

DAFTAR PUSTAKA

- Abdurrahman, S.S. 2020. *Statistik Lahan Pertanian Tahun 2015-2019*. Pusat Data dan Sistem Informasi Pertanian. Sekretariat Jenderal. Kementerian Pertanian. Jakarta.
- Agustiyani, D., Agandi, R., Arinafril, Nugroho, A.A., Antonius, S. 2021. The effect of application of compost and frass from *Black Soldier Fly Larvae (Hermetia illucens L.)* on growth of pakchoi (*Brassica rapa L.*). *IOP Conference Series: Earth and Environmental Science*. 762(1).
- Ai, N.S dan Yunia, B. 2011. Konsentrasi Klorofil Daun Sebagai Indikator Kekurangan Air Pada Tanaman. *Jurnal Ilmiah Sains*. 11(2).
- Alattar, M.A. 2012. *Biological Treatment of leachates of microaerobic fermentation*. Tesis. Portland State University. Portland.
- Alhasan, A. and Heitholt, J. 2020. Effect of Soil Nitrogen Rate on Leaf Chlorophyll and Vegetative Growth of Dry Bean. *LREC Report, Field days Bulletin*. DOI: 10.13140/RG.2.2.17890.07365.
- Ali, S., Zeng, F., Qiu, L and Zhang, G. 2011. The effect of chromium and aluminum on growth, root morphology, photosynthetic parameters and transpiration of the two barley cultivars. *Biologia Plantarum*.55(2): 291-296.
- Anggraeni, D. 2010. *Pengaruh pemupukan Bioconversion Fertilizer Kernel Meal (BFPKM) terhadap Pertumbuhan Vigna unguiculata L.Walp (Kacang Panjang) Varietas Mutiara*. Tesis. Universitas Indonesia. Depok.
- Arifah, SM, 2014. Analisis Komposisi Pakan Cacing *Lumbricus* Sp Terhadap Kualitas Kascing Dan Aplikasinya Pada Tanaman Sawi. *Jurnal Gamma*. 9(2).
- Arnon, D.I. 1949. Copper enzymes in isolated chloroplast, polyphenol oxidase in Beta vulgaris. *Plant Physiology*. 2:1-15
- Barker, A.V and Pilbeam, D.J. 2007. *Hand Book of Plant Nutrition*. CRC Press. New York.
- Beesigamukama, D., Nicholas K., Benson M., dan Dorothy N. 2021. Effects of black soldier fly frass-fertiliser on the growth, yield and nitrogen use efficiency of maize in Central Kenya. *Journal of Insect of Food and Feed*, 6 (1)

- Beesigamukama, D., Mochoge, B., Korir, N., Musyoka, M.W, Fiaboe, K.K.M., Nakimbugwe, D., Khamis, F.M., Subramanian, S., Dubois, T., Ekesi, S and Tanga, C.M. 2020. Nitrogen Fertilizer Equivalence of Black Soldier Fly Frass Fertilizer and Synchrony of Nitrogen Mineralization for Maize Production. *Agronomy*. 10(1395). DOI:10.3390/agronomy10091395.
- Bohn, H.L, McNeal, BL, O'Connon, GA. 2001. *Soil Chemistry*. John Willey&Sons. Inc. New York. Chichester. Brisbane. Toronto. Singapore.
- Bojovic, B and Marcovic, A. 2009. Correlation Between Nitrogen and Chlorophyll Content in Wheat (*Triticum aestivum L.*). *Kragujevac J. Sci.* 31: 69-74.
- Bowo, P.A., Sumarni, Hardiatmi, S. 2019. Penerapan Macam dan Dosis Pupuk Organik terhadap Pertumbuhan dan Hasil Tanaman Gandum (*Triticum aestivum L.*). *Jurnal Inovasi Pertanian*. 21(1).
- Budiman. 2013. Pengaruh Pemupukan Nitrogen dan Stress Air terhadap Bukaan Stomata, Kandungan Klorofil dan Akumulasi Prolin Tanaman Rumput Gajah (*Penunisetum purpureum Schum*). *Journal Unhas*. 159-166.
