

DAFTAR PUSTAKA

- Abdelhadi, L. O., Santini, F. J., & Gagliostro, G. A. (2005). Corn Silage or High Moisture Corn Supplements for Beef Heifers Grazing Temperate Pastures: Effects on Performance, Ruminal Fermentation and In Situ Pasture Digestion. *Animal Feed Science and Technology*, 118(1–2), 63–78. <https://doi.org/10.1016/j.anifeedsci.2004.09.007>
- Adiguna, G. Setyo., & Aryantha, I. N. P. (2020). Aplikasi Fungi Rizosfer Sebagai Pupuk Hayati Pada Bibit Kelapa Sawit Dengan Memanfaatkan Limbah Tandan Kosong Kelapa Sawit Sebagai Media Pertumbuhan. *Manfish Journal*, 1(01), 32–42. <https://doi.org/10.31573/manfish.v1i01.43>
- Agung, A. K., Adiprasetyo, T., Hermansyah. (2019). Penggunaan Kompos Tandan Kosong Kelapa Sawit sebagai Subtitusi Pupuk NPK dalam Pembibitan Awal Kelapa Sawit. *Jurnal Ilmu-Ilmu Pertanian Indonesia*, 21(2), 75–81. <https://doi.org/10.31186/jipi.21.2.75-81>
- Agustin, H., Warid, W., & Musadik, I. M. (2023). Kandungan Nutrisi Kasgot Larva Lalat Tentara Hitam (*Hermetia illucens*) sebagai Pupuk Organik. *Jurnal Ilmu-Ilmu Pertanian Indonesia*, 25(1), 12–18. <https://doi.org/10.31186/jipi.25.1.12-18>
- Ainy, E. Q., Ratnayani, R., & Susilawati, L. (2015). Uji Aktivitas Antagonis *Trichoderma harzianum* 11035 terhadap *Colletotrichum capsici* TCKR2 dan *Colletotrichum acutatum* TCK1 Penyebab Antraknosa pada Tanaman Cabai. *Seminar Nasional XII Pendidikan Biologi FKIP UNS*, 11035, 892–897.
- Akbar, G. P., Kusdiyantini, E., & Wijanarka. (2019). Isolasi dan Karakterisasi secara Morfologi dan Biokimia Khamir dari Limbah Kulit Nanas Madu (*Ananas comosus* L.) untuk Produksi Bioetanol. *Berkala Bioteknologi*, 2(2).
- Albertyn, J., Pohl, C. H., & Viljoen, B. C. (2014). Rhodotorula. In *Encyclopedia of Food Microbiology* (pp. 291–295). Elsevier. <https://doi.org/10.1016/B978-0-12-384730-0.00289-5>
- Aldi, M. (2018). The Influence of Various Places to Grow Toward Moisture Content, Protein. *J. Ris. Dan Inov. Peternak*, 2(2), 14–20.
- Al-Dossary, M. A., Raheem, S. S., & Almyah, M. K. (2021). Molecular Identification of Five Species of Family Chaetomiaceae (Sordariomycetes, Ascomycota) from Iraqi Soil. *Biodiversitas*, 22(3), 1277–1284. <https://doi.org/10.13057/biodiv/d220325>
- Allaily, Miswar, Rianah S, Usman, Y., Zulfan, & Yaman, M. A. (2017). Potensi Pakan Fermentasi Anaerob Menggunakan Bahan Pakan Lokal untuk Ternak Itik. *Prosiding Seminar Nasional TPV*, 428–436. <https://doi.org/10.14334>
- Alya, Q. A., Antari, A. L., Prasetyo, A., & Lestari, E. S. (2020). Efektivitas Ekstrak Bunga Sepatu (*Hibiscus rosa-sinensis* L.) Sebagai Herbal Potensial Anti Mikosis. *Jurnal Kedokteran Raflesia*, 6(2), 2020. <https://ejournal.unib.ac.id/index.php/jukeraflesia>
- Amelia, R. N., Haris, A., Muliana, P. D., Fauziyyah, I. I., Damayanti, T., Nisa, J. K., & Rafidah, Z. (2024). Effect of Black Soldier Fly Frass (BSFF) on The Growth and Yield of Cayenne Pepper (*Capsicum frutescens* L.). *Jurnal Biodjati*, 9(1), 190–201. <https://doi.org/10.15575/biodjati.v9i1.33656>

- Aminah, S., Nuswantara, L. K., Tamboebolon, B. I. M., & Sunarso, S. (2020). Quality Improvement of Coconut Coir Through Fermentation Technology Using Selected Fiber Digestive Microbes from Buffalo Rumen Fluid. *Animal Science*, 18(1), 44–52.
- Amtmann, A., Troufflard, S., & Armengaud, P. (2008). The Effect of Potassium Nutrition on Pest and Disease Resistance in Plants. *Physiologia Plantarum*, 133(4), 682–691. <https://doi.org/10.1111/j.1399-3054.2008.01075.x>
- Anwar, M., & Lagiono. (2021). Efektifitas Media Pertumbuhan Maggots *Hermetia illucens* (Lalat Tentara Hitam) dalam Pemanfaatan Sampah Organik dengan Cara Rekayasa Biokonversi. *Jurnal Pendidikan Hayati*, 7(2), 93–100.
- AOAC. (1980). Official Methods of Analysis. 16th Ed. *Association of Analysis Chemist*.
- Aprianthina, I. D. A. Y. (2021). *Lalat Tentara Hitam (Black Soldier Fly) Serangga yang Beragam Manfaat*. Distanpangan.Baliprov.Go.Id. <https://distanpangan.baliprov.go.id/lalat-tentara-hitam-black-soldier-fly-serangga-yang-beragam-manfaat/>
- Arabzadeh, G. (2024). *Antifungal Properties of Black Soldier Fly Larval Frass: Impact on Plant Pathogens Control*. Universite Laval.
- Arabzadeh, G., Delisle-Houde, M., Vandenberg, G. W., Derome, N., Deschamps, M.-H., Dorais, M., Vincent, A. T., & Tweddel, R. J. (2023). Assessment of Antifungal/Anti-Oomycete Activity of Frass Derived from Black Soldier Fly Larvae to Control Plant Pathogens in Horticulture: Involvement of *Bacillus velezensis*. *Sustainability*, 15. <https://doi.org/https://doi.org/10.3390/su151410957>
- Arief, M., Ratika, A. N., & Lamid, M. (2012). Pengaruh Kombinasi Media Bungkil Kelapa Sawit dan Dedak Padi yang Difermentasi terhadap Produksi Maggot Black Soldier Fly (*Hermetia illucens*) sebagai Sumber Protein Pakan Ikan. *Jurnal Ilmiah Perikanan Dan Kelautan*, 4(1), 33–37.
- Attigobe, F. K., Ayim, N. Y. K., & Martey, J. (2019). Effectiveness of black soldier fly larvae in composting mercury contaminated organic waste. *Sci. Afr.*, 6.
- Azir, A., Harris, H., & Haris, R. B. K. (2017). Produksi dan Kandungan Nutrisi Maggot (*Chrysomya Megacephala*) Menggunakan Komposisi Media Kultur Berbeda. *Jurnal Ilmu-Ilmu Perikanan Dan Budidaya Perairan*, 12(1).
- Badan Standardisasi Nasional. (2016). *Pakan Ternak - SNI 8290.1:2016*. Badan Standardisasi Nasional.
- Badan Standardisasi Nasional. (2018). Pupuk Organik Padat - SNI 7763:2018. In *Badan Standardisasi Nasional*. Badan Standardisasi Indonesia. www.bsn.go.id
- Badawy, M. E. I., & Rabea, E. I. (2011). A Biopolymer Chitosan and Its Derivatives as Promising Antimicrobial Agents against Plant Pathogens and Their Applications in Crop Protection. *International Journal of Carbohydrate Chemistry*, 2011, 1–29. <https://doi.org/10.1155/2011/460381>
- Bahtiar, V. K., Patang, P., & Indrayani, I. (2024). The Effect of Molasses Concentration on the Growth of Yeast *Saccharomyces cerevisiae* in Making Single Cell Proteins. *Formosa Journal of Applied Sciences*, 3(1), 337–352. <https://doi.org/10.55927/fjas.v3i1.7462>
- Balitbangtan. (2016). *Lalat Tentara Hitam Agen Biokonversi Sampah Organik Berprotein Tinggi*. Balitbangtan Veteriner.

- Barragán-Fonseca, K. Y., Nurfikari, A., van de Zande, E. M., Wantulla, M., van Loon, J. J. A., de Boer, W., & Dicke, M. (2022). Insect Frass and Exuviae to Promote Plant Growth and Health. *Trends in Plant Science*, 27(7), 646–654. <https://doi.org/10.1016/j.tplants.2022.01.007>
- Barus, E. B., Yunilas, Hasanah, U., & Najwa, N. (2022). Maggot Nutrition Content in Various Growing Media (Vegetable, Fruit, and Food Processing Industry): Fish Flour Substitution. *Jurnal Peternakan Integratif*, 10(3), 170–178. <https://doi.org/10.32734/jpi.v10i3.9455>
- Basri, N. E. A., Azman, N. A., Ahmad, I. K., Suja, F., Jalil, N. A. A., & Amrul, N. F. (2022). Potential Applications of Frass Derived from Black Soldier Fly Larvae Treatment of Food Waste: A Review. In *Foods* (Vol. 11, Issue 17). MDPI. <https://doi.org/10.3390/foods11172664>
- Batista, A. S., Milette, L. C., & Stambuk, B. U. (2004). Sucrose Fermentation by *Saccharomyces cerevisiae* Lacking Hexose Transport. *Microbial Physiology*, 8(1), 26–33. <https://doi.org/10.1159/000082078>
- Beesigamukama, D., Mochoge, B., Korir, N. K., Fiaboe, K. K. M., Nakimbugwe, D., Khamis, F. M., Subramanian, S., & Tanga, C. M. (2020). Exploring Black Soldier Fly Frass as Novel Fertilizer for Improved Growth, Yield, and Nitrogen use Efficiency of Maize Under Field Conditions. *Frontiers in Plant Science*, 11, 1–17. <https://doi.org/https://doi.org/10.3389/fpls.2020.574592>
- Beesigamukama, D., Subramanian, S., & Tanga, C. M. (2022). Nutrient Quality and Maturity Status of Frass Fertilizer from Nine Edible Insects. *Sci. Rep.*, 12, 1–14. <https://doi.org/doi: 10.1038/s41598-022-11336-z>
- Bellemain, E., Carlsen, T., Brochmann, C., Coissac, E., Taberlet, P., & Kauserud, H. (2010). ITS as an Environmental DNA Barcode for Fungi: An in Silico Approach Reveals Potential PCR Biases. *BMC Microbiology*, 10, 1–9.
- BiologyInsights Team. (2024, July 5). *Ketoconazole: Mechanisms of Action and Fungal Resistance*. Pathology and Diseases. <https://biologyinsights.com/ketoconazole-mechanisms-of-action-and-fungal-resistance/?form=MG0AV3>
- Bosch, G., Zhang, S., Oonincx, D. G. A. B., & Hendriks, W. H. (2014). Protein Quality of Insects as Potential Ingredients for Dog and Cat Foods. *Journal of Nutritional Science*, 3. <https://doi.org/10.1017/jns.2014.23>
- Bourdichon, F., Casaregola, S., Farrokh, C., Frisvad, J. C., Gerds, M. L., Hammes, W. P. J. H., Huys, G., Laulund, S., Ouwehand, A., Powell, I. B., Prajapati, J. B., Seto, Y., Schure, E. Ter, Boven, A. Van, Vankerckhoven, V., Zgoda, A., Tuijtelaars, S., & Hansen, E. B. (2012). Food Fermentations: Microorganisms With Technological Beneficial Use. *International Journal of Food Microbiology*, 154(3), 87–97. <https://doi.org/https://doi.org/10.1016/j.ijfoodmicro.2011.12.030>
- BPS, B. P. S. (2023). Statistik Kelapa Sawit Indonesia 2022. *Badan Pusat Statistik*, 16(1), 1689–1699. <https://revistas.ufrj.br/index.php/rce/article/download/1659/1508%0Ahttp://hipatiapress.com/hpjournals/index.php/qre/article/view/1348%5Cnhttp://www.tandfonline.com/doi/abs/10.1080/09500799708666915%5Cnhttps://mckinseyonsociety.com/downloads/reports/Educa>

