

## REFERENCES

- Acosta-Martínez, V., & Tabatabai, M.A. (2000). Enzyme activities in a limed agricultural soil. *Biology and Fertility of Soils*, 31(1). <https://doi.org/10.1007/s003740050628>.
- Adams, F. (1981). Nutritional imbalances and constraints to plant growth on acid soils. *Journal of Plant Nutrition*, 4(2). <https://doi.org/10.1080/01904168109362905>.
- Anwar, R., Suzanna, E., Djatmiko, D., Dwi Andika, W. S., & Gartiwo, D. M. T. (2019). Effectiveness of Herbicide Formulations on Water Weeds in Rainfed Swamp, Brackish Swamp, and Drainage Channels. *Jurnal Agronomi Indonesia (Indonesian Journal of Agronomy)*, 47(2), 210–216. <https://doi.org/10.24831/jai.v47i2.24136>.
- Aruna, K., Rao, P. C., & Madhavi, M. (2020). Effects of herbicides on soil enzyme l-asparaginase activity. *Bangladesh Journal of Botany*, 49(4). <https://doi.org/10.3329/bjb.v49i4.52657>.
- Ariyanto, S. E. (2011). Improving the Quality of Cattle Manure and Its Application to Sweet Corn Plants (*Zea mays saccharata Sturi*). *Jurnal Sains Dan Teknologi*, 4(2).
- Baath, E., & Arnebrant, K. (1994). Growth rate and response of bacterial communities to pH in limed and ash treated forest soils. *Soil Biology and Biochemistry*, 26(8). [https://doi.org/10.1016/0038-0717\(94\)90114-7](https://doi.org/10.1016/0038-0717(94)90114-7).
- Baboo, M., Pasayat, M., Samal, A., Kujur, M., Kumar Maharana, J., & Kumar Patel, A. (2013). Effect of four herbicides on soil organic carbon, microbial biomass-c, enzyme activity and microbial populations in agricultural soil. *International Journal of Research in Environmental Science and Technology*, 3(4).
- Baboo, M., Pasayat, M., Samal, A., Kujur, M., Maharana, J.K., Patel, A.K., & Sambalpur, D. (2013).Effect of four herbicides on soil organic carbon , microbial biomass-C , enzyme activity and microbial. ISSN 2249 – 9695 Original Article 3(4), 100–112.
- Baer, K.N. (2005). Glyphosate. In *Encyclopedia of Toxicology* (pp. 455–456). <https://doi.org/10.1016/B0-12-369400-0/00459-2>.
- Barchia, M.F. (2009). Acid mineral soil agroecosystem. Gadjah Mada University Press. Yogyakarta.. 228 halaman. <http://ugmpress.ugm.ac.id/en/product/pertanian/agroekosistem-tanah-mineral-masam>.
- Bennicelli, R.P., Szafranek-Nakonieczna, A., Wolińska, A., Stepniewska, Z., & Bogudzińska, M. (2009). Influence of pesticide (glyphosate) on dehydrogenase activity, pH, Eh and gases production in soil (laboratory conditions). *International Agrophysics*, 23(2).

- Bismantara, I.P.A., Situmeang, Y.P., & Udayana, I.G.B. (2022). Arabica Coffee Growth Response on Composting Time Treatment and Coffee Skin Biochar Dosage. *Agriwar Journal*, 2(1), 7–13.
- Brookes, G. (2020). Glyphosate Use in Asia and Implications of Possible Restrictions on its Use. *AgBioForum*, 22(1), 1.
- Busse, M.D., Ratcliff, A.W., Shestak, C.J., & Powers, R.F. (2001). Glyphosate toxicity and the effects of long-term vegetation control on soil microbial communities. In *Soil Biology and Biochemistry* (Vol. 33, Issues 12–13, pp. 1777–1789). [https://doi.org/10.1016/S0038-0717\(01\)00103-1](https://doi.org/10.1016/S0038-0717(01)00103-1).
- Chatzistathis, T., & Therios, I. (2013). How Soil Nutrient Availability Influences Plant Biomass and How Biomass Stimulation Alleviates Heavy Metal Toxicity in Soils: The Cases of Nutrient Use Efficient Genotypes and Phytoremediators, Respectively. In *Biomass Now - Cultivation and Utilization*. <https://doi.org/10.5772/53594>.
