

DAFTAR PUSTAKA

- [1] A. Krisnawati, "Kedelai Sebagai Sumber Pangan Fungsional," Balai Penelitian Tanaman Aneka Kacang dan Umbi, 12 Juni 2017. [Online]. Available: <http://pangan.litbang.pertanian.go.id/files/06-IPTEK12-01-2017-Ayda.pdf>. [Accessed 18 November 2020].
- [2] Subejo, "Mungkinkah Indonesia Tanpa Impor Pangan?," Kompasiana, 3 Juni 2019. [Online]. Available: <https://www.kompasiana.com/subejo17345/5ce08dc63ba7f73e5c1b2c08/mungkinkah-indoensia-tanpa-impor-pangan?page=all#section1>. [Accessed 18 November 2020].
- [3] D. Harnomo, M. Subandi, S. and M. Adie, Panduan Teknis Budidaya Kedelai di Berbagai Agroekosistem, Malang: Agro Inovasi, 2015.
- [4] M. Dholu and M. K. A. Ghodinde, "Internet of Things (IoT) for Precision Agriculture," in *d International Conference on Trends in Electronics and Informatics*, Tirunelveli, India, 2018.
- [5] R. H. Putra, D. Perdana and Y. Gustommy, "Analisa dan Implementasi Sistem Pengukuran Unsur Hara Tanah Pada Tanaman Stroberi Berbasis IoT Dengan Metode Topologi Jaringan Star," *Universitas Telkom*, 2019.
- [6] D. Davcev, K. Mitreski, S. Trajkovic, V. Nikolovski and N. Koteli, "IoT agriculture system based on LoRaWAN," *Workshop on Factory Communication Systems (WFCS)*, 2018.
- [7] A. Sumarudin, W. P. Putra , E. Ismantohadi, S. and M. Qomaruddin, "Sistem Monitoring Tanaman Hortikultura Pertanian," *Jurnal Teknologi dan Informasi*, vol. 9, p. 1, 2019.
- [8] Q. F.Hassan, *Internet of Things A To Z: Technologies and Applications*, IEEE: Wiley, 2018.
- [9] Z. A, B. N, C. A, V. L and Z. M., "“Internet of things for smart cities,”," *IEEE Internet of Things journal*, vol. 1, pp. 22-32, 2014.

- [10] L. Alliance, A technical overview of lora and lorawan, White Paper, November, 2015.
- [11] R. Firdaus, M. A. Murti and I. Alinursafa, "Air Quality Monitoring System Based Internet of Things (IoT) Using LPWAN LoRa," *IEEE International Conference on Internet of Things and Intelligence System (IoTais)*, vol. 10.1109, no. IoTais47347.2019.8980437, pp. 195-200, 2019.
- [12] M. Turmudzi, A. Rakhmatsyah and A. A. Wardana, "Analysis of Spreading Factor Variations on LoRa in Rural Areas," *2019 International Conference on ICT for Smart Society (ICISS)*, vol. 10.1109, no. ICISS48059.2019.8969846, pp. 1-4, 2019.
- [13] R. Barry, "IoT connectivity comparison (GSM vs LoRa vs Sigfox vs NB-Iot)," Polymorph, 1 January 2020. [Online]. Available: <https://www.polymorph.co.za/iot-connectivity-comparison-gsm-vs-lora-vs-sigfox-vs-nb-iot/>. [Accessed 31 January 2021].
- [14] A. T. Haryanto, "Antares, Platform IoT Telkom Diakui Internasional," Detikinet, 7 July 2019. [Online]. Available: <https://inet.detik.com/telecommunication/d-4623914/antares-platform-iot-telkom-diakui-internasional>. [Accessed 1 12 2020].
- [15] S. A and M. A. E, Let's Build Your Android Apps with Android Studio, Jakarta: PT. Elex Media Komputindo, 2016.
- [16] E. Ihsanto and S. Hidayat, "Rancangan Bangun Sistem Pengukuran Ph Meter Dengan Menggunakan Mikrokontroler Arduino Uno," *Teknologi Elektro*, vol. 5, no. 3, pp. 139-146, 2014.
- [17] S. Rangkuti, Arduino & Proteus Simulasi Dan Praktik, Bandung: Penerbit Informatika, 2016.
- [18] A. Parastiwi, C. Rahmad and A. N. Rahmanto, Pemrograman Spreadsheet Untuk Pemodelan Kontrol Rangkaian Elektronika, Malang: UPT Percetakan dan Penerbitan Polinema, 2018.
- [19] "Datasheet and Instruction of NPK Sensor.2012," 2012. [Online]. Available:

http://www.lusterleaf.com/img/instruction/1865_instruction.pdf.

[Accessed 2 November 2020].

- [20] L. J and T. T. Thanga, "Dependence of hall effect flow sensor frequency on the attached inlet and outlet pipe size," *2017 IEEE International Conference on Consumer Electronics-Asia (ICCE-Asia)*, vol. 10.1109, no. ICCE-ASIA.2017.8307842, pp. 56-60, 2017.
- [21] A. Razor, "Modul Relay Arduino : Pengertian, Gambar, Skema dan Lainnya," 7 Mei 2020. [Online]. Available: <https://www.aldyrazor.com/2020/05/modul-relay-arduino.html>. [Accessed 2 November 2020].
- [22] Ajie, "Menggunakan LCD 20x4 I2C pada Arduino," Indomaker, 16 Desember 2019. [Online]. Available: <http://indomaker.com/index.php/2019/12/16/menggunakan-lcd-20x4-2004-i2c-pada-arduino/>. [Accessed 2 November 2020].
- [23] J. Susila, G. Dhiviansyah, D. A. Tsauri, F. I. Adhim and B. A. Kindhi, "Prototype of Liquid Materials Mixing System using Microcontroller," *International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIMIA)*, vol. 10.1109, no. ICAMIMIA47173.2019.9223360, pp. 268-271, 2019.
- [24] P. Astuti, "Unsur Hara Kebutuhan Tanah," Dinas Pangan, Pertanian dan Perikanan, 6 Desember 2018. [Online]. Available: <https://pertanian.pontianakkota.go.id/artikel/52-unsur-hara-kebutuhan-tanaman.html#>. [Accessed 17 November 2020].
- [25] P. D. D. Istianti, N. B. A. Karna and I. Alinursafa, "PERANCANGAN DAN IMPLEMENTASI DEVICE TENTANG TEKNOLOGI AKSES LPWAN LORA UNTUK MONITORING AIR SUNGAI CITARUM," *Universitas Telkom*, 2019.
- [26] M. Imadudin, "Rancang Bangun dan Analisis Sistem Pengukuran Unsur Hara Tanah Pada Tanaman Bawang Putih Berbasis Internet of Things Menggunakan Metode Topologi Mesh," *Telkom University, Bandung*, 2019.

- [27] M. Masrie, M. S. A. Rosman, R. Sam and Z. Janin, "Detection of Nitrogen, Phosphorus, and Potassium," in *International Conference on Smart Instrumentation, Measurement and Applications (ICSIMA)*, Putrajay, Malaysia, 2017.
- [28] R. Prabha, E. Sinitambirivoutin, F. Passelaigue and M. V. Ramesh4, "Design and Development of an IoT Based Smart Irrigation and Fertilization System for Chilli Farming," in *International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET)*, Chennai, India, 2018.