

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 7, April 2024

Crop Protection from Wild Animal using IOT

Dr. P. P. Chitte¹, Miss. Nikita Bidve², Miss. Vaishali Jadhav³, Miss. Vaishanvi Lokhande⁴ Department of Electronics Engineering^{1,2,3,4} Pravara Rural Engineering College, Loni, Maharashtra, India

Abstract: Crops in the farms are many times devastated by the wild as well as domestic animals and low productivity of crops is one of the reasons for this. It is not possible to stay 24 hours in the farm to sentinel the crops. So to surmount this issue an automated perspicacious crop aegis system is proposed utilizing Internet of Things (IOT). The system consists of esp8266 (nodeMCU), soil moisture sensor, dihydrogen monoxide sensor, GPRS and GSM module, servo motor, dihydrogen monoxide pump, etc. to obtain the required output. As soon as any kineticism is detected the system will engender an alarm tobe taken and the lights will glowup implemented at every corner of the farm. This will not harm any animal and the cropswill stay forfended.

Keywords: Crops

REFERENCES

- [1]. [K. A. Pranesh and K Saranya, Solar tracking system using DC motor, International journal on application of information and communication engineering,4(2), 2015, 122-222.
- [2]. Charles Severence, "Eben Upton: Raspberry Pi", vol.46, NO.10, pp. 14-16, 2013.
- [3]. Laur, I., "Microcontroller based home automation system with security," International Journal of Advanced Computer Science and Applications, vol. 1, no. 6, pp. 60- 65, 2010.
- [4]. A. Veeramani, P. Easa, E. Jayson, "An evaluation of crop protection methods in kerala", J.Bombay Nat. Hist. Soc, vol. 101, pp. 255-260, 2004.
- [5]. B. Hamrick, T. Campbell, B. Higginbotham, S. Lapidge, Managing an invasion: effective measures to control wild pigs, 2011.
- [6]. C. Thomas, J. Marois, J. English, "The effects of wind speed temperature and relative humidity on development of aerial mycelium and conidia of botrytis cinerea on grape", Phytopathology, vol. 78, no. 3, pp. 260-265, 1988.
- [7]. A. R. Tiedemann, T. Quigley, L. White, W. Lauritzen, J. Thomas, M. M. Cinnis, "Electronic (fenceless) control of livestock", US Department of Agriculture Forest Service Pacific Northwest Research Station PNW-RP- 510, 1999.
- [8]. M. Lenders, P. Kietzmann, O. Hahm, H. Petersen, C. Gundoğan, E. Baccelli, K. Schleiser, T. C. Schmidt, M. Wahlisch, Con-necting the world of embedded mobiles: The riot approach to ubiquitous networking for the internet of things, 2018.
- [9]. Yadahalli, S., Parmar, A., & Deshpande, A. (2020, July). Smart intrusion detection system for crop protection by using Arduino. In 2020 Second International Conference on Inventive Research in Computing Applications (ICIRCA) (pp. 405-408). IEEE.
- [10]. Sandeep, C., Bhargav, D. S., Jaisai, Y. L., & Kumaravel, V. (2022, October). A design and implementation of IoT based on earlier recognition and intimation of wild animals attack on farming lands. In AIP Conference Proceedings (Vol. 2519, No. 1, p. 030082). AIP Publishing LLC.