- Buulolo, Y. E. C. (2024). *Pertumbuhan Ayam Broiler Fase Starter Suplementasi Tepung Maggot diberi Pakan Fermentasi Khamir Pichia kudriavzevii Y-137 dan Rhodotorula alborubescens Y-158 Koleksi UNJCC* [Skripsi]. Universitas Negeri Jakarta.
- Cahyani, P. M., Maretha, D. E., Asnilawati. (2020). Uji Kandungan Protein, Karbohidrat dan Lemak pada Larva Maggot (*Hermetia illucens*) yang Diproduksi di Kalidoni Kota Palembang dan Sumbangsihnya pada Materi Insecta di Kelas X SMA/MA. *Bioilm*, 6(2), 120-128.
- Chairinnisa, Kurniawan, E., Mulyawan, R., Jalaludin, & Hakim, L. (2024). Pembuatan Pupuk Organik Padat dari Kotoran Kambing dan Cocopeat dengan Bioaktivator Sot (Suplemen Organik Tanaman). *Chemical Engineering Journal Storage*, 1(April), 36–44.
- Chelliah, R., Ramakrishnan, S. R., Prabhu, P. R., & Antony, U. (2016). Evaluation of Antimicrobial Activity and Probiotic Properties of Wild-strain *Pichia kudriavzevii* Isolated from Frozen Idli Batter. *Yeast*, 33(8), 385–401.
- Chen, J., Hou, D., Pang, W., Nowar, E. E., Tomberlin, J. K., Hu, R., Chen, H., Xie, J., Zhang, J., Yu, Z., & Li, Q. (2019). Effect of Moisture Content on Greenhouse Gas and NH₃ Emissions from Pig Manure Converted by Black Soldier Fly. *Science of The Total Environment*, 697. <https://doi.org/10.1016/j.scitotenv.2019.133840>
- Chepkorir, A., Beesigamukama, D., Gitari, H. I., Chia, S. Y., Subramanian, S., Ekesi, S., Abucheli, B. E., Rubyogo, J. C., Zahariadis, T., Athanasiou, G., Zachariadi, A., Zachariadis, V., Tenkouano, A., & Tanga, C. M. (2024). Insect Frass Fertilizer as a Regenerative Input for Improved Biological Nitrogen Fixation and Sustainable Bush Bean Production. *Frontiers in Plant Science*, 15 (September), 1–25. <https://doi.org/10.3389/fpls.2024.1460599>
- Christiana, I., Maryani, Rozik, M., Matling, & Lumbantoruan, Y. (2023). Pengaruh Kombinasi Bungkil Sawit Terfermentasi dengan Natura Organik Dekomposer dan Ampas Tahu terhadap Laju Pertumbuhan Maggot BSF (*Hermetia illucens*). *Jurnal Akuakultur Sungai Dan Danau*, 8(2), 195–205.
- Chu, Y., Li, M., Jin, J., Dong, X., Xu, K., Jin, L., Qiao, Y., & Ji, H. (2023). Advances in the Application of the Non-Conventional Yeast *Pichia kudriavzevii* in Food and Biotechnology Industries. *Journal of Fungi*, 9(2). <https://doi.org/10.3390/jof9020170>
- Cicilia, A. P., & Susila, N. (2018). Potensi Ampas Tahu Terhadap Produksi Maggot (*Hermetia illucens*) sebagai Sumber Protein Pakan Ikan. *Anterior Jurnal*, 18(1), 40–47. <https://doi.org/10.33084/anterior.v18i1.407>
- Cickova, H., Newton, G. L., Lacy, R. C., & Kozanek, M. (2015). The Use of Fly Larvae for Organic Waste Treatment. *Waste Manag.*, 35, 68–80.
- Darmosarkoro, W., & Rahutomo, S. (2007). Tandan Kosong Kelapa Sawit Sebagai Bahan Pemberah Tanah. *Jurnal Lahan Dan Pemupukan Kelapa Sawit Edisi1.*, 3, 167–180.
- De Smet, J., Wynants, E., Cos, P., & Van Campenhout, L. (2018). Microbial Community Dynamics During Rearing of Black Soldier Fly Larvae (*Hermetia illucens*) and Impact on Exploitation Potential. *Appl. Environ. Microbiol.*, 84.
- Diarrukmi, R. M. (2021). *Efektivitas Hasil Pertumbuhan Jamur Aspergillus flavus pada Media SDA (Sabouraud Dextrose Agar) dan MEA (Malt Extract Agar) yang Dibandingkan dengan Media PDA (Potato Dextrose Agar)* [Karya Tulis Ilmiah]. Politeknik Kesehatan Kementerian Kesehatan.

- DLH Kabupaten Probolinggo. (2021). *Kelapa Sawit*. DLH Kab. Probolinggo. <https://dlh.probolinggokab.go.id/kelapa-sawit/>
- Dortsman, B., Diener, S., Bart, V., & Zurbrugg, C. (2017). *Black Soldier Fly Biowaste Processing: A Stepby-step Guide*. Eawag.
- Ekblom, R., & Wolf, J. B. (2014). A Field Guide to Whole-genome Sequencing, Assembly and Annotation. *Evolutionary Applications*, 7(9), 1026–1042. <https://doi.org/https://doi.org/10.1111/eva.12178>
- El Hadrami, A., Adam, L. R., El Hadrami, I., & Daayf, F. (2010). Chitosan in Plant Protection. *Marine Drugs*, 8(4), 968–987. <https://doi.org/10.3390/md8040968>
- El-Sayed, H., Osman, M. E., Abdelsalam, A., Boroujerdi, A., Sonbol, H., & Elsaba, Y. M. (2022). Morphological, Molecular and Metabolic Characterization of the Pigmented Fungus Subramaniula asteroids. *Journal of Fungi*, 8(11). <https://doi.org/10.3390/jof8111149>
- Erlangga, M. F. (2023). *Analisis Kualitas Pupuk Kasgot Cair Berdasarkan Variasi Bahan Organik [Skripsi]*. Universitas Islam Negeri Raden Intan Lampung.
- Fadilah, U., Wijaya, I. M. M., & Antara, N. S. (2018). Studi Pengaruh pH Awal Media dan Lama Fermentasi pada Proses Produksi Etanol dari Hidrolisat Tepung Biji Nangka dengan Menggunakan *Saccharomyces cerevisiae*. *Jurnal Rekayasa Dan Manajemen Agroindustri*, 6(2), 92–102.
- Fahmi, M. R. (2015). Optimalisasi Proses Biokonversi dengan Menggunakan Mini Larva *Hermetia illucens* untuk Memenuhi Kebutuhan Pakan Ikan. *Jurnal Ilmiah Perikanan dan Kelautan*, 1, 139–144.
- Fajri, N. A., & Hamid, A. (2021). Produksi Maggot BSF (Black Soldier Fly) sebagai Pakan yang Dibudidaya dengan Media yang berbeda. *AGRIPTEK (Jurnal Agribisnis Dan Peternakan)*, 1(1), 12–17. <https://doi.org/10.51673/agriptek.v1i1.609>
- Fardiaz, S. (1992). *Fisiologi Fermentasi*. PAU IPB.
- Fernandes, T., Carvalho, B. F., Mantovani, H. C., Schwan, R. F., & Ávila, C. L. S. (2019). Identification and Characterization of Yeasts from Bovine Rumen for Potential use as Probiotics. *Journal of Applied Microbiology*, 127(3).
- Fitri, A., Anandito, R. B. K., & Siswanti. (2016). Penggunaan Daging dan Tulang Ikan Bandeng (*Chanos chanos*) pada Stik Ikan sebagai Makanan Ringan Berkalsium dan Berprotein Tinggi. *Jurnal Teknologi Hasil Pertanian*, IX(2).
- Ganapathiwar, S., & Bhukya, B. (2023). In Vitro Assessment for the Probiotic Potential of *Pichia kudriavzevii*. *Bioinformation*, 19(4), 441–444. <https://doi.org/10.6026/97320630019441>
- Gao, Z., Wang, W., Lu, X., Zhu, F., Liu, W., Wang, X., & Lei, C. (2019). Bioconversion Performance and Life Table of Black Soldier Fly (*Hermetia illucens*) on Fermented Maize Straw. *Journal of Cleaner Production*, 230, 974–980. <https://doi.org/10.1016/j.jclepro.2019.05.074>
- Gaol, M. R. L. L., Sitorus, R., S, Y., & Indra, S. (2013). Pembuatan Selulosa Asetat Dari A -Selulosa Tandan Kosong Kelapa Sawit. *Jurnal Teknik Kimia USU*, 2(3), 33–39. <https://doi.org/10.32734/jtk.v2i3.1447>