- Cahyadi, D dan Widodo, WD. 2017. Efektivitas Pupuk Hayati terhadap Pertumbuhan dan Hasil Tanaman Caisin (*Brassica Chinensis L.*). *Buletin Agrohorti*. 5(3): 292-300.
- Chen, J., Liu L., Wang Z., Zhang Y., Sun H., Song S., Bai Z., Lu Z., Li C. 2020. Nitrogen Fertilization Increases Root Growth and Coordinates the Root–Shoot Relationship in Cotton. *Frontiers in Plant Science*. 11: 880.
- Chen, J., Cao, F., Li, H., Shan, S., Tao, Z., Lei, T., Liu, Y., Xiao, Z., Zou, Y., Huang, M., Elwafa, S.F.A. 2020. Genotypic variation in the grain photosynthetic contribution to grain filling in rice. *Journal of Plant Physiology*. 253
- Cui, K., Peng, S., Ying,Y., Yu, S and Xu, S. 2004. Molecular Dissection of the Relationships among Tiller Number, Plant Height and Heading Date in Rice. *Plant Production Science*. 7(3):309-318
- Dalimunthe, R.A. 2020. *Pengaruh Dosis NPK dan Tinggi Ratun terhadap Pertumbuhan dan Produksi Padi (*Oryza sativa L.*)* [skripsi]. Universitas Muhammadiyah Sumatera Utara. Medan.
- Damanik, V., Musa L dan Marbun, P. 2013. Pengaruh Pemberian Kompos Kulit Durian dan Kompos Kulit Kakao pada tanah Ultisol terhadap beberapa aspek kimia kesuburan tanah. *Jurnal Online Agroekoteknologi*. 2(1): 445-461.
- Diener, S., C. Zurbrügg, F. R., Gutierrez, D.H., Nguyen, A., Morel, T., Koottatep, and K. Tockner. 2011. *Black soldier fly larvae for organic waste treatment-prospects and constraints*. Khulna, Bangladesh. International Conference on Solid Waste Management in Developing Countries.

- Ding, L., Zhifeng, L., Limin G., Shiwei G. and Qirong S. 2018. Is Nitrogen a Key Determinant of Water Transport and Photosynthesis in Higher Plants Upon Drought Stress?. *Front. Plant Sci.* 9:1143.
- Dortmans, Diener S., Verstappen B.M., Zurbrügg C. 2017. *Proses Pengolahan Sampah Organik dengan Black Soldier Fly (BSF)*. Eawag-Swiss Federal Institute of Aquatic Science and Technology. Switzerland.
- Elfayetti. 2009. Pengaruh pemberian kascing dan pupuk NPK Buatan pada Ultisol terhadap Kimia tanah dan hasil tanaman Jagung (*Zea mays* L.). *Jurnal Geografi*. 1(1).
- Fageria, N.K and Oliveira, J.P. 2014. Nitrogen, Phosphorus and Potassium Interactions in Upland Rice. *Journal of Plant Nutrition*. 37(10):1586-1600.
- Fageria, N.K and Moneira, A. 2011 Chapter Four-The Role of Mineral Nutrition of Root Growth of Crop Plants. *Advances in Agronomy*. 110:251-331.
- Fageria, N.K., Moreira, A and Coelho, A.M. 2011. Yield and yield components of upland rice as influenced by nitrogen sources. *Journal of Plant Nutrition*. 34:361–370
- Fageria, N.K., Morais, D., Santos, A.B. 2010. Nitrogen Use Efficiency in Upland Rice Genotype. *Journal of Plant Nutrition*. 33:1696-1711.
- FahmF, Syamsudin, S.N., Utami, H dan Radjagukguk, B. 2009. Peran Pemupukan Posfor dalam Pertumbuhan Tanaman Jagung (*Zea mays* L.) di Tanah Regosol dan Latosol. *Berita Biologi*. 9(6).