- Cherni, A.E., Trabelsi, D., Chebil, S., Barhoumi, F., Rodríguez-Llorente, I.D., & Zribi, K. (2015). Effect of Glyphosate on Enzymatic Activities, Rhizobiaceae and Total Bacterial Communities in an Agricultural Tunisian Soil. *Water, Air, and Soil Pollution*, 226(5), 1–11. <https://doi.org/10.1007/s11270-014-2263-8>.
- Cook, A.M., & Hütter, R. (1981). s-Triazines as Nitrogen Sources for Bacteria. *Journal of Agricultural and Food Chemistry*, 29(6). <https://doi.org/10.1021/jf00108a009>.
- Das, S.K., & Varma, A. (2010). Role of Enzymes in Maintaining Soil Health. *Soil Enzymology*, *Soil Biology* 22. [https://doi.org/10.1007/978-3-642-14225-3\\_2](https://doi.org/10.1007/978-3-642-14225-3_2).
- Deng, S.P., & Tabatabai, M.A. (1994). Cellulase activity of soils. *Soil Biology and Biochemistry*, 26(10). [https://doi.org/10.1016/0038-0717\(94\)90216-X](https://doi.org/10.1016/0038-0717(94)90216-X).
- Dick, R.P., Breakwell, D.P., & Turco, R.F. (1996). Soil enzyme activities and biodiversity measurements as integrative microbiological indicators. In *Methods for Assessing Soil Quality* (pp. 247–271). <https://doi.org/10.2136/sssaspecpub49.c15>.
- Dick, W.A., Cheng, L., & Wang, P. (2000). Soil acid and alkaline phosphatase activity as pH adjustment indicators. *Soil Biology and Biochemistry*, 32(13). [https://doi.org/10.1016/S0038-0717\(00\)00166-8](https://doi.org/10.1016/S0038-0717(00)00166-8).
- Dennis, P.G., Kukulies, T., Forstner, C., Orton, T.G., & Pattison, A.B. (2018). The effects of glyphosate, glufosinate, paraquat and paraquat-diquat on soil microbial activity and bacterial, archaeal and nematode diversity. *Scientific Reports*, 8(1). <https://doi.org/10.1038/s41598-018-20589-6>.
- Duke, S.O., & Powles, S.B. (2008). Glyphosate: A once-in-a-century herbicide. *Pest Management Science*, 64(4). <https://doi.org/10.1002/ps.1518>.
- Eivazi, F., & Tabatabai, M. A. (1990). Factors affecting glucosidase and

- galactosidase activities in soils. *Soil Biology and Biochemistry*, 22(7). [https://doi.org/10.1016/0038-0717\(90\)90126-K](https://doi.org/10.1016/0038-0717(90)90126-K).
- Emalinda, Ari, and A. (2003). The effect of glyphosate herbicide on the growth and variation of micro organism in the soil and the growth of soybean (*Glycine max* (L.) Merr.) on Ultisol. *Stigma Volume XI No.4*.
- Ekenler, M. Tabatabai, M.A. (2004). Arylamidase and amidohydrolases in soils as affected by liming and tillage systems. *Soil and Tillage Research* 77: 157–168.
- Edi, W. (2022). Monthly Rain Bulletin - Updated November 2022. Meteorology Climatology and Geophysics Council.
- Fahmuddin Agus. (2005). Analisis kimia tanah, tanaman, air, dan pupuk. In *Handbuch der Mediterranistik* (pp. 129–144). [https://doi.org/10.30965/9783657766277\\_011](https://doi.org/10.30965/9783657766277_011).
- Faqihhudin, M.D., Haryadi, & Purnamawati, H. (2014). Penggunaan Herbisida IPA-Glifosat terhadap Pertumbuhan, Hasil dan Residu pada Jagung. *Ilmu Pertanian*, 17(1).
- Franz, J.E., Mao, M.K., & Sikorski JA, G. (1997). Glyphosate: A Unique and Global Herbicide. *AmericanChemical Society*, 189.