- Gebremikael, M. T., Ranasinghe, A., Hosseini, P. S., Laboan, B., Sonneveld, E., Pipan, M., Oni, F. E., Montemurro, F., Höfte, M., Sleutel, S., & De Neve, S. (2020). How Do Novel and Conventional Agri-food Wastes, Co-products and By-products Improve Soil Functions and Soil Quality?. *Waste Management*, 113, 132–144. <https://doi.org/10.1016/j.wasman.2020.05.040>
- Gold, M., Cassar, C. M., Zurbrügg, C., Kreuzer, M., Boulos, S., Diener, S., & Mathys, A. (2020). Biowaste Treatment With Black Soldier Fly Larvae: Increasing Performance Through the Formulation of Biowastes Based on Protein and Carbohydrates. *Waste Management*, 102, 319–329. <https://doi.org/10.1016/j.wasman.2019.10.036>
- Gozan, M., & Samsuri, M. (2007). Sakarifikasi dan Fermentasi Bagas menjadi Etanol menggunakan Enzim Selulase dan Enzim Sellobiase. *Jurnal Teknologi*, 21(3), 209–215.
- Gumanti, N. R., Nadhra, M., Azeli, S. P., Pratama, S. F., & Razak, A. (2024). Pengaruh Campuran Media Pakan Terhadap Pertumbuhan Maggot Black Soldier Fly (BSF). *Microbiotech*, 2(1), 28–35.
- Gunadi, S. A. (2023). *Pengaruh Penambahan Saccharomyces cerevisiae UNJCC Y-87 dan Pichia Kudriavzevii UNJCC Y-103 pada Fermentasi Media Biakan Terhadap Produksi Maggot Hermetia illucens* [Skripsi]. Universitas Negeri Jakarta.
- Halwiyah, N., Rejeki, S. F., Raharjo, B., & Purwantisari, S. (2019). Uji Antagonisme Jamur Patogen *Fusarium solani* Penyebab Penyakit Layu pada Tanaman Cabai dengan Menggunakan *Beauveria bassiana* Secara In Vitro. *Jurnal Akademika Biologi*, 8(2), 8–17.
- Hamzah, T. N. T., Lee, S. Y., Hidayat, A., Terhem, R., Faridah-Hanum, I., & Mohamed, R. (2018). Diversity and Characterization of Endophytic Fungi Isolated from the Tropical Mangrove Species, *Rhizophora mucronata*, and Identification of Potential Antagonists Against the Soil-borne Fungus, *Fusarium solani*. *Frontiers in Microbiology*, 9(JUL). <https://doi.org/10.3389/fmicb.2018.01707>
- Harahap, F. S., Walida, H., Rahmaniah, R., Rauf, A., Hasibuan, R., & Nasution, A. P. (2020). Pengaruh Aplikasi Tandan Kosong Kelapa Sawit dan Arang Sekam Padi terhadap beberapa Sifat Kimia Tanah pada Tomat. *Agrotechnology Research Journal*, 4(1), 1–5. <https://doi.org/10.20961/agrotechresj.v4i1.41121>
- Haryawan, B., Sofjan, J., & Yetti, H. (2015). Pemberian Kompos Tandan Kosong Kelapa Sawit dan Pupuk N, P dan K terhadap Pertumbuhan dan Produksi Tanaman Jagung Manis (*Zea mays*. L Var saccarata Sturt). *Universitas Riau JOM Faperta*, 2(2).
- Hasanuzzaman, M., Bhuyan, M. H. M. B., Nahar, K., Hossain, M. S., Al Mahmud, J., Hossen, M. S., Masud, A. A. C., Moumita, & Fujita, M. (2018). Potassium: A Vital Regulator of Plant Responses and Tolerance to Abiotic Stresses. In *Agronomy* (Vol. 8, Issue 3). MDPI AG. <https://doi.org/10.3390/agronomy8030031>
- Hatmiko, S. P., Cholis, N., & Soejosopoetro, B. (2014). Pengaruh Pakan Fermentasi Menggunakan Bakteri Azotobacter terhadap pH, Daya Mengikat Air, dan Susut Masak Daging Kelinci. *Miko Deal*, 12, 1–8.
- Hau, L. J., Shamsuddin, R., May, A. K. A., Saenong, A., Lazim, A. M., Narasimha, M., & Low, A. (2020). Mixed Composting of Palm Oil Empty Fruit Bunch (EFB) and Palm Oil Mill Effluent (POME) with Various Organics: An Analysis on Final Macronutrient Content and Physical Properties. *Waste and Biomass Valorization*, 11, 1–10.

- Heil, C. S., Burton, J. N., Liachko, I., Friedrich, A., Hanson, N. A., Morris, C. L., Schacherer, J., Shendure, J., Thomas, J. H., & Dunham, M. J. (2017). Identification of a Novel Interspecific Hybrid Yeast from a Metagenomic Spontaneously Inoculated Beer Sample using Hi-C. *Yeast*, 35(1), 71–84. <https://doi.org/https://doi.org/10.1002/yea.3280>
- Hem, S., Fahmi, M. R., Chumaidi, Maskur, Hadadi, A., Supriyadi, Ediwarman, Larue, M., & Pouyaud, L. (2008). Valorization of Palm Kernel Meal via Bioconversion: Indonesia's initiative to address aquafeeds shortage. *International Conference on Oil Palm and Environment (ICOPE)*.
- Hem, S., Toure, S., Sagabla, C., & Legendre, M. (2008). Bioconversion of Palm Kernel Meal for Aquaculture: Experiences from the Forest Region (Republic of Guinea). *African Journal of Biotech*, 7(8), 1192–1198.
- Herdyastuti, N., Raharjo, T. J., & Matsjeh, S. (2009). Kitinase dan Mikroorganisme Kitinolitik : Isolasi, Karakterisasi dan Manfaatnya. *Indo. J. Chem*, 9(1), 37–47.
- Hidangmayum, A., Dwivedi, P., Katiyar, D., & Hemantaranjan, A. (2019). Application of Chitosan on Plant responses With Special Reference to Abiotic Stress. *Physiology and Molecular Biology of Plants*, 25(2), 313–326. <https://doi.org/10.1007/s12298-018-0633-1>
- Hidayat, R. A., & Isnawati. (2021). Isolasi dan Karakterisasi Jamur Selulolitik pada Fermetodege: Pakan Fermentasi Berbahan Campuran Eceng Gondok, Bekatul Padi, dan Tongkol Jagung. *LenteraBio*, 10(2), 176–187. <https://journal.unesa.ac.id/index.php/lenterabio/index>
- Hidayat, W., Hartati, R. M., Putra, D. P. (2024). Pemberian Pupuk P dan Kompos Tandan Kosong Kelapa Sawit sebagai Campuran Media Tanam Pengaruhnya terhadap Pertumbuhan *Mucuna bracteata*. *Agroforetech*, 2(2), 519-524.
- Hoffman, P. C. (2020). Ash Content of Forages. *Focus on Forage*, 7(1).
- Hu, L., Chen, Q., & Chen, X. (2024). Characterization of *Humicola pulvericola* First Isolated from a Patient with Keratitis Clinical Case. *Infection and Drug Resistance*, 17, 2183–2188. <https://doi.org/10.2147/IDR.S468800>
- Ihsan, T. P., Sinaga, S., & Ramdani, D. (2023). Pengaruh Fermentasi Manure Layer sebagai Media Tumbuh Maggot terhadap Kandungan N-Total dan C-Organik Kasgot. *Jurnal Ilmu Peternakan (JANHUS)*, 8(1), 18–25. www.journal.uniga.ac.id
- Illumina. (2024). *Introduction to NGS*. <https://www.illumina.com/science/technology/next-generation-sequencing.html>
- Indah, A. S. (2016). *Kandungan Protein Kasar dan Serat Kasar Silase Pakan Lengkap Berbahan Utama Batang Pisang (Musa paradisiace) dengan Lama Inkubasi yang Berbeda [Skripsi]*. Universitas Hasanuddin.
- Indariyanti, N., & Barades, E. (2018). Evaluasi Biomassa dan Kandungan Nutrisi Maggot (*Hermetia illucens*) pada Media Budaya yang Berbeda. *Prosiding Seminar Nasional Pengembangan Teknologi Pertanian Politeknik Negeri Lampung*. <http://jurnal.polinela.ac.id/index.php/PROSIDING>
- Ispitasari, R., & Haryanti. (2022). Pengaruh Waktu Destilasi terhadap Ketepatan Uji Protein Kasar pada Metode Kjeldahl dalam Bahan Pakan Ternak Berprotein Tinggi. *Indonesian Journal of Laboratory*, 5(1), 39–43.

- Jácome, N. T., Mendoza, E. M., & Hurtado, B. E. P. (2024). Characterization of the Biodegradation Properties of Lignocellulosic Material by *Pichia Kudriavzevii* Isolated From Cocoa Pod Shell (*Theobroma cacao*). *Research Square*. <https://doi.org/10.21203/rs.3.rs-4883043/v1>
- Jana, S. (2020). *Functional Chitosan: Drug delivery and biomedical applications*. Springer Nature.
- Kadhim, R. A., Al-Saadoon, A. H., & Al-Mahmoud, W. A. (2019). Morphological and Phylogenetic Identification of *Pichia* Species Associated With Foods in Basrah, Iraq. *Basrah Journal of Science*, 37(2). <https://doi.org/10.29072/basjs.20190206>
- Kantun, W., Malik, A. A., & Harianti. (2015). Kelayakan Limbah Padat Tuna Loin Madidihang (*Thunus albacares*) untuk Bahan Baku Produk Diversifikasi. *Jurnal Pengolahan Hasil Perikanan*, 18(3), 303–314.
- Kaufman, P. E., & II, J. W. D. (2009). *Black soldier fly Hermetia illucens Linnaeus (Insecta: Diptera: Stratiomyidae)*. University of Florida IFAS Extension.
- Kim, W., Bae, S., Park, K., Lee, S., Choi, Y., Han, S., & Koh, Y. (2011). Biochemical Characterization of Digestive Enzymes in the Black Soldier Fly, *Hermetia illucens* (Diptera: Stratiomyidae). *Journal of Asia-Pacific Entomology*, 14(1), 11–14. <https://doi.org/10.1016/j.aspen.2010.11.003>
- Klammsteiner, T., Turan, V., Fernandez-Delgado Juarez, M., Oberegger, S., & Insam, H. (2020). Suitability of Black Soldier Fly Frass as Soil Amendment and Implication for Organic Waste Hygienization. *Agronomy*, 10, 1578.
- Kumala, S. (2014). *Mikroba Endofit: Pemanfaatan Mikroba Endofit dalam Bidang Farmasi*. ISFI Penerbitan.
- Kumar, V. (2018). *Lignocellulose biodegradation: Fundamentals and Applications*.
- Kurniawan, E., Dewi, R., & Jannah, R. (2022). Pemanfaatan LCPKS sebagai POC dengan Penambahan Serat TKKS. *Teknologi Kimia Unimal*, 11(1), 76–90.
- Kurniawan, E., Ginting, Z., & Nurjannah, P. (2017). Pemanfaatan Urine Kambing Pada Pembuatan Pupuk Organik Cair Terhadap Kualitas Unsur Hara Makro (NPK). *Seminar Nasional Sains Dan Teknologi*, 23, 1–10.
- Kurtzman, C. P. (2000). Four new yeasts in the *Pichia anomala* clade. *International Journal of Systematic and Evolutionary Microbiology*, 50, 395–404.
- Kusmawati, S., Rizqiati, H., & Susanti, S. (2019). Analisis Kadar Alkohol, Nilai pH, Viskositas dan Total Khamir pada Water Kefir Semangka dengan Variasi Konsentrasi Sukrosa. *Jurnal Teknologi Pangan*, 4(2), 127–130. www.ejournal-s1.undip.ac.id/index.php/tekpangan.
- Kusuma, A. P., Chuzaemi, S., & Mashudi, M. (2019). Pengaruh Lama Fermentasi Limbah Buah Nanas (*Ananas comosus* L. Merr) terhadap Kualitas Fisik dan Kandungan Nutrien Menggunakan *Aspergillus niger*. *Jurnal Nutrisi Ternak Tropis*, 2(1), 1–9.
- Kusuma, G. P. A. W., Nocianitri, K. A., & Pratiwi, I. D. P. K. (2020). Pengaruh Lama Fermentasi terhadap Karakteristik Fermented Rice Drink sebagai Minuman Probiotik dengan Isolat *Lactobacillus* sp. F213. *Jurnal Itepa*, 9(2), 182–193.