- Faozi, K, dan Bambang, R.W. 2010. Serapan Nitrogen Dan Beberapa Sifat Fisiologi Tanaman Padi Sawah Dari Berbagai Umur Pemindahan Bibit. *Jurnal Pembangunan Pedesaan*. 10 (2):93-101
- Foth, H.D. 1984. *Fundamentals of soil science*. John Wiley & Sons Inc. New York.
- Gusmiatur dan Marlina, N. 2018. Peran Pupuk Organik dalam Mengurangi Pupuk Anorganik pada Budidaya Padi Gogo. *Jurnal Ilmiah Agribisnis dan Perikanan*. 11(2):91-99
- Hakim, A.R., Prasetya, A., Petrus, H. K. 2017. Studi Laju Umpam Pada Proses Biokonversi Limbah Pengolahan Tuna Menggunakan Larva *Hermetia illucens*. *Jurnal Pasca Panen dan Bioteknologi Kelautan dan Perikanan*. 12(2).
- Haryadi, D., Husna, Y dan Sri Y. 2015. Pengaruh Pemberian Beberapa Jenis Pupuk Terhadap Pertumbuhan Dan Produksi Tanaman Kailan (*Brassica alboglabra* L.) *Jom Faperta*. 2(2).

- Hidayati, N., Triadiati, Iswandi, A. 2016. Photosynthesis and Transpiration Rates of Rice Cultivated Under the System of Rice Intensification and the Effects on Growth and Yield. *Hayati Journal of Bioscience*. 23:67-72.
- Hu,W., Nan J., Jiashuo Y., Yali M., Youhua W., Binglin C., Wenqing Z., Derrick M. Oosterhuis, Zhiguo Z. 2016. Potassium (K) supply affects K accumulation and photosynthetic physiology in two cotton (*Gossypium hirsutum L.*) cultivars with different K sensitivities. *Field Crops Res.* <http://dx.doi.org/10.1016/j.fcr.2016.06.005>.
- Ifansyah, H. 2013. Soil pH and Solubility of Alumunium, Iron and Phosphorus in Ultisol: The Role of Humic Acid. *J.Trop Soil*. 18(3): 203-208.
- Karimaei, M dan Poozesh, V. 2016. Effect of Aluminum Toxicity on Plant Heighy, Total Chlorophyll (Chl a+b), Potassium and Calcium Content in Spinach (*Spinacia oleracea L.*). *International Journal of Farming and Allied Sciences*. 5 (2): 76-82.
- Krishnapillai, S and Ediriweera, V.L. 1986. Influence Of Levels Of Nitrogen And Potassium Fertilizers On Chlorophyll Content In Mature Clonal Tea Leaves. *S. L. J. Tea Sei.* 55 (2), 71 - 76, 1986.
- Leghari, S. Niaz W., Ghulam M., Abdul H., Ghulam M.B., Khalid H., Tofique A., Safdar A., dan Ayaz A. 2016. Role of Nitrogen for Plant Growth and Development: A Review. *Journal Advance in Environmental Biology*, 10(9): 209-218.
- Lestari, D., and Nyoman, G. 2020. Perbedaan Kualitas Kompos Sampah Organik Menggunakan Effective Microorganism 4 (Em4) Dan Larva Black Soldier Fly Di Desa Buduk Tahun 2020. *Jurnal Kesehatan Lingkungan*.10 (2).
- Liu, T., Awasthi M.K., Awashi S.K., Duan, Y., Zhang, Z. 2020. *Effects of black soldier fly larvae (Diptera: Stratiomyidae) on food waste and sewage sludge composting*. College of Natural Resources and Environment. Northwest A&F University, Yangling, Shaanxi Province, China.
- Liu, Y.D., Yanfeng, Wang, D., Meng, K and Wang, S. 2011. Effects of Nitrogen and 6-Benzylaminopurine on Rice Tiller Bud Growth and Changes in Endogenous Hormones and Nitrogen. *Crop Science*. Madison, 51(2): 786-792.