- FAO. (2023). Sustainable Development Goals. <https://www.fao.org/sustainable-development-goals/overview/fao-and-the-2030-agenda-for-sustainable-development/sustainable-agriculture/en/>.
- Gianessi, L.P. (2013). The increasing importance of herbicides in worldwide crop production. In *Pest Management Science* (Vol. 69, Issue 10). <https://doi.org/10.1002/ps.3598>.
- Gimsing, A.L., Borggaard, O.K., & Bang, M. (2004). Influence of soil composition on adsorption of glyphosate and phosphate by contrasting Danish surface soils. *European Journal of Soil Science*, 55(1). <https://doi.org/10.1046/j.1365-2389.2003.00585.x>.
- Gimsing, A.L., Borggaard, O.K., & Sestoft, P. (2004). Modeling the Kinetics of the Competitive Adsorption and Desorption of Glyphosate and Phosphate on Goethite and Gibbsite and in Soils. *Environmental Science and Technology*, 38(6). <https://doi.org/10.1021/es030572u>.
- Grossbard, E., & Wingfield, G.I. (1978). Effects of paraquat, aminotriazole and glyphosate on cellulose decomposition. *Weed Research*, 18(6). <https://doi.org/10.1111/j.1365-3180.1978.tb01172.x>.
- Gusmara, H., Silitonga, R.H., & Simanuhuruk, B.W. (2020). Growth Response and Yield of Sweet Corn on Palm Oil Sludge and Dolomite in Ultisols. *TERRA : Journal of Land Restoration*, 3(1). <https://doi.org/10.31186/terra.3.1.1-9>.
- Hale, S.E., Nurida, N.L., Jubaedah, Mulder, J., Sørmo, E., Silvani, L., Abiven, S., Joseph, S., Taherymoosavi, S., & Cornelissen, G. (2020). The effect of

- biochar, lime and ash on maize yield in a long-term field trial in a Ultisol in the humid tropics. *Science of the Total Environment*, 719. <https://doi.org/10.1016/j.scitotenv.2020.137455>.
- Haney, R.L., Senseman, S.A., Hons, F.M., & Zuberer, D.A. (2000). Effect of glyphosate on soil microbial activity and biomass. *Weed Science*, 48(1). [https://doi.org/10.1614/0043-1745\(2000\)048\[0089:eogosm\]2.0.co;2](https://doi.org/10.1614/0043-1745(2000)048[0089:eogosm]2.0.co;2).
- Hart, M.R., & Brookes, P.C. (1996). Soil microbial biomass and mineralisation of soil organic matter after 19 years of cumulative field applications of pesticides. *Soil Biology and Biochemistry*, 28(12). [https://doi.org/10.1016/S0038-0717\(96\)00249-0](https://doi.org/10.1016/S0038-0717(96)00249-0).
- Haynes, R.J., & Swift, R.S. (1988). Effects of lime and phosphate additions on changes in enzyme activities, microbial biomass and levels of extractable nitrogen, sulphur and phosphorus in an acid soil. *Biology and Fertility of Soils*, 6(2). <https://doi.org/10.1007/BF00257666>.
- Herbien, S.A., & Neal, J.L. (1990). Communications in Soil Science and Plant Analysis Soil pH and phosphatase activity. *Communications in Soil Science and Plant Analysis*, 21:5-6, 43(3), 37–41. <https://doi.org/10.1080/00103629009368244>.
- Ilham Bakri, Abdul Rahim, T.I. (2016). Status of Various Soil Chemical Properties On Various Land Use. In *Poboya* (Vol. 4, Issue 1, pp. 16–23).
- Imfeld, G., & Vuilleumier, S. (2012). Measuring the effects of pesticides on bacterial communities in soil: A critical review. *European Journal of Soil Biology*, 49, 22–30. <https://doi.org/10.1016/j.ejsobi.2011.11.010>.
- Jacob, G.S., Garbow, J.R., Hallas, L.E., Kimack, N.M., Kishore, G.M., & Schaeffer, J. (1988). Metabolism of glyphosate in *Pseudomonas* sp. strain LBr. In *Applied and Environmental Microbiology* (Vol. 54, Issue 12, pp. 2953–2958). <https://doi.org/10.1128/aem.54.12.2953-2958.1988>.
