheet..
- [6]. "Ultrasonic Sensor HC-SR04", Data Sheet.
- [7]. A;Ranjan khanna, "Solar-powred Android based Speed Control of DC motors through Secure Bluetooth", Communication systems and network technologies CSNT 2015 internationalconference, pp. 1244-1249.
- [8]. G. Amer, S. M. M. Mudassir and M. A. Malik, "Design and operation of Wi-Fi Agribot Integrated system", Industrial Instrumentation and Control, pp. 207-212, 2015.
- [9]. Parth Gargava, Karan Sindhwani and Sumit Soman, "Controlling an Arduino robot using Brain Computer Interface", International Conference on Reliability Infocam Technologies and optimization, pp. 1-5, 2014.
- [10]. A Golakotta and M. B. Shrinivas, "Agribot-A multipurpose Agricultural robot", India Conference (INDIACON) 2011 IEEE Annual conference, pp. 1-4.
- [11]. Dhiraj Arun Patil, Manish Upadhye, F. S. Kazi and N. M. Singh, "Multi Robot Communication and Target Tracking System with ControllerDesign and Implimentation of SWARM Robot using Arduino", international conference on Industrial Instrumentation and Control, pp. 412- 416, 2015..

DOI: 10.48175/568