- Makarim, A.K and Suhartatik, E. 2015. *Morfologi dan fisiologi Tanaman Padi*. Balai Besar Penelitian Padi. Balitbang Kementerian Pertanian.
- Malhotra, H., Vandana, Sandeep S., dan Renu P. 2018. Phosphorus Nutrition: Plant Growth in Response to Deficiency and Excess. *Plant Nutrients and Abiotic Stress Tolerance*. DOI.10.1007/978-981-10-9044-8_7.
- Malik, A. 2017. *Pengembangan Padi Gogo*. Badan Penelitian dan Pengembangan Pertanian. Jakarta.

- Malik, N. 2014. The Growth of Plant Height of Bitter Plant (*Andrographis paniculata* Ness) with the Addition of Fertilizer and Different Solar Light Intensity. *Jurnal Agroteknos*, 4(3):189-193.
- Marschner, H. 2002. *Mineral Nutrition of Higher Plants*. Academic Press. Germany. Amsterdam. Boston. Heidelberg. London. New York. Oxford. Paris. San Diego. San Francisco. Singapore. Sydney. Tokyo.
- Menino, R., Fernando F., Maria A., Paula F., Olga M., Rui N and Daniel, M. 2020. Agricultural value of Black Soldier Fly larvae frass as organic fertilizer on ryegrass. *Heliyon*, 6 e05855.
- Mezuan, Handayani, I., Endang, I. 2002. Penerapan Formulasi Pupuk Hayati pada Budidaya Padi Gogo. *Jurnal Ilmu Pertanian Indonesia*, 4(1): 27-34.
- Mulyani, O., Sudirja, R., Joy, B and Hanandiva, R.A. 2019. The Effect of Organomineral on pH, Nitrogen Content, Organic-C Content and Yield of Upland Rice (*Oryza sativa L.*) on Inceptisols, West Java Indonesia. *Earth and Environmental Science*. 334.012071
- Mulyani, A dan Muhrizal, S. 2013. Karakteristik dan Potensi Lahan Sub Optimal untuk Pengembangan Pertanian di Indonesia. *Jurnal Sumberdaya Lahan*. 7(1).
- Muhayyat, M.S., Yuliansyah, A. and Prasetya, A. 2016. Pengaruh Jenis Limbah dan Rasio Umpam pada Biokonversi Limbah Domestik Menggunaan Larva Black Soldier Fly (*Hermetia illucens*). *Jurnal Rekayasa Proses*.
- NCIPMI. 1998. *Insect and related pests of man and animals*. North Carolina Integrated Pest Management Information.
- Newton, L., Sheppard, C., Watson, D.W, Burtle, G., Dove, R. 2005. *Using the black soldier fly, Hermetia illucens, as a value-added tool for the management of swine manure*. Waste Management Programs. North Carolina State University.
- Nirmala, Purwaningrum, and Indrawati, D. 2020. Pengaruh Komposisi Sampah Pasar Terhadap Kualitas Kompos Organik Dengan Metode Larva Black Soldier Fly (Bsf). Prosiding Seminar Nasional Pakar Ke 3 Tahun 2020. Buku 1: Sains Dan Teknologi.
- Nita, C.E., Siswanto, B., Utomo W.D. 2015. Pengaruh Pengolahan Tanah dan Pemberian Bahan Organik (Blotong dan Abu Ketel) Terhadap Porositas Tanah dan Pertumbuhan Tanaman Tebu Pada Ultisol. *Jurnal Tanah dan Sumber Daya Lahan*, 2 (1): 119-127.
- Notohadiprawiro,T. 2006. *Ultisol, fakta dan implikasi pertaniannya*. Ilmu Tanah Universitas Gajah Mada.Yogyakarta.

- Nugroho, V.A and Prayogo, C. 2016. Dapatkah Status Unsur Hara dan Produktivitas Tanaman Padi Metode SRI (System of Rice Intensification) Ditingkatkan?. *Jurnal Tanah dan Sumberdaya Lahan.* 3(2) : 365-374.