- James, C. (2006). Global Status of Commercialized Biotech/GM Crops: 2005. ISAAA Briefs No. 34. *Experimental Agriculture*, 42(03).
- K. Nandula, V., & L. Tyler, H. (2016). Effect of New Auxin Herbicide Formulations on Control of Herbicide Resistant Weeds and on Microbial Activities in the Rhizosphere. *American Journal of Plant Sciences*, 07(17). <https://doi.org/10.4236/ajps.2016.717212>.
- Kamdem, M.M., Yanou, N.N., & Filser, J. (2016). Effects of soil treated glyphosate on growth parameters and chlorophyll content of maize *Zea mays* L. and bean *Phaseolus vulgaris* L. plants. *Brazilian Journal of Biological Sciences*, 3(6). <https://doi.org/10.21472/bjbs.030611>.
- Kanissery, R., Gairhe, B., Kadyampakeni, D., Batuman, O., & Alferez, F. (2019). Glyphosate: Its environmental persistence and impact on crop health and nutrition. In *Plants* (Vol. 8, Issue 11). <https://doi.org/10.3390/plants8110499>.

- Khoa, L.V., Cu, N.X., Dung, B.T.N., Duc L, Hiep, T.K., and Tranh, C. (2001). Analytical methods: soil, water, crop fertilizer. *HaNoi education publisher.*
- Kjær, J., Olsen, P., Ullum, M., & Grant, R. (2005). Vadose Zone Processes and Chemical Transport Leaching of Glyphosate and Amino-Methylphosphonic Acid from. In *J. Environ. Qual.* (Vol. 34, pp. 608–620).
- Lahan, E., Zhiwu, W., Kai, C., Shijun, Q., Zengbin, L., Wen, C., & Huanying, X. (2019). Cultivating Corn with High Populations to Increase Productivity and Land Efficiency in Indonesia. April. <https://doi.org/10.33019/agrosainstek.v3i1.36>.
- Lancaster, S.H., Hollister, E.B., Senseman, S.A., & Gentry, T.J. (2010). Effects of repeated glyphosate applications on soil microbial community composition and the mineralization of glyphosate. *Pest Management Science*, 66(1). <https://doi.org/10.1002/ps.1831>.
- Latha, P.C., & Gopal, H. (2010). Influence of herbicides on cellulolytic, proteolytic and phosphate solubilising bacteria. *International Journal of Plant Protection*, 3(1), 83–88.
- Latifa, I.C., & Dnggarwulan, E. (2009). Nitrogen content, nitrate reductase activity, and biomass of kimpul (*Xanthosoma sagittifolium*) on shade and nitrogen fertilizer variation. *Nusantara Bioscience*, 1(2). <https://doi.org/10.13057/nusbiosci/n010203>.
- Lupwayi, N.Z., & Blackshaw, R. E. (2012). Soil microbiology in glyphosate-resistant corn cropping systems. *Agronomy Journal*, 104(4). <https://doi.org/10.2134/agronj2012.0054>.
- Li, Y., Cui, S., Chang, S.X., & Zhang, Q. (2019). Liming effects on soil pH and crop yield depend on lime material type, application method and rate, and crop species: a global meta-analysis. *Journal of Soils and Sediments*, 19(3). <https://doi.org/10.1007/s11368-018-2120-2>
- Mayerová, M., Mikulka, J., & Soukup, J. (2018). Effects of selective herbicide treatment on weed community in cereal crop rotation. *Plant, Soil and Environment*, 64(9). <https://doi.org/10.17221/289/2018-PSE>.
- Mertens, M. (2017). Glyphosate , a chelating agent — relevant for ecological risk assessment ? <https://doi.org/https://doi.org/10.1007/s11356-017-1080-1>.
- Moore, J.K., Braymer, H.D., & Larson, A.D. (1983). Isolation of a *Pseudomonas* sp. which utilizes the phosphonate herbicide glyphosate. *Applied and Environmental Microbiology*, 46(2). <https://doi.org/10.1128/aem.46.2.316-320.1983>.