- Kusumaningsih, R. (2024). Pemanfaatan Maggot sebagai Organisme Kecil Pengolah Sampah Organik. *ADMA: Jurnal Pengabdian dan Pemberdayaan Masyarakat*, 4(2), 533-544. <https://doi.org/10.30812/adma.v4i2.3162>.
- Lalander, C., Diener, S., Zurbrugg, C., & Vinneras, B. (2019). Effects of Feedstock on Larval Development and Process Efficiency in Waste Treatment With Black Soldier Fly (*Hermetia illucens*). *J. Clean Prod.*, 208, 211–210.
- Lata, P., Kumari, R., Sharma, K. B., Rangra, S., & Savitri. (2022). In Vitro Evaluation of Probiotic Potential and Enzymatic Profiling of *Pichia kudriavzevii* Y33 Isolated from Traditional Home-made Mango Pickle. *Journal of Genetic Engineering and Biotechnology*, 20(1). <https://doi.org/10.1186/s43141-022-00416-2>
- Lauber, C. L., Hamady, M., Knight, R., & Fierer, N. (2009). Pyrosequencing-Based Assessment of Soil pH as a Predictor of Soil Bacterial Community Structure at the Continental Scale. *Applied and Environmental Microbiology*, 75(15), 5111–5120. <https://doi.org/10.1128/AEM.00335-09>
- Lemme, A., & Klüber, P. (2024). Rethinking Amino Acid Nutrition of Black Soldier Fly Larvae (*Hermetia illucens*) Based on Insights from an Amino Acid Reduction Trial. *Insects*, 15(11), 862. <https://doi.org/10.3390/insects15110862>
- Lestari, A., Wahyuni, T. H., Mirwandhono, E., & Ginting, N. (2020). Maggot Black Soldier Fly (*Hermetia illucens*) Nutritional Content Using Various Culture Media. *Jurnal Peternakan Integratif*, 8(3), 161–169.
- Levitel, T., Mustafaa, A. F., Seguin, P., & Lefebvre, G. (2009). Effects of a Propionic Acid-base Additive on Short-termenssing Characteristics of Whole Plant Maize and on Dairycow Performance. *Anim. Feed Sci. Technol.*, 152, 21–32.
- Li, P., Li, S., Cheng, L., & Luo, L. (2014). Analyzing the Relation Between the Microbial Diversity of DaQu and the Turbidity Spoilage of Traditional Chinese Vinegar. *Applied Microbiology and Biotechnology*, 98, 6073–6084. <https://doi.org/https://doi.org/10.1007/s00253-014-5697-4>
- Liang, Y., Qiu, F., Tao, Y., Peng, B., Zeng, X., Zhang, M., Zhang, Q., Li, X., & Wei, J. (2024). Combating Fusarium oxysporum in Tobacco Soils with Black Soldier Fly Larvae Frass-based Reductive Soil Disinfestation. *Archives of Agronomy and Soil Science*, 70(1), 1–16. <https://doi.org/10.1080/03650340.2024.2432914>
- Lina, L., Rusmiyanto, E., & Kurniatuhadi, R. (2021). Khamir Potensial Probiotik Hasil Isolasi dari Fermentasi Jus Jeruk Siam (*Citrus nobilis* var. *microcarpa*). *Biologica Samudra*, 3(2), 115–132.
- Liu, J., Bell, A. A., Stipanovic, R. D., & Puckhaber, L. S. (2011). A Polyketide Synthase Gene and an Aspartate Kinase Like Gene are Required for the Biosynthesis of Fusaric Acid in *Fusarium oxysporum* F. sp. *Vasinsectum*. *Beltwide Cotton Conferences*.
- Liu, J., Liu, X., Ren, J., Zhao, H., Yuan, X., Wang, X., Fattahand, Z. M. S. A., & Z, C. (2015). The Effects of Fermentation and Adsorption Using Lactic Acid Bacteriaculture Broth on the Feed Quality of Rice Straw. *Journal of Integrative Agriculture*, 14(3), 503–513. [https://doi.org/https://doi.org/10.1016/S2095-3119\(14\)60831-5](https://doi.org/https://doi.org/10.1016/S2095-3119(14)60831-5)
- Lomonaco, G., Franco, A., De Smet, J., Scieuzzo, C., Salvia, R., & Falabella, P. (2024). Larval frass of *Hermetia illucens* as Organic Fertilizer: Composition and Beneficial Effects on Different Crops. *Insects*, 15(4), 293.

- Lopes, I. G., Yong, J. W., & Lalander, C. (2022). Frass Derived from Black Soldier Fly Larvae Treatment of Biodegradable Wastes. A Critical Review and Future Perspectives. *Waste Management*, 142, 65–76.
- Madu, A. S. T. M., Hendriarianti, E., & Wulandari, C. D. R. (2022). Teknologi Black Soldier Fly (BSF) dengan Variasi Pakan Sampah Organik. *Jurnal Mahasiswa "ENIRO,"* 1(1).
- Manan, F. A., Yeoh, Y.-K., Chai, T.-T., & Wong, F.-C. (2024). Unlocking the Potential of Black Soldier Fly Frass as a Sustainable Organic Fertilizer: A Review of Recent Studies. *Journal of Environmental Management*, 367, 121997. <https://doi.org/10.1016/j.jenvman.2024.121997>
- Mangisah, I., Mulyono, & Yunianto, V. D. (2022). *Maggot Bahan Pakan Sumber Protein Untuk Unggas*. UNDIP PRESS.
- Mangunwardoyo, W. (2011). Penggunaan Bungkil Inti Kelapa Sawit Hasil Biokonversi sebagai Substrat Pertumbuhan Larva *Hermetia illucens L* (Maggot). 16(2), 166–172.
- Manning, D. A. C. (2010). Mineral Sources of Potassium for Plant Nutrition. A Review. *Agronomy for Sustainable Development*, 30(2), 281–294. <https://doi.org/10.1051/agro/2009023>
- Maradon, G. G., Sutrisna, R., Erwanto. (2015). Pengaruh Ransum dengan Kadar Serat Kasar Berbeda terhadap Organ Dalam Ayam Jantan Tipe Medium Umur 8 Minggu. *Jurnal Ilmiah Peternakan Terpadu*, 3(2), 6-11.
- Mardawati, E., Daulay, D. N., Wira, D. W., & Sukarminah, E. (2018). Pengaruh Konsentrasi Sel Awal dan pH Medium pada Fermentasi Xilitol dari Hidrolisat Tandan Kosong Sawit. *Industria: Jurnal Teknologi Dan Manajemen Agroindustri*, 7(1), 23–30.
- Marham, H. D., Rustam, Y., & Sukmawati, D. (2016). Uji Kemampuan Antagonisme Khamir Asal Daun Jati (*Tectona grandis*) terhadap Kapang Pengkontaminan pada Pakan Ternak Ayam. *BIOMA*, 12.
- Martin, M. (2011). Cutadapt Removes Adapter Sequences from High-throughput Sequencing Reads. *EMBnet Journal*, 17(1), 10–12.
- Maryoto, A. (2020). *Manfaat Serat Bagi Tubuh* (Sulistiono, Ed.; Digital edition). ALPRIN.
- Masir, U., Fausiah, A., & Sagita, S. (2020). Produksi Maggot Black Soldier Fly (BSF) (*Hermetia illucens*) pada Media Ampas Tahu dan Feses Ayam. *Agrovital: Jurnal Ilmu Pertanian*, 5(2), 87–90.
- Maya, F. N., & Alami, N. H. (2019). Uji Potensi Isolat Khamir Dari Rhizosfer Mangrove Wonorejo dan Gunung Anyar Sebagai Agen Penghasil IAA (Indole Acetic Acid). *Jurnal Sains Dan Seni Its*, 8(1), 2337–3520.
- Merdekawangi, D., Widayat, W., & Darmadji, P. (2013). Delignification and Cellulose Cracking Process by Enzymatic Treatment. *Procedia Environmental Sciences*, 17, 126–135. <https://doi.org/https://doi.org/10.1016/j.proenv.2013.02.019>
- Monica, S. L. D., & Sa'diyah, K. (2023). Pengaruh Rasio Kadar Tepung Maggot terhadap Kualitas Pakan Ikan Lele. *DISTILAT: Jurnal Teknologi Separasi*, 9(4), 381–391. <https://doi.org/10.33795/distilat.v9i4.4171>