- Pakpahan, A., Widowati, R and Suryadinata, A. 2020. Black soldier fly liquid biofertilizer in Bunga Mayang sugarcane plantation: From experiment to policy implications. *MOJ Eco. Environ. Sci.* 5 (2):89–98.
- Prado, R. 2021. *Mineral Nutrition of Tropical Plants.* Springer, Sao Paulo Reasearch Foundation.
- Prasetyo, B.H and Suriadikarta. 2006. Karakteristik, Potensi dan Teknologi Pengelolaan Tanah Ultisol untuk Pengembangan Pertanian Lahan Kering di Indonesia. *J. Litbang Pertanian.* Bogor.
- Pratama, A.M. 2020. Pemanfaatan Kasing Black Soldier Fly (*Hermetia illucens*) Sebagai Kompos Untuk Meningkatkan Pertumbuhan Vegetatif Tanaman Cabai Merah (*Capsicum annuum* L.) [skripsi]. Universitas Pendidikan Indonesia.
- Pratiwi, S. 2016. Growth and Yield of Rice (*Oryza sativa* L.) on Various Planting Methods and Addition of Organic Fertilizers. *Gontor AGROTECH Science Journal.* 2(2).
- Proklamasiningsih, E. Prijambada, E.D, Rachmawati, D, Ningsih, R.P.S. 2012. Laju Fotosintesis dan Kandungan Klorofil Kedelai pada Medium Tanam Masam dengan Pemberian Garam Alumunium. *Agrotrop.* 2(1): 17-24.
- Rahayu, R. 2021. *Webiner Budidaya Maggot BSF Mengolah Sampah Menjadi Berkah.* Padang. 23 Mei 2021.
- Rajasekar, M., Nandhini, D.U., Swaminathan, V and Balakrishnan, K., 2017. A review on role of macro nutrients on production and quality of vegetables. *Int. J. Chem. Sci.* 5:304-309.
- Ramesh, N., Saraswathi, E., Rajesh, G., Rao, K.B., Rajanikanth, G. 2018. Influence Of Fertilizers And Vermicompost On *Oryza Sativa*. *Life Science Informatics Publications.*4(5): 240.
- Rismunandar. 1993. *Tanah, seluk beluknya bagi pertanian.* Cetakan kelima. Sinar Baru Algesindo, Bandung.
- Riyani, R., Radiyan., Budi, S. 2012. *Pengaruh Berbagai Pupuk Organik terhadap Pertumbuhan Dan Hasil Padi di Lahan Pasang Surut.* Universitas Tanjungpura : Pontianak
- Safrani, E., Hasmeda, M., Munandar, M and Sulaiman, F. 2018. Korelasi Komponen Pertumbuhan dan Hasil pada Pertanian Terpadu Padi-Azola. *Jurnal Lahan Suboptimal.* 7(1): 59-65

- Samira, D., Sufardi, Zaitun, Chairunas, Anischan, G., Peter, S and Malem, M. 2012. Effect of NPK fertilizer and biochar residue on paddy growth and yield of second planting. *The Proceedings of The 2nd Annual International Conference Syiah Kuala University.*
- Sarpong, D., Odoro, S., Gyasi, S., Buamah, R., Donkor, E., Awuah, E., & Baah, M. K.. 2018. Biodegradation by composting of municipal organic solid waste into organic fertilizer using the black soldier fly (*Hermetia illucens*) (Diptera: Stratiomyidae) larvae. *International Journal of Recycling of Organic Waste in Agriculture.*
- Setti, L., Francia, E., Pulvirenti, A., Gigliano, S., Zaccardelli, M., Pane, C., Caradonia, F., Bortolini, S., Maistrello, L., Ronga, D. 2019. Use of black soldier fly (*Hermetia illucens* (L.), Diptera: Stratiomyidae) larvae processing residue in peat-based growing media. *Waste Management Journal.* 95 (2019) 278-288.