- Moretto, J.A.S., Altarugio, L.M., Andrade, P. A., Fachin, A.L., Andreote, F.D., & Stehling, E.G. (2017). Changes in bacterial community after application of three different herbicides. *FEMS Microbiology Letters*, 364(13). <https://doi.org/10.1093/femsle/fnx113>.

- Nasution, D.P. (2009). Corn production (*Zea mays L.*). Thesis as one of the requirements to be able to obtain a bachelor's degree at the Faculty of Agriculture, University of North Sumatra, Medan. *Skripsi*.
- Nguyen, D.B., Rose, M.T., Rose, T.J., & Zwieten, L. (2018). Effect of glyphosate and a commercial formulation on soil functionality assessed by substrate induced respiration and enzyme activity. *European Journal of Soil Biology*, 85. <https://doi.org/10.1016/j.ejsobi.2018.01.004>.
- Nivelle, E., Verzeaux, J., Chabot, A., Roger, D., Chesnais, Q., Ameline, A., Lacoux, J., Nava-Saucedo, J. E., Tétu, T., & Catterou, M. (2018). Effects of glyphosate application and nitrogen fertilization on the soil and the consequences on aboveground and belowground interactions. In *Geoderma* (Vol. 311, pp. 45–57). <https://doi.org/10.1016/j.geoderma.2017.10.002>.
- Nleya, T., Kleinjan, J., & Chungu, C. (2019). Corn Growth and Development: Climate Matters. In *IGrow Corn: Best Management Practices* (Vol. 1, Issue March).
- Novozamsky, I., Houba, V.J.G., Temminghoff, E., & Lee, J.J. (1984). Determination of total N and total P in a single soil digest. In *Netherlands Journal of Agricultural Science* (Vol. 32, pp. 322–324).
- Nduwumuremyi, A. (2013). Soil acidification and lime quality: Sources of soil acidity, effects on plant nutrients, efficiency of lime and liming requirements. *Research & Reviews: Journal of Agriculture and Allied Sciences*, 2(November 2013).
- Neina, D. (2019). The Role of Soil pH in Plant Nutrition and Soil Remediation. In *Applied and Environmental Soil Science* (Vol. 2019). <https://doi.org/10.1155/2019/5794869>.
- Oerke, E.C. (2006). Crop losses to pests. In *Journal of Agricultural Science* (Vol. 144, Issue 1). <https://doi.org/10.1017/S0021859605005708>.
- Okada, E., Costa, J.L., & Bedmar, F. (2019). Glyphosate Dissipation in Different Soils Under No-Till and Conventional Tillage. *Pedosphere*, 29(6). [https://doi.org/10.1016/S1002-0160\(17\)60430-2](https://doi.org/10.1016/S1002-0160(17)60430-2).
- Olorunwa, O.J., Adhikari, B., Shi, A., & Barickman, T.C. (2022). Screening of cowpea (*Vigna unguiculata (L.) Walp.*) genotypes for waterlogging tolerance using morpho-physiological traits at early growth stage. *Plant Science*, 315. <https://doi.org/10.1016/j.plantsci.2021.111136>.
- Olson, B.M., & Lindwall, C.W. (1991). Soil microbial activity under chemical fallow conditions: Effects of 2,4-D and glyphosate. *Soil Biology and Biochemistry*, 23(11). [https://doi.org/10.1016/0038-0717\(91\)90046-M](https://doi.org/10.1016/0038-0717(91)90046-M).
- Panettieri, M., Lazaro, L., López-Garrido, R., Murillo, J. M., & Madejón, E. (2013). Glyphosate effect on soil biochemical properties under conservation tillage. *Soil and Tillage Research*, 133. <https://doi.org/10.1016/j.still.2013.05.007>.

- Perucci, P., & Scarponi, L. (1994). Effects of the herbicide imazethapyr on soil microbial biomass and various soil enzyme activities. *Biology and Fertility of Soils*, 17(3). <https://doi.org/10.1007/BF00336329>.
- Pimentel, D., Harvey, C., Resosudarmo, P., Sinclair, K., Kurz, D., McNair, M., Crist, S., Shpritz, L., Fitton, L., Saffouri, R., & Blair, R. (1995). Environmental and economic costs of soil erosion and conservation benefits. *Science*, 267(5201). <https://doi.org/10.1126/science.267.5201.1117>.