- Moricca, S., & Ragazzi, A. (2008). Fungal endophytes in mediterranean oak forests: A lesson from *Discula quercina*. *Phytopathology*, 98(4), 380–386. <https://doi.org/10.1094/PHYTO-98-4-0380>
- Moulia, E. (2019). *Analisis Komunitas Bakteri Tanah Sulfat Masam dari Dua Tipe Lahan Rawa di Kalimantan dengan Pendekatan Next Generation Sequencing (NGS)* [Skripsi]. Universitas Islam Negeri Syarif Hidayatullah.
- Mudeng, N. E. G., Mokolensang, J. F., Kalesaran, O. J., Pangkey, H., & Lantu, S. (2018). Budidaya Maggot (*Hermetia illucens*) dengan menggunakan Beberapa Media. *E-Journal Budidaya Perairan*, 6(3), 1–6. <https://doi.org/10.35800/bdp.6.3.2018.21543>
- Mudmainah, S., & Khatimah, K. (2021). Pengaruh Aplikasi Pemberian Pupuk NPK terhadap Produksi dan Perkembangan Penyakit Layu Fusarium (*Fusarium oxysporum*) pada Tanaman Melon (*Cucumis melo* L.) di Rumah Kaca. *Jurnal Pertanian Peradaban*, 01(02), 36–46.
- Mulyaningsih, L. (2024). Pengaruh Pemberian Dosis Pupuk Kasgot (Bekas Maggot) dan NPK Terhadap Pertumbuhan dan Hasil Tiga Varietas Jagung Manis (*Zea mays Saccharata Sturt. L.*). *Ranah Research : Journal of Multidisciplinary Research and Development*, 6(4), 504–510. <https://doi.org/10.38035/rrj.v6i4.850>
- Mumtaz, S., Bintari, S. H., Mubarok, I., & Mustikaningtyas, D. (2022). Pemanfaatan Media Ampas Tahu Terfermentasi untuk Meningkatkan Produksi Maggot Black Soldier Fly (*Hermetia illucens*). *Prosiding Seminar Nasional Biologi*, 204–211. <https://proceeding.unnes.ac.id/index.php/psnb/article/view/1708>
- Munkvold, G. P. (2017). Fusarium Species and Their Associated Mycotoxins. In *Methods in Molecular Biology* (Vol. 1542, pp. 51–106). Humana Press Inc. https://doi.org/10.1007/978-1-4939-6707-0_4
- Murdikaningrum, G., Siskayanti, R., Rizkiah, R., Hidayat, M. F. I., & Komalasari, N. (2023). Perbandingan Biomassa Feses Kelinci dan Ampas Kopi sebagai Bahan Baku Pupuk Organik Padat dengan Metode Bokashi. *Composite: Jurnal Ilmu Pertanian*, 5(1), 40–45. <https://doi.org/10.37577/composite.v5i1.505>
- Muzzarelli, R. A. (2013). *Chitin*. Elsevier.
- Nadiya, R. A. (2022). *Pengaruh Konsentrasi Molase dan Yeast Extract terhadap Pertumbuhan Khamir Candida Tropicalis serta Variasi Konsentrasi Khamir terhadap Kualitas Roti* [Skripsi]. Universitas Islam Negeri Maulana Malik Ibrahim.
- Nata, I. F., Irawan, C., Putra, M. D., Wijayanti, H., Mardina, P., Mardina, P., Ma'rifah, Y. N., Misnawati, & Priscila, S. B. (2022). Tandan Kosong Kelapa Sawit: Potensi dan Aplikasi. In Sunardi (Ed.), *Repo-Dosen.Ulm.Ac.Id.* CV. Banyubening Cipta Sejahtera. <https://repo-dosen.ulm.ac.id/bitstream/handle/123456789/28006/TKS-Potensi dan Aplikasi-IFN.pdf?sequence=1>
- Natsir, M., Suryani, A., & Yulianti, F. (2020). Pengaruh Starter Khamir Terhadap Kualitas Pakan Maggot Lalat Tentara Hitam (*Hermetia illucens*). *Jurnal Ilmu-Ilmu Peternakan Dan Veteriner*, 30(3), 1–8. <https://doi.org/https://media.neliti.com/media/publications/481345-none-3c0826d5.pdf>
- Ngo, M. T., Van Nguyen, M., Han, J. W., Kim, B., Kim, Y. K., Park, M. S., Kim, H., & Choi, G. J. (2021). Biocontrol Potential of *Aspergillus* Species Producing

- Antimicrobial Metabolites. *Frontiers in Microbiology*, 12. <https://doi.org/10.3389/fmicb.2021.804333>
- Nguyen, T. T. X., Tomberlin, J. K., & Vanlaerhoven, S. (2013). Influence of Resources on *Hermetia illucens* (Diptera: Stratiomyidae) Larval Development. *Journal of Medical Entomology*, 50(4), 898–906. <https://doi.org/10.1603/ME12260>
- Ni'mah, Gt. Khairun., Hidayatullah, Arif., & Djaya, M. Syarif. (2020). Uji Kualitas Pupuk Organik Padat dari Vegetasi Lahan Gambut Berdasarkan Peraturan Menteri Pertanian No 70 Tahun 2011 di Banjarmasin Kalimantan Selatan. *Prosiding Hasil-Hasil Penelitian*, 1–9.
- Ningsih, H., Hastuti, U. S., & Listyorini, D. (2016). Kajian Antagonis *Trichoderma* Spp. terhadap Fusarium Solani Penyebab Penyakit Layu Pada Daun Cabai Rawit (*Capsicum frutescens*) Secara in Vitro. *Proceeding Biology Education Conference*, 13(1), 814–817.
- Nisa, A. K., Lamid, M., Lokapirnasari, W. P., & Amin, M. (2021). Improving Crude Protein and Crude Fat Content of Seligi Leaf (*Phyllanthus buxifolius*) Flour Through Probiotic Fermentation. *IOP Conference Series: Earth and Environmental Science*, 679(1), 012041. <https://doi.org/10.1088/1755-1315/679/1/012041>
- Nofiyanti, E., Tri Laksono, B., Salman, N., Ari Wardani, G., & Mellyanawaty, M. (2022). Efektivitas Larva Black Soldier Fly (*Hermetia illucens*) dalam Mereduksi Sampah Organik Pasar. *Serambi Engineering*, VII(1).
- Novita, R., & Sari, N. (2015). Sistem Informasi Penjualan Pupuk Berbasis E-Commerce. *Teknoif*, 3(2), 1–6.
- Nur, M. (2019). Analisis Potensi Limbah Buah-Buahan Sebagai Pupuk Organik Cair. *Seminar Nasional Teknik Industri*.
- Nurfikari, A., Leite, M. F. A., Kuramae, E. E., & de Boer, W. (2024). Microbial Community Dynamics During Decomposition of Insect Exuviae and Frass in Soil. *Soil Biology and Biochemistry*, 194. <https://doi.org/10.1016/j.soilbio.2024.109426>
- Nurhidayah, M. (2018). Female Black Soldier Fly (*Hermetia illucens*) Larvae as Biological Control for House Fly (*Musa domestica*) in Poultry Farm. *Journal of Biological Control*, 2(1), 7–11.
- Nursari, P. I. (2023). *Pengujian Biokontrol Isolat Khamir Asal Fermentasi Biji Kakao terhadap Kapang Patogen pada Buah Kakao (Theobroma cacao L.)* [Skripsi]. Universitas Negeri Jakarta.
- Oecd. (2017). *Waste Management Services*. Illumina Sequencing Production. http://www.illumina.com/content/dam/illumina-marketing/%0Adocuments/products/illumina_sequencing_introduction.pdf.
- Oesman, R., Harahap, F. S. F. S., Rauf, A., & Rahmaniah. (2020). Pengaruh Pemberian Pupuk Organik dan Pupuk Anorganik terhadap Serapan N, P, dan K oleh Tanaman Jagung pada Ultisol Tambunan Langkat. *Jurnal Tanah Dan Sumberdaya Lahan*, 7(2), 393–397. <https://doi.org/https://doi.org/10.21776/ub.jtsl.2020.007.2.25>.
- Oka, Y. (2010). Mechanisms of Nematode Suppression by Organic Soil Amendments—A Review. *Applied Soil Ecology*, 44(2), 101–115. <https://doi.org/10.1016/j.apsoil.2009.11.003>.

- Okine, A., Hanada, M., Aibibula, Y., & Okamoto, M. (2005). Ensiling of Potato Pulp With or Without Bacterial Inoculants and its Effect on Fermentation Quality, Nutrient Composition and Nutritive Value. *Animal Feed Science and Technology*, 121(3–4), 329–343. <https://doi.org/10.1016/j.anifeedsci.2005.02.032>.
- Ondov, B. D., Bergman, N. H., & Phillippy, A. M. (2011). Interactive Metagenomic Visualization in a Web Browser. *BMC Bioinformatics*, 12. <https://doi.org/10.1186/1471-2105-12-385>.
- Onesiforus, B. Y., Rinihapsari, E., Yarangga, F. T. D., & Pradistya, R. (2021). Perbandingan Kemampuan Fermentasi Khamir *Saccharomyces cerevisiae* dari Berbagai Media Kultur. *Bioma*, 17(2), 65–73. [https://doi.org/10.21009/bioma17\(2\).3](https://doi.org/10.21009/bioma17(2).3)
- Ozimek, E., & Hanaka, A. (2021). Mortierella Species as the Plant Growth-Promoting Fungi Present in the Agricultural Soils. *Agriculture (Switzerland)*, 11(1), 1–18. <https://doi.org/10.3390/agriculture11010007>.
- Pantaya, D., Pamungkas, D., Muspita, M. DU, Wulandari, S., & Febri, A. (2016). Optimasi Produksi Pepton dari Bungkil Kedelai untuk Media Produksi Yeast. *Seminar Nasional Hasil Penelitian Dan Pengabdian Masyarakat*.
- Permana, A. D., Putra, R. E., Soebakti, R. O., & Kinashih, I. (2021). Efek Pemberian Pakan Berlebih Berupa Limbah Sayuran Pakcoy terhadap Daya Cerna, Tingkat Penurunan Limbah, dan Kandungan Protein pada Lalat Tentara Hitam (*Hermetia illucens* (Linnaeus)). *Jurnal Entomologi Indonesia*, 18(3), 170–181. <https://doi.org/10.5994/jei.18.3.170>.
- Permata, D. A., Kasim, A., Asben, A., & Yusniwati, Y. (2021). Pengaruh Lama Fermentasi Spontan Terhadap Karakteristik Tandan Kosong Kelapa Sawit Fraksi Serat Campuran. *Jurnal Teknologi Pertanian Andalas*, 25(1), 96. <https://doi.org/10.25077/jtpa.25.1.96-103.2021>.
- Perry, T. W. (1984). *Animal life-cycle feeding and nutrition*. Academic Press.
- Pokorny, K. (2022, August 19). *Dont Worry, Maggots Help Break Down Compost Pile*. News.Oregonstate.Edu. <https://news.oregonstate.edu/news/don%E2%80%99t-worry-maggots-help-break-down-compost-pile#:~:text=The%20body%20features%20only%20hairs,ands%20glucose%20to%20the%20compost..>, diakses pada 28 Desember 2024.
- Pongprayoon, W., Siringam, T., Panya, A., & Roytrakul, S. (2022). Application of Chitosan in Plant Defense Responses to Biotic and Abiotic Stresses. *Appl. Sci. Engine. Prog.*, 15.
- Pothiraj, G., Hussain, Z., Singh, A. K., Solanke, A. U., Aggarwal, R., Ramesh, R., & Shanmugam, V. (2021). Characterization of Fusarium Spp. Inciting Vascular Wilt of Tomato and Its Management by a Chaetomium-Based Biocontrol Consortium. *Frontiers in Plant Science*, 12. <https://doi.org/10.3389/fpls.2021.748013>.
- Pramitasari, M. D., Pujiyanto, S., & Suprihadi, A. (2017). Aktivitas Inhibitor a-amilase Isolat Khamir Endofit dari Tumbuhan Brotowali (*Tinospora crispa* L.). *Jurnal Biologi*, 6(3), 76–84.
- Pratama, R. A. (2019). Respon Jamur Merang (*Volvariella volvacea*) terhadap Ketebalan Media Tanam dan Konsentrasi Molase Tetes Tebu. *JAGROS*, 3(2).