- Setyorini, D., Saraswati, R., Anwar, E.K. 2006. *Pupuk Organik dan Pupuk Hayati.* Balai Besar Penelitian dan Pengembangan Sumber Daya Lahan Pertanian. Bogor.
- Sihaloho, S.S, Rahmawati, N., Putri, LAP. 2015. Respon Pertumbuhan dan Produksi Tanaman Kedelai Varietas Detum 1 terhadap Pemberian Vermicompos dn Pupuk P. *Jurnal Agroekoteknologi.* 3 (4): 1591-1600.
- Silvina, F., Arnis, E.T., Noreza. 2017. Pemberian Berbagai Pupuk Organik terhadap Pertumbuhan dan Produksi Beberapa Varietas Padi Gogo (*Oryza sativa* L.) yang ditanam diantara Tanaman Kelapa Sawit Belum Menghasilkan. *Jurnal Universitas Islam Riau.* 33 (3) 231-242.
- Siregar, D., Marbun,P., Marpaung, P. 2013. Pengaruh Varietas dan Bahan Organik yang Berbeda terhadap Bobot 1000 butir dan Biomassa Padi Sawah Pada Musin Tanam I. *Jurnal Online Agroekoteknologi.* 1(4).
- Skudra, I., and Antons, R. 2017. Effect of Nitrogen and Sulphur Fertilization on Chlorophyll Content in Winter Wheat. *Rural Sustainability Research,* 37(332).
- Soepriyanto, S., Sulistyawati, Retno,T. 2021. The Effect Of Providing Various Types Of Nitrogen Fertilizer On The Amount Of Peanut Leaf Chlorophyll (*Arachis hypogaea* L.). *Jurnal Agroteknologi Merdeka Pasuruan,* 5(1): 23-31.
- SSS (Soil Survey Staff). 1999. *Second Ed. Soil Taxonomy, A basic system of Soil classification for Making and Interpreting Soil Survey.* United States Departmen of Agriculture. Natural Resources Conservation Service.
- Sugiyono. 2012. *Metode Penelitian Kuantitatif Kualitatif dan R&D.* Alfabeta. Bandung.

- Suharja and Sutarno. 2009. Biomassa, kandungan klorofil dan nitrogen daun dua varietas cabai (*Capsicum annum*) pada berbagai perlakuan pemupukan. *Nusantara Bioscience* 1: 9-16.
- Suharno, Nugrohotomo, Bharoto, dan Ariani. K. T. 2010. Daya Hasil dan Karakter Unggul Dominan Pada 9 Galur dan 3 Varietas Padi (*Oryza sativa L*)di Lahan Sawah Irigasi Teknis. *Jurnal Ilmu-ilmu Pertanian*. 6(2).
- Sumarno., dan Jan, R. H. 2007. Perluasan areal padi gogo sebagai pilihan untuk mendukung ketahanan pangan nasional. *Jurnal Iptek Tanaman Pangan*. 2 (1): 26-40.
- Suparyono dan Setyono. A, 1993. *Padi*. Penebar Swadaya. Jakarta.
- Susilo J., Ardian, Ariani, E. 2015. Pengaruh Jumlah Bibit Per Lubang Tanam dan Dosis Pupuk N, P dan K terhadap Pertumbuhan dan Produksi Padi Sawah (*Oryza sativa L.*) Dengan Metode SRI. *Jom Faperta*. 2 (1): 1-15.
- Surya, J.A, Nuraini, Y and Widianto. 2017. Kajian Porositas Tanah dan Pemberian Beberapa Jenis Bahan Organik di Perkebunan Kopi Robusta. *Jurnal Tanah dan Sumberdaya Lahan*. 4(1): 463-471.
- Syahputra, E. 2015. Karakteristik Sifat Kimia Sub Grup Tanah Ultisol di Beberapa Wilayah Sumatera Utara. *Jurnal Agroekoteknologi*. 4(1).