- Powles, S.B., & Preston, C. (2006). Evolved Glyphosate Resistance in Plants: Biochemical and Genetic Basis of Resistance. *Weed Technology*, 20(2). <https://doi.org/10.1614/wt-04-142r.1>.
- Putra, R. (2018). Corn Cultivation Techniques. In *Litbang Pertanian* (pp. 1–27). [www.litbang.pertanian.go.id](http://www.litbang.pertanian.go.id).
- Rabileh, M.A., Shamshuddin, J., Panhwar, Q.A., Rosenani, A.B., & Anuar, A.R. (2015). Effects of biochar and/or dolomitic limestone application on the properties of ultisol cropped to maize under glasshouse conditions. *Canadian Journal of Soil Science*, 95(1). <https://doi.org/10.4141/CJSS-2014-067>.
- Rasool, N., & Reshi, Z.A. (2010). Effect of the fungicide Mancozeb at different application rates on enzyme activities in a silt loam soil of the Kashmir Himalaya, India. *Tropical Ecology*, 51(2).
- Ratcliff, A.W., Busse, M.D., & Shestak, C.J. (2006). Changes in microbial community structure following herbicide (glyphosate) additions to forest soils. In *Applied Soil Ecology* (Vol. 34, Issues 2–3, pp. 114–124). <https://doi.org/10.1016/j.apsoil.2006.03.002>.
- Romano-Armada, N., Amoroso, M.J., & Rajal, V.B. (2017). Effect of glyphosate application on soil quality and health under natural and zero tillage field conditions. *Soil and Environment*, 36(2). <https://doi.org/10.25252/SE/17/51241>.
- Rose, M.T., Cavagnaro, T.R., Scanlan, C.A., Rose, T.J., Vancov, T., Kimber, S., Kennedy, I. R., Kookana, R. S., & Van Zwieten, L. (2016). Impact of Herbicides on Soil Biology and Function. In *Advances in Agronomy* (Vol. 136). <https://doi.org/10.1016/bs.agron.2015.11.005>.
- Rousk, J., Brookes, P.C., & Bååth, E. (2009). Contrasting soil pH effects on fungal and bacterial growth suggest functional redundancy in carbon mineralization. *Applied and Environmental Microbiology*, 75(6). <https://doi.org/10.1128/AEM.02775-08>.
- Šantric, L., Radivojevic, L., Gajic-Umiljendic, J., Saric-Krsmanovic, M., & Đurović-Pejcev, R. (2018). The effects of nicosulfuron and glyphosate on microbial activity of different soils. *Planta Daninha*, 36. <https://doi.org/10.1590/S0100-83582018360100103>.
- Schinner. (1996). Methods in Soil Biology. In *Methods* (Vol. 85, Issue 3, pp. 1–11).

- Singh, B.K., & Walker, A. (2006). Microbial degradation of organophosphorus compounds. In *FEMS Microbiology Reviews* (Vol. 30, Issue 3). <https://doi.org/10.1111/j.1574-6976.2006.00018.x>.
- Soeka, Y.S., Suharna, N., & Triana, E. (2019). Characterization of Cellulase Enzyme Produced by Two Selected Strains of *Streptomyces Macrosporeus* Isolated from Soil in Indonesia. *Makara Journal of Science*, 23(2). <https://doi.org/10.7454/mss.v23i2.11043>.
- Schneider, K; Turrión, M.B, Grierson, P.F, Gallardo, J.F. (2001). Phosphatase activity, microbial phosphorus, and fine root growth in forest soils in the Sierra de Gata, western central Spain. *Biology and Fertility of Soils* 34: 151–155.
- Tan, K.H. (2005). Soil Sampling, Preparation, and Analysis. In *Soil Sampling, Preparation, and Analysis*. <https://doi.org/10.1201/9781482274769>.
- Tan, K.H. (2008). Soils in the humid tropics and monsoon region of Indonesia. In *Soils in the Humid Tropics and Monsoon Region of Indonesia*. <https://doi.org/10.1201/9781420069105>.
- Van, F., Schubert, S., & Mengel, K. (1992). Effect of low root medium pH on net proton release, root respiration, and root growth of corn (*Zea mays L.*) and broad bean (*Vicia faba L.*). *Plant Physiology*, 99(2). <https://doi.org/10.1104/pp.99.2.415>.