- Pratiwi, A. P., Santoso, E., & Purwaningsih. (2024). Pengaruh Bokashi Alang-Alang dan Pupuk Kalium terhadap Pertumbuhan dan hasil Tanaman Kedelai pada Tanah PMK. *Jurnal Sains Pertanian Equator*, 255–262. <https://doi.org/DOI: http://dx.doi.org/10.26418/jspe.v13i1.60471>.
- Prihanto, A. A., Timur, H. D. L., Jaziri, A. A., Nurdiani, R., & Pradarameswari, K. A. (2018). Isolasi dan Identifikasi Bakteri Endofit Mangrove *Sonneratia alba* Penghasil Enzim Gelatinase dari Pantai Sendang Biru, Malang, Jawa Timur. *Indonesia Journal of Halal*, 1(1), 31. <https://doi.org/10.14710/halal.v1i1.3114>.
- Purnamasari, D. K., Syamsuhaidi, S., Erwan, E., Wiryanan, K. G., Sumiati, S., Taqiuddin, Moh., Utami, M. U., & Ardyanti, N. P. W. O. (2023). Kualitas Fisik dan Kimia Maggot BSF yang Dibudidaya Oleh Peternak Menggunakan Media Pakan yang Berbeda. *Jurnal Sains Teknologi & Lingkungan*, 9(1), 95–104. <https://doi.org/10.29303/jstl.v9i1.422>.
- Pusztahelyi, T. (2018). Chitin and Chitin-related Compounds in plant-fungal interactions. *Mycology*, 9(3), 189–201. <https://doi.org/10.1080/21501203.2018.1473299>.
- Putri, M. F., Sari, D. P., Caesari, A., & Miranda, G. (2013). Biobleaching Pelepah Sawit sebagai Bahan Baku Pembuatan Nitroselulosa Menggunakan Enzim Xylanase. *Pekan Ilmiah Mahasiswa Nasional Program Kreativitas Mahasiswa - Penelitian 2013*.
- Putri, W. S. E. (2013). *Isolasi Khamir dari Ampas Kasar Kecap dan Potensinya sebagai Starter Pembuatan Etanol* [Skripsi]. Universitas Brawijaya.
- Quilliam, R. S., Nuku-Adeku, C., Maquart, P., Little, D., Newton, R., & Murray, F. (2020). Integrating Insect Frass Biofertilisers into Sustainable Peri-urban Agro-food Systems. *J. Insects Food Feed*, 6, 315–322.
- Rachmawati, R., Buchori, D., Hidayat, P., Hem, S., & Fahmi, M. R. (2010). Kandungan Nutrisi Larva *Hermetia illucens* (Linnaeus) (Diptera: Stratiomyidae) Pada Bungkil Kelapa Sawit. *Jurnal Entomologi Indonesia*, 7(1), 28.
- Rachmawati, R., Rahabistra, A., & Afandhi, A. (2016). Daya Antagonis Tiga Jamur Patogen Serangga terhadap Jamur Patogen Tular Tanah *Fusarium* sp. (Hypocreales = Nectriaceae) secara In Vitro. *Jurnal HPT*, 4(2), 93–101.
- Rachmawati, S. (2017). *Identifikasi Molekuler Dan Karakterisasi Fisiologi Khamir Serta Uji Potensi Antagonismenya Terhadap Jamur Rebah Semai* (*Sclerotium rolfsii*) [Skripsi]. Universitas Brawijaya.
- Rahmah, U. A. (2021). *Pengaruh Waktu Fermentasi Pembuatan Pupuk Organik Cair (POC) Kasgot terhadap Kandungan Unsur Hara* [Skripsi]. Universitas Islam Negeri Raden Intan Lampung.
- Rambe, K. R., & Kusnadi, N. (2018). Permintaan dan Penawaran Minyak Goreng Sawit di Indonesia. *Forum Agribisnis*, 8(1).
- Ramdhani, M. (2021). Analisis Komunitas Fungi Tanah Sulfat Masam pada Dua Tipe Rawa di Kalimantan dengan Pendekatan Next Generation Sequencing (NGS) [Skripsi]. In *[skripsi]*. Universitas Islam Negeri Syarif Hidayatullah Jakarta.
- Ramli, M. N. (2022). Pengomposan Tandan Kosong Kelapa Sawit (*Elaeis guineensis*) dengan Beberapa Pemberian Mikroorganisme Lokal (MOL). *ARview Jurnal Ilmiah*, 1(1), 27–37.

- <https://ejurnal.unisan.ac.id/index.php/arview/indexhttps://ejurnal.unisan.ac.id/index.php/arview/index>.
- Rani, S., Sonu, Kaur, J., & Vaja, M. D. (2024). Ketoconazole: A Review of Its Therapeutic Effectiveness in Superficial and Systemic Fungal Infections. *International Journal of Science and Research (IJSR)*, 13(3), 1258–1260. <https://doi.org/10.21275/sr24318150843>.
- Rehman, K., Ur Rehman, R., Somroo, A. A., Cai, M., Zheng, L., Xiao, X., Ur Rehman, A., Rehman, A., Tomberlin, J. K., & Yu, Z. (2019). Enhanced Bioconversion of Dairy and Chicken Manure by the Interaction of Exogenous Bacteria and Black Soldier Fly Larvae. *J. Environ. Manage.*, 237, 75–83.
- Retnoningsih, L. P., Kumala, S., Raunsai, M. M., & Simanjuntak, Partomuan. (2022). Uji Aktivitas Antimikroba Hasil Bioproduksi Kapang Endofit Daun Lidah Mertua (*Sansevieria trifasciata* Prain). *Prosiding Seminar Nasional Kimia 2022*.
- Rido, M., Erni, N., Triasih, D., & Husein, F. (2023). Pengaruh Minyak Ikan Lemuru dalam Media Tumbuh Berbasis Fermentasi Ampas Tahu terhadap Produksi, Protein dan Lemak Tepung Maggot BSF (Black Soldier Fly). *Agriovet*, 5(2), 169–180.
- Rizal, S., Erna Kustyawati, M., Hasanudin, U., & Marniza. (2018). Pengaruh Konsentrasi *Saccharomyces cerevisiae* terhadap Kadar Abu, Kadar Protein, Kadar Lemak dan Kandungan Beta-Glukan Tempe. *Seminar Nasional Dalam Rangka Dies Natalis UNS Ke-42 Tahun 2018*, 2(1).
- Rodiah, S. A., Fifendy, M., & Indriati, G. (2022). Uji Daya Hambat Ekstrak Daun Beringin (*Ficus Benjaminia* L.) Terhadap Pertumbuhan Jamur *Candida albicans* secara in Vitro. *SERAMBI BIOLOGI*, 7(4), 318–325.
- Rosalin, N. (2008). *Konversi Protein Kasar dan Lemak Kasar Pakan Komplit terhadap Total Protein dan Lemak Susu pada Kambing Peranakan Etawa* [Skripsi]. Universitas Airlangga.
- Rosawanti, P. (2019). Kandungan Unsur Hara pada Pupuk Organik Tumbuhan Air Lokal. *Jurnal Daun*, 6(2), 140–148.
- Rosyadi, M. A., Purnamasari, D. K., Erwan, E., Sumiati, S., Wiryawan, K. G., Syamsuhaidi, S., & Maslami, V. (2024). Komposisi Nutrisi Maggot Yang Dibudidaya pada Media Berbasis Limbah Telur Infertil dan Ampas Tahu. *Jurnal Sains Dan Teknologi & Lingkungan*, 10(1), 118–128. <https://doi.org/10.29303/jstl.v10i1.572>
- Sa'adah, N. (2018). *Pembibitan Khamir Saccharomyces cerevisiae dan Uji Antagonis terhadap Gloeosporium sp. Penyebab Penyakit Busuk Buah pada Apel* [Skripsi]. Universitas Brawijaya.
- Sajuri. (2018). Potensi Tepung Pakan Alternatif dari Maggot dan Azolla (Malla) sebagai Bahan Baku Pakan Ternak dengan Kandungan Protein Tinggi. *Biofarm: Jurnal Ilmiah Pertanian*, 14.
- Salmanizadeh, H., Beheshti-Maal, K., Nayeri, H., & Torabi, L. R. (2024). Optimization of Xylanase Production by *Pichia kudriavzevii* and *Candida tropicalis* Isolated from the Wood Product Workshop. *Brazilian Journal of Microbiology*, 55(1), 155–168. <https://doi.org/10.1007/s42770-023-01171-3>
- Salomone, R., Saija, G., Mondello, G., Giannetto, A., Fasulo, S., & Savastano, D. (2017). Environmental Impact of Food Waste Bioconversion by Insects: Application of Life