- Tanaka, A and Garcia, C.V. 2012. Studies of the relationship between tillering and nitrogen uptake of the rice plant. *Soil Science and Plant Nutrition*. 11(3).
- Terfa, G.N, 2021. Role of Black Soldier Fly (*Hermetiaillucens*) Larvae Frass Bio-fertilizer on Vegetable Growth and Sustainable Farming in Sub-Saharan Africa. *Reviews in Agricultural Science*. 9: 92–102,
- Utomo, M. 2002. Pengelolaan Lahan Kering untuk Pertanian Berkelanjutan. Makalah utama pada Seminar Nasional IV pengembangan wilayah lahan kering dan pertemuan ilmiah tahunan himpunan ilmu tanah Indonesia di Mataram, 27-28 Mei 2002.
- Vyas, S.P., Garg, B.K., Kathju, S and Lahiri, A.N. 2001. *Influence of Potassium on Water Relations, Photosynthesis, Nitrogen Metabolism and Yield of Clusterbean Under Soil Moisture Stress*. Indian J. Plant Physiol. 6(1): 30-37
- Vogh, K., Asbjornsen, H., Ercelawn, A., Montagnini, F and Valdes, M. 1997. *Roots and mycorrhizas in tropical forest plantation*. In: E.K.S, Nambiar dan A.G. Brown (Eds.). *Management of Soil, Nutrients and Water in Tropical Plantation Forests*. ACIAR Monograph. Australia.
- Wahyuningtyas, S.R. 2011. *Mengelola Tanah Ultisol Untuk Mendukung Pertumbuhan Tegakan*. Balai Penelitian Kehutanan Banjarbaru. Kalimantan Selatan.

- Wang, F., Chen, Y.F and Wu, W.H. 2020. Potassium and phosphorus transport and signaling in plants . *Journal of Integrative Plant Biology*. 63(1):34-52.
- Wang, Y., Jianwei L., Tao R., Saddam H., Chen G., Sen W., Rihuan, C. and Xiaokun, L. 2017. Effects of nitrogen and tiller type on grain yield and physiological responses in rice. *AoB PLANTS* 9: plx012; doi:10.1093/aobpla/plx012
- Warren, C.R. 2011. How does P effect Photosynthesis and metabolit profiles of *Eucalyptus globus*? . *Tree Physiology*. 31(7): 727-739.
- Wati. R, 2015. *Respon Pertumbuhan dan Produksi Beberapa Varietas Padi Unggul Lokal dan Unggul Baru Terhadap Variasi Intensitas Penyiraman*. Skripsi. Universitas Muhammadiyah Sumatera Utara. Medan
- Wenno, S. and Sinay, H. 2019. Kadar Klorofil Daun Pakcoy (*Brassica Chinensis* L.) Setelah Perlakuan Pupuk Kandang Dan Ampas Tahu Sebagai Bahan Ajar Mata Kuliah Fisiologi Tumbuhan. *Biopendix*. 5(2):130-139.
- Wibowo, P. 2010. *Pertumbuhan dan Produktivitas Galur Harapan Padi (*Oryza sativa* L.) Hibrida di Desa Ketaon Kecamatan Banyudono Boyolali*. Skripsi. Universitas Sebelas Maret. Surakarta.
- Winarso, S., Handayanto, E and Taufiq, A. 2009. Aluminium Detoxification by Humic Substance Extracted From Compost of Organic Waste. *J. Trop Soils*. 15(1): 19-24.
- Yang, C., Yang, L., Yang, Y and Ouyang, Z. 2004. Rice Root Growth and Nutrient Uptake as Influenced by Organic Manure in Continously and Alternately Flooded Paddy Soils. *Agricultural Water Management*. 70: 67-81.
- Yuniarti, A., Maya, D and Dina, M. 2019. The Effect of Organic and N,P,K Fertilizers on Organic C, Total N, C/N, N Uptake, and Yields od Black Rice on Inceptisols. *Jurnal Pertanian Presisi*. 3(2).