- Verchot, L.V., & Borelli, T. (2005). Application of para-nitrophenol (pNP) enzyme assays in degraded tropical soils. *Soil Biology and Biochemistry*, 37(4), 625–633. <https://doi.org/10.1016/j.soilbio.2004.09.005>.
- Wahyudin, A., Wicaksono, F.Y., & Sari, D.F. (2016). Respons tanaman jagung (*Zea mays L.*) toleran herbisida akibat pemberian berbagai dosis herbisida IPA glifosat 486 g/l. *Kultivasi*, 15(1). <https://doi.org/10.24198/kultivasi.v15i1.12005>.
- Walkley, A., & Black, I.A. (1934). An examination of the degtjareff method for determining soil organic matter, and a proposed modification of the chromic acid titration method. In *Soil Science* (Vol. 37, Issue 1, pp. 29–38). <https://doi.org/10.1097/00010694-193401000-00003>.
- Williams, G.M., Kroes, R., & Munro, I.C. (2000). Safety evaluation and risk assessment of the herbicide Roundup and its active ingredient, glyphosate, for humans. *Regulatory Toxicology and Pharmacology*, 31(2 I). <https://doi.org/10.1006/rtpb.1999.1371>.
- Winarko, P., G. Darmawan dan Dwianto N. (2009). Description of Paragon Variety Sweet Corn. Available at : <http://varietas.net/dbvarietas/varimage/Jagung%2520Manis%2520Paragon.p df&ved=2ahUKEwivul89XgAhUISX0KHV3EBgoQFjAAegQIARAB&usg=AQvVaw1pTsFoKenCKs8O49q2541h>.

- Yulnafatmawita, & Anggriani, F. (2013). Fresh Organic Matter Application to Improve Aggregate Stability of Ultisols under Wet Tropical Region. *Journal of tropical soils*, 18(1). <https://doi.org/10.5400/jts.2013.v18i1.33-44>.
- Yulnafatmawita, & Adrinal. (2014). Physical characteristics of ultisols and the impact on soil loss during soybean (*Glycine max* Merr) cultivation in a wet tropical area. *Agrivita*, 36(1), 57–64. <https://doi.org/10.17503/agrivita-2014-36-1-p057-064>.
- Yulnafatmawita, Gusnidar & A. Saidi (2010). Role of organic matter in situ for aggregate stability improvement of Ultisol in West Sumatra and chili (*Capsicum annum*) production (p. 4).
- Yulnafatmawita, Y., Adrinal, A., & Daulay, A. (2008). The effect of adding several types of organic matter to the stability of the ultisol aggregates of sweet lime. *Jurnal Solum*, 5(1). <https://doi.org/10.25077/js.5.1.7-13.2008>.
- Zi, H., Hu, L., & Wang, C. (2022). Differentiate Responses of Soil Microbial Community and Enzyme Activities to Nitrogen and Phosphorus Addition Rates in an Alpine Meadow. *Frontiers in Plant Science*, 13. <https://doi.org/10.3389/fpls.2022.829381>.
- Zobiole, L.H.S., Kremer, R.J., & De Oliveira, R.S. (2011). Glyphosate interactions with physiological, microbiological, and nutritional parameters in glyphosate-resistant soybeans. In *Soybeans: Cultivation, Uses and Nutrition*.
- Zobiole, L.H.S., Kremer, R.J., Oliveira, R.S., & Constantin, J. (2011). Glyphosate affects micro-organisms in rhizospheres of glyphosate-resistant soybeans. *Journal of Applied Microbiology*, 110(1). <https://doi.org/10.1111/j.1365-2672.2010.04864.x>.
- Zobiole, L.H.S., Oliveira, R. S., Kremer, R. J., Constantin, J., Yamada, T., Castro, C., Oliveira, F. A., & Oliveira, A. (2010). Effect of glyphosate on symbiotic N<sub>2</sub> fixation and nickel concentration in glyphosate-resistant soybeans. *Applied Soil Ecology*, 44(2). <https://doi.org/10.1016/j.apsoil.2009.12.003>.