- Cycle Assessment to Process Using *Hermetia illucens*. *Journal of Cleaner Production*, 140, 890–905. <https://doi.org/10.1016/j.jclepro.2016.06.154>
- Sandhya, M. V. S., Yallappa, B. S., Varadaraj, M. C., Puranaik, J., Rao, L. J., Janardhan, P., & Murthy, P. S. (2016). Inoculum of the Starter Consortia and Interactive Metabolic Process in Enhancing Quality of Cocoa Bean (*Theobroma cacao*) Fermentation. *LWT*, 65, 731–738. <https://doi.org/10.1016/j.lwt.2015.09.002>
- Sanjaya, W. T. A., Giyanto, Widystuti, R., & Santosa, D. A. (2020). Keanekaragaman Enzim Invertase, Pengembangan Strain Unggul dan Teknologi Produksinya. *Jurnal Biotehnologi & Biosains Indonesia*, 7. <http://ejurnal.bpp.go.id/index.php/JBBI>
- Santi, Astuti, A. T. B., & Pasamboang, J. (2020). Nilai Nutrisi Maggot Black Soldier Fly (*Hermetia illucens*) dengan berbagai Media. *Agrovital: Jurnal Ilmu Pertanian*, 5(6), 91–93.
- Santosa, B., Wirawan, W., & Muljawan, R. E. (2019). Pemanfaatan Molase sebagai Sumber Karbon Alternatif dalam Pembuatan Nata de Coco. *Teknologi Pangan: Media Informasi Dan Komunikasi Ilmiah Teknologi Pertanian*, 10(2), 61–69. <https://doi.org/10.35891/tp.v10i2.1641>
- Saputra, A. (2018). *Identifikasi Molekuler Tiga Isolat Khamir Termotoleran Terpilih serta Potensinya sebagai Pengendali Hayati terhadap Fusarium oxysporum f.sp cubense pada Tanaman Bawang Merah*. Universitas Brawijaya.
- Schmitt, E., & de Vries, W. (2020). Potential Benefits of Using *Hermetia illucens* Frass as a Soil Amendment on Food Production and for Environmental Impact Reduction. *Current Opinion in Green and Sustainable Chemistry*, 25, 100–335. <https://doi.org/10.1016/j.cogsc.2020.03.005>
- Scriber, J. M., & Slansky, F. (1981). The Nutritional Ecology of Immature Insects. *Annual Review of Entomology*, 26, 183–211. <https://doi.org/https://doi.org/10.1146/annurev.en.26.010181.001151>
- Setiawibowo, A. D., Sipayung, D. A., & Putra, P. G. H. (2009). *Pengaruh Beberapa Media Terhadap Pertumbuhan Populasi Maggot (Hermetia illucens)*. Institut Pertanian Bogor.
- Setyati, W. A., Martani, E., Triyanto, T., & Zainuddin, M. (2015). Kinetika Pertumbuhan dan Aktivitas Protease Isolat 36k Berasal dari Sedimen Ekosistem Mangrove, Karimunjawa, Jepara. *Ilmu Kelautan: Indonesian Journal of Marine Sciences*, 20(3), 163. <https://doi.org/10.14710/ik.ijms.20.3.163-169>
- Sharma, R., Mittal, A., Gupta, V., & Aggarwal, N. K. (2024). Production, purification and characterization of phytase from *Pichia kudriavzevii* FSMP-Y17 and its application in layers feed. *Brazilian Journal of Microbiology*. <https://doi.org/10.1007/s42770-024-01492-x>
- Silalahi, J. D., Aryati, I., Sakiah, S., & Febrianto, E. B. (2022). Perkembangan Maggot Black Soldier Fly Dalam Biopond Berbahan Tandan Kosong Kelapa Sawit dan Limbah Dapur. *Jurnal Agro Estate*, 6(1), 18–26. <https://doi.org/10.47199/jae.v6i1.97>
- Simanjuntak, A. L. S., Rangkuti, I. U. P., Ginting, M. Hendra. (2021). Potensi Limbah Padat Kelapa Sawit: Pelepas Kelapa Sawit dan Tandan Kosong Kelapa Sawit sebagai Bahan Baku Bioetanol. *Agro Fabrica: Jurnal Teknik Pengolahan Hasil Perkebunan Kelapa Sawit dan Karet*, 3(2), 52-63.

- Simões, D., & de Andrade, E. (2023). *Fusarium Species Responsible for Tomato Diseases and Mycotoxin Contamination and Biocontrol Opportunities*. In *Fusarium - Recent Studies*. IntechOpen. <https://doi.org/10.5772/intechopen.1003643>
- Sinaga, R., & Dewi, E. N. (2023). Pengaruh Rasio Sabut Kelapa Dan Jerami Padi Terhadap Karakteristik Pupuk Organik Padat. *DISTILAT: Jurnal Teknologi Separasi*, 9(4), 392–400. <https://doi.org/10.33795/distilat.v9i4.4209>
- Sipayung, P. Y. E. (2015). Pemanfaatan Larva Black Soldier Fly (*Hermetia illucens*) sebagai Salah Satu Teknologi Reduksi Sampah di Daerah Perkotaan [Tugas Akhir]. In [*skripsi*]. Institut Teknologi Sepuluh November.
- Sirait, E. S. (2022). *Pengaruh Penggunaan Media Tumbuh Ampas Kelapa yang Difermentasi dengan Probio_FM terhadap Pertumbuhan Maggot Black Soldier Fly (BSF)* [Skripsi]. Universitas Jambi.
- Siregar, D. J. S., Julianti, E., Tafsin, M., & Suryanto, D. (2023). Pemanfaatan Limbah Organik Terhadap Produksi dan Kandungan Nutrisi dari Larva Lalat (*Hermetia illucens*). *Seminar Nasional Dies Natalis UNS Ke-47 2023*, 7(1), 664–671.
- Sitohang, R. V., Herawati, T., & Lili, W. (2012). Pengaruh Pemberian Dedak Padi Hasil Fermentasi Ragi (*Saccharomyces cerevisiae*) terhadap Pertumbuhan Biomassa *Daphnia* sp. *Jurnal Perikanan Dan Kelautan*, 3(1), 65–72.
- Smetana, S., Spykman, R., & Heinz, V. (2021). Environmental Aspects of Insect Mass Production. *Journal of Insects as Food and Feed*, 7(5), 553–571. <https://doi.org/10.3920/JIFF2020.0116>
- Smets, R., Verbinnen, B., Van De Voorde, I., Aerts, G., Claes, J., & Van Der Borght, M. (2020). Sequential Extraction and Characterisation of Lipids, Proteins, and Chitin from Black Soldier Fly (*Hermetia illucens*) Larvae, Prepupae, and Pupae. *Waste, Biomass Valor*, 11, 6455–6466.
- Song, S., Ee, A. W. L., Tan, J. K. N., Cheong, J. C., Chiam, Z., Arora, S., Lam, W. N., & Tan, H. T. W. (2021). Upcycling Food Waste Using Black Soldier Fly Larvae: Effects of Further Composting on Frass Quality, Fertilising Effect and Its Global Warming Potential. *Journal of Cleaner Production*, 288, 125664. <https://doi.org/10.1016/j.jclepro.2020.125664>
- Souza, A. B. G., Tedeschi, R. L., & Pires, A. V. (2019). Effects of Dietary Supplementation with Multi-strain Probiotics on Growth Performance, Rumen Fermentation, and Microbial Diversity in Growing Beef Cattle. *Livestock Science*, 225, 61–66.
- Spader, T. B., Venturini, T. P., Cavalheiro, A. S., Mahl, C. D., Mario, D. N., Lara, V. M., Santurio, J., Alves, S. H. (2009). *In Vitro* Interactions Between Amphotericin B and Antifungal Agents and Rifampin Against *Fusarium* spp.. *Mycoses*, 5, 131-136. <https://doi.org/10.1111/j.1439-0507.2009.01773.x>
- Sukmawati, D., Adisyahputra, A., Al-Ani, L. K. T., Husna, S. N. Al, Afifah, Z. N., Sriherwanto, C., Surono, S., Setiarto, R. H. B., Nurjayadi, M., & Rahman, R. A. (2024). *Pichia kudriavzevii* UNJCC Y-137 and *Candida tropicalis* UNJCC Y-140 Isolated from *Durio kutejensis* as Potential Probiotic Agents. *Food Sci Biotechnol*. <https://doi.org/https://doi.org/10.1007/s10068-024-01609-w>
- Sukmawati, D., Nurkhasanah, S., Afifah, Z. N., Husna, S. N. Al, Widowati, R., Enshasy, H. El, & Dailin, D. J. (2021). Metagenomic-based Approach for the Analysis of Yeast Diversity Associated with Amylase Production in Lai (*Durio kutejensis*). *Journal of*

Pure and Applied Microbiology, 15(1), 75–90.
<https://doi.org/10.22207/JPAM.15.1.02>

Sukmawati, D., Sondana, G. A., Fikriyyah, N. N., Afifah, Z. N., Firhandini, A., Khumaiya, U., Komsiatun, D. A., Asmara, Y. T., Supiyani, A., Puspitaningrum, R., Ridawati, R., Prihantini, N. B., Husna, S. N. A., El Enshasy, H. A., Hanapi, S. Z., Dailin, D. J., & Surono, S. (2021). Cellulase-producing Yeast Isolated from Fermented Cocoa Beans as Biocontrol for Pathogenic mold Chocolate Fruit Collected from Sentul, Jawa Barat, Indonesia. *Journal of Physics: Conference Series*, 1869(1). <https://doi.org/10.1088/1742-6596/1869/1/012043>

Sukmawati, D., Supiyani, A., Qonita, R. K., Salsabila, C., Herlambang, R. N., Ariska, R., Sentosa, A. B., Saszieta, D., Nursari, P. I., Priskaningrum, A. M., Ichsanty, F., Annisyah, S., Enshasy, H. A. El, Dailin, D. J., Skyler, Heng, L. H., Setiarto, R. H. B., Sulistiani, Yusuf, D., ... Fathoni, A. (2024). Antagonist Test of Endophyte Fungi Isolated from Leaves of Mangrove (*Rhizophora* sp.) as Antifungi against Sanca Snakes (*Malayopython* sp.) Disease. *Current Applied Science and Technology*, 24(2). <https://doi.org/10.55003/cast.2023.258187>

Sundaramoorthy, S., Raguchander, T., Ragupathi, N., & Samiyappan, R. (2011). Combinatorial Effect of Endophytic and Plant Growth Promoting Rhizobacteria Against Wilt Disease of *Capsicum annum* L. caused by *Fusarium solani*. *Biological Control*, 60(1), 5967. <https://doi.org/10.1016/j.biocontrol.2011.10.002>

Suntara, C., Cherdthong, A., Wanapat, M., Uriyapongson, S., Leelavatcharamas, V., Sawaengkaew, J., Chanjula, P., & Foiklang, S. (2021). Isolation and Characterization of Yeasts from Rumen Fluids for Potential Use as Additives in Ruminant Feeding. *Veterinary Sciences*, 8(3), 52. [https://doi.org/https://doi.org/10.3390/vetsci8030052](https://doi.org/10.3390/vetsci8030052)

Supiyani, A., Agussetiandari, I., Handayani, T., & Sukmawati, D. (2023). Efek Susu Sinbiotik terhadap Struktur Mukosa Duodenum Mencit yang Diinduksi Minyak Trans Dosis Tinggi: Penelitian Hewan Coba. *Health Information : Jurnal Penelitian*, 15(1), 23–31. <https://doi.org/10.36990/hijp.v15i1.673>

Supriyatna, A., Amalia, D., Jauhari, A. A., & Holydaziah, D. (2015). Aktivitas Enzim Amilase, Lipase, dan Protease dari Larva *Hermetia illucens* yang Diberi Pakan Jerami Padi. *Jurnal ISTEK*, IX(2).

Susantri, A., Sunarti, T. C., & Meryandini, A. (2021). Produksi dan Pemurnian Xilooligosakarida dari Xilan Tongkol Jagung menggunakan Xilanase Streptomyces P26B4 dan Khamir IP4. *Jurnal Ilmu Pertanian Indonesia*, 26(2), 309–317. <https://doi.org/10.18343/jipi.26.2.309>

Sutarini, N. L., Sumiartha, I. K., Suniti, N. W., Sudiarta, I. P., Wirya, G. N. A. S., & Utama, M. S. U. (2015). Pengendalian Penyakit Layu Fusarium pada Tanaman Cabai Besar (*Capsicum annum* L.) dengan Kompos dan Pupuk Kandang yang dikombinasikan dengan *Trichoderma* sp. di Rumah Kaca. *E-Jurnal Agroekoteknologi Tropika*, 4(2), 135–144.

Syahputra, D., Hasan, U., & Manullang, H. M. (2023). Pengaruh Pemberian Limbah Buah-Buahan Pepaya, Nanas dan Semangka Terhadap Pertumbuhan Maggot BSF (*Hermetia illucens*). *Journal Aquaculture Indonesia*, 2(2), 88–98. <https://doi.org/https://doi.org/10.46576/jai.v2i2.2092>

- Syahri, M. (2023). Pengaruh Berbagai Media terhadap Pertumbuhan, Produksi Larva dan Produksi Kasgot Black Soldier Fly (*Hermetia illucens*) [Skripsi]. Universitas Medan Area.
- Syamsia, S., Idhan, A., Latifah, H., Noerfityani, N., & Akbar, A. (2021). Alternative Medium for the Growth of Endophytic Fungi. *IOP Conference Series: Earth and Environmental Science*, 886(1), 012–045. <https://doi.org/10.1088/1755-1315/886/1/012045>
- Tabata, N., Tomoda, H., Iwai, Y., & Omura, S. (1996). Xanthoquinodin B3, a New Anticoccidial Agent Produced by *Humicola* sp. FO-888. *The Journal of Antibiotics*, 49, 267–271.
- Tahir, A. A., Barnoh, N. F. M., Yusof, N., Said, N. N. M., Utsumi, M., Yen, A. M., Hashim, H., Noor, M. J. M. M., Akhir, F. N. M. D., Mohamad, S. E., Sugura, N., Othman, N. A., Zakaria, Z., Hara, H. (2019). Microbial Diversity in Decaying Oil Palm Empty Fruit Bunches (OPEFB) and Isolation of Lignin-degrading Bacteria from a Tropical Environment. *Microbes Environ*, 34(2), 161-168. <https://doi.org/10.1264/jsme2.ME18117>
- Tasma, I. M. (2015). Pemanfaatan Teknologi Sekuensing Genom untuk Mempercepat Program Pemuliaan Tanaman Utilization of Genome Sequencing Technology to Accelerate Plant Breeding Program. *Jurnal Litbang Pert.*, 34(2), 159–168.
- Telagathoti, A., Probst, M., Mandolini, E., Peintner, U. (2022). Mortierellaceae from Subalpine and Alpine Habitats: New Species of Entomortierella, Linnemannia, Mortierella, Podila and Tyroliella gen. *Studies in Mycology*, 103, 25-58. <https://doi.org/10.3114/sim.2022.103.02>
- Tinning, M., & Genome, A. (2013). Next-Generation Sequencing: An Overview. *ARC Centre of Excellence in Bioinformatics*.
- Tiwari, R. K., Lal, M. K., Kumar, R., Mangal, V., Kumar, A., Kumar, R., Sharma, S., Sagar, V., & Singh, B. (2024). Salt Stress Influences the Proliferation of *Fusarium solani* and Enhances the Severity of Wilt Disease in Potato. *Heliyon*, 10(4). <https://doi.org/10.1016/j.heliyon.2024.e26718>
- Toiby, A. R., Rahmadani, E., & Oksana, O. (2016). Perubahan Sifat Kimia Tandan Kosong Kelapa Sawit yang Difermentasi dengan EM4 Pada Dosis dan Lama Pemeraman yang Berbeda. *Jurnal Agroteknologi*, 6(1), 1. <https://doi.org/10.24014/ja.v6i1.1370>
- Tomberlin, J. K., Sheppard, D. C., & Joyce, J. A. (2002). Selected life-history traits of black soldier flies (Diptera: Stratiomyidae) reared on three artificial diets. *Ann Entomol Soc Am*, 95, 379–386.
- Tripathi, P., Khare, P., Barnawal, D., Shanker, K., Srivastava, P. K., Tripathi, R. D., & Kalra, A. (2020). Bioremediation of Arsenic by Soil Methylating Fungi: Role of *Humicola* sp. Strain 2WS1 in Amelioration of Arsenic Phytotoxicity in *Bacopa monnieri* L. *Science of The Total Environment*, 716, 136758. <https://doi.org/10.1016/j.scitotenv.2020.136758>
- Ulfah, M., Irawan, A., & Ningsih, L. (2024). Antifungal Activity of the Ethyle Acetate Fraction of Red Frangipani Flowers (*Plumeria rubra*) Against *Candida albicans* and *Trichophyton rubrum*. *Journal of Current Pharmaceutical Sciences*, 4(2).
- Usyk, M., Zolnik, C. P., Patel, H., Levi, M. H., & Burk, R. D. (2017). Novel ITS1 Fungal Primers for Characterization of the Mycobiome. <https://doi.org/10.1128/mSphere>

- Utama, C. S., Cahya, R. I., & Sulistiyanto, B. (2024). Utilization of Dietary Maggot Frass on the Performance, Carcass Percentage, Digestive Organs, and Economic Value of Muscovy Ducks. *Tropical Animal Science Journal*, 47(1), 104–111. <https://doi.org/10.5398/tasj.2024.47.1.104>
- Utama, C. S., Sulistiyanto, B., Marifah, B., & Cahya, R. I. (2023). The Organoleptic, Chemical and Microbiological Quality of Maggot'S Frass As Alternative Poultry Feed Ingredients. *Online Journal of Animal and Feed Research*, 13(5), 340–347. <https://doi.org/10.51227/ojafr.2023.49>
- van Huis, A. (2019). Manure and Flies: Biodegradation and/or Bioconversion? *Journal of Insects as Food and Feed*, 5(2), 55–58. <https://doi.org/10.3920/JIFF2019.x002>
- Vuyst, L. De, Harth, H., Kerrebroeck, S. Van, & Leroy, F. (2016). Yeast Diversity of Sourdoughs and Associated Metabolic Properties and Functionalities. *International Journal of Food Microbiology*, 239, 26–34. <https://doi.org/https://doi.org/10.1016/j.ijfoodmicro.2016.07.018>
- Wanansinghe, D. N., & Mortimer, P. E. (2022). Taxonomic and Phylogenetic Insight into Novel Ascomycota from Forest Woody Litter. *Biology*, 11(6), 889. <https://doi.org/10.3390/biology11060889>
- Wantulla, M., Dicke, M., & van Loon, J. J. A. (2024). Effects of Amending Soil with Black Soldier Fly Frass on Survival and Growth of the Cabbage Root Fly (*Delia radicum*) Depend on Soil Type. *Journal of Pest Science*, 97(3), 1451–1459. <https://doi.org/10.1007/s10340-023-01710-9>
- Wantulla, M., van Zadelhoff, K., van Loon, J. J. A., & Dicke, M. (2023). The Potential of Soil Amendment with Insect Exuviae and Frass to Control the Cabbage Root Fly. *Journal of Applied Entomology*, 147(3), 181–191. <https://doi.org/10.1111/jen.13097>
- Wardani, N. B., Susanti, M., Maryanty, Y., & Widiarto, E. (2021). Hidrolisis Raw Sugar sebagai Bahan Baku Pembuatan Mono Natrium Glutamat dengan Variasi pH, Suhu, dan Konsentrasi. *DISTILAT: Jurnal Teknologi Separasi*, 7(1), 1–5. <http://distilat.polinema.ac.id>
- Warsito, J., Sabang, S. M., & Mustapa, K. (2016). Pembuatan Pupuk Organik dari Limbah Tandan Kosong Kelapa Sawit. *J. Akad. Kim*, 1(5).
- Wicaksono, L. H., Petrus, H. T. B., & Yuliansah, A. T. (2017). Reduksi Limbah Palm Kernel Meal dan Kompos Tandan Kosong Kelapa Sawit menggunakan Larva *Hermetia illucens*. *Simposium Nasional RAPI XVI*, 91–96.
- Widayati, Wahyu, T., Murni, Wahyu, S., Sriadi, Syahliana, A., Rosalinda, & Prima, D. (2017). Pengaruh Aktivator Stardec terhadap Proses Pembuatan Pupuk Organik dari Kotoran Sapi. *Prosiding Seminar Nasional Teknik Kimia “Kejuangan.”*
- Widowati, R., Sukmawati, D., & Marham, H. D. (2019). Aktivitas Antagonisme Khamir Asal Daun Jati (*Tectona grandis*) terhadap *Aspergillus* sp. Asal Pakan Ayam. *Jurnal Mikologi Indonesia*, 3(1), 33–42. www.mikoina.or.id
- Widyantari, N. P. I., & Sari, P. M. N. A. (2022). Potensi Rimpang Temu Kunci (*Boesenbergia pandurata* Roxb.) sebagai Bahan Aktif Produk Kecantikan Alami yang Ramah Lingkungan. *Prosiding Workshop Dan Seminar Nasional Farmasi*, 1(1), 82–100.
- Wiryanta, B. T. W. (2002). *Bertanam Tomat*.

- Wulan, R., Astuti, R. I., Rukayadi, Y., & Meryandini, A. (2021). Evaluation of Indigenous *Pichia kudriavzevii* from Cocoa Fermentation for a Probiotic Candidate. *Biodiversitas*, 22(3), 1317–1325. <https://doi.org/10.13057/biodiv/d220331>
- Yarden, O., & Yanofsky, C. (1991). Chitin Synthase 1 Plays a Major Role in Cell Wall Biogenesis in *Neurospora crassa*. *Genes & Development*, 5(12b), 2420–2430. <https://doi.org/10.1101/gad.5.12b.2420>
- Yulianti, T. (2013). Pemanfaatan Endofit Sebagai Agensi Pengendali Hayati Hama dan Penyakit Tanaman. *Buletin Tanaman Tembakau, Serat & Minyak Industri*, 5(1), 40–49.
- Yumas, M., & Rosniati. (2014). Pengaruh Konsentrasi Starter dan Lama Fermentasi Pulp Kakao terhadap Konsentrasi Etanol. *Biopropal Industri*, 5(1), 13–22.
- Zainodin, J., Abdullah, N., & Hassan, M. A. (2018). Generation of Organic Acids during Fermentation Process of Cocoa (*Theobroma cacao L.*) Pod Husk and Its Potential as pH Buffer. *International Journal of Engineering & Technology*, 7(4), 25–29.
- Zakaria, L., & Ning, C. H. (2013). Endophytic *Fusarium* spp. from Roots of Lawn Grass (*Axonopus compressus*). *Tropical Life Sciences Research*, 24(2), 85–90. <http://www.ncbi.nlm.nih.gov/pubmed/24575251>
- Živković, S., Stojanović, S., Ivanović, Ž., Gavrilović, V., Popović, T., & Balaž, J. (2010). Screening of Antagonistic Activity of Microorganisms Against *Colletotrichum acutatum* and *Colletotrichum gloeosporioides*. *Archives of Biological Sciences*, 62(3), 611–623. <https://doi.org/10.2298/ABS1003611Z>

