

DAFTAR PUSTAKA

- Arikawa, K., Nakatani, Y., Koshitaka, H., & Kinoshita, M. (2021). Foraging Small White Butterflies, *Pieris rapae*, Search Flowers Using Color Vision. *Frontiers in Ecology and Evolution*, 9. <https://doi.org/10.3389/fevo.2021.650069>
- Barkmann, F., Huemer, P., Tappeiner, U., Tasser, E., & Rüdissler, J. (2023). Standardized butterfly surveys: comparing transect counts and area-time counts in insect monitoring. *Biodiversity and Conservation*, 32(3), 987–1004. <https://doi.org/10.1007/s10531-022-02534-2>
- Bonebrake, T. C., Ponisio, L. C., Boggs, C. L., & Ehrlich, P. R. (2010). More than just indicators: A review of tropical butterfly ecology and conservation. In *Biological Conservation* (Vol. 143, Number 8, pp. 1831–1841). <https://doi.org/10.1016/j.biocon.2010.04.044>
- Carissa, A., Azzahra, N., Pamela, S. A., & Suryanda, A. (2024). Studi Kupu-kupu (Lepidoptera : Rhopalocera) di Daerah Papua Barat. *Panthera : Jurnal Ilmiah Pendidikan Sains Dan Terapan*, 4(1), 18–28. <https://doi.org/10.36312/panthera.v4i1.226>
- Rahayu, S. E., dan Basukriadi, A. 2020. Kelimpahan Dan Keanekaragaman Spesies Kupu-Kupu (Lepidoptera: Rhopalocera) Pada Berbagai Tipe Habitat Di Hutan Kota Muhammad Sabki, Kota Jambi. *Biospecies*. 5 (2): 40-48. <https://doi.org/10.22437/biospecies.v5i2.645>
- Duan, Y., Ye, T., Ye, D., & Zhou, J. (2023). Seed Distribution and Phenotypic Variation in Different Layers of a *Cunninghamia Lanceolata* Seed Orchard. *Forests*, 14(2). <https://doi.org/10.3390/f14020240>
- Fahlefi, A. R., Prasetya, K. N., Firdhausi, N. F., & Bahri, S. (2024). Diversity of butterfly species (Order: Lepidoptera) in riparian ecosystems of Bromo Tengger Semeru National Park, Indonesia. *International Journal of Bonorowo Wetlands*, 14(2). 987–1004. <https://doi.org/10.13057/bonorowo/w140202>
- Gracia Rojas, J. S., Navarro Tamayo, T., Pedraza Hernández, L. D., & Lesmes Fabian, C. A. (2024). Academic entomotourism as a strategy for the conservation of lepidoptera in Meta, Colombia. *Región Científica*. 51 (3). 17-90. <https://doi.org/10.58763/rc2024317>
- Hallmann, C. A., Sorg, M., Jongejans, E., Siepel, H., Hofland, N., Schwan, H., Stenmans, W., Müller, A., Sumser, H., Hörren, T., Goulson, D., & De Kroon, H. (2017). More than 75 percent decline over 27 years in total flying insect biomass in protected areas. *PLoS ONE*, 12(10). <https://doi.org/10.1371/journal.pone.0185809>

- Hesketh, A., Kadiwala, J., Ravikumar, V., Garizo, A. R., Beldade, P., Fournier, M., & Shakur, R. (2025). A Proteomic View of Butterfly Metamorphosis. *Proteomes*, 13(4). <https://doi.org/10.3390/proteomes13040068>
- Hordijk, I., Maynard, D. S., Hart, S. P., Lidong, M., ter Steege, H., Liang, J., de-Miguel, S., Nabuurs, G. J., Reich, P. B., Abegg, M., Adou Yao, C. Y., Alberti, G., Almeyda Zambrano, A. M., Alvarado, B. V., Esteban, A. D., Alvarez-Loayza, P., Alves, L. F., Ammer, C., Antón-Fernández, C., ... Crowther, T. W. (2023). Evenness mediates the global relationship between forest productivity and richness. *Journal of Ecology*, 111(6), 1308–1326. <https://doi.org/10.1111/1365-2745.14098>
- Hünefeld, F., & Kristensen, N. P. (2012). The female postabdomen and genitalia of the basal moth family Heterobathmiidae (Insecta: Lepidoptera): Structure and phylogenetic significance. *Arthropod Structure and Development*, 41(4), 395–407. <https://doi.org/10.1016/j.asd.2012.05.001>
- Krishna, A., Nie, X., Briscoe, A. D., & Lee, J. (2021). Air temperature drives the evolution of mid-infrared optical properties of butterfly wings. *Scientific Reports*, 11(1). <https://doi.org/10.1038/s41598-021-02810-1>
- Kumar Singhariya, S. (2023). Importance Of Biodiversity And Various Conservation Strategies. In *International Journal of Current Science* (Vol. 13). www.ijcspub.org
- Ningsih, N. I. K. (2023). Keanekaragaman Kupu-Kupu (Lepidoptera) Di Ruang Terbuka Hijau Taman Abhirama, Kabupaten Sidoarjo. 5(2).29-78. <https://doi.org/11.33890/rc2023567>
- Kvalseth, T. O. (2024). Diversity analysis: Richness versus evenness. *Ecology and Evolution*, 14(9). <https://doi.org/10.1002/ece3.70275>
- Lam, D. T., Kataoka, T., Yamagishi, H., Sun, G., Udatsu, T., Tanaka, K., & Ishikawa, R. (2024). Origin of domesticated water chestnuts (*Trapa bispinosa* Roxb.) and genetic variation in wild water chestnuts. *Ecology and Evolution*, 14(2). <https://doi.org/10.1002/ece3.10925>
- Li, D., Brough, B., Rees, J. W., Coste, C. F. D., Yuan, C., Fowler, M. S., & Sait, S. M. (2024). Humidity modifies species-specific and age-dependent heat stress effects in an insect host-parasitoid interaction. *Ecology and Evolution*, 14(7). <https://doi.org/10.1002/ece3.70047>
- Li, H., & Nabawy, M. R. A. (2022). Wing Planform Effect on the Aerodynamics of Insect Wings. *Insects*, 13(5). <https://doi.org/10.3390/insects13050459>
- Lou, Z., Lei, M., Dong, H., & Li, C. (2024). Wing-antenna interaction reduces odour fatigue in butterfly odour-tracking flight. *Journal of Fluid Mechanics*, 998. <https://doi.org/10.1017/jfm.2024.644>
- Mairawita, Duha, S., & Herwina, H. (2023). The diversity of butterflies (Lepidoptera: Rhopalocera) at Tanahbala Island, North Sumatra, Indonesia. *Biodiversitas*, 24(3), 1759–1765. <https://doi.org/10.13057/biodiv/d240350>

- Manesi, Z., Van Lange, P. A. M., & Pollet, T. V. (2015). Butterfly eyespots: Their potential influence on aesthetic preferences and conservation attitudes. *PLoS ONE*, 10(11). <https://doi.org/10.1371/journal.pone.0141433>
- Mariati, A. S., Malahayati, E. N., & Sofyana, M. S. (2024). Identification Of Soil Insect Diversity At Sirah Kencong Tea Plantation As An Atlas Supporting Animalia. *JOSAR*, 9(1), 2503–1155. <https://doi.org/10.35457/josar.v8i1.xxxx>
- Meng, H. H., & Song, Y. G. (2023). Understanding Plant Diversity from Ecological and Evolutionary Perspectives. In *Diversity* (Vol. 15, Number 12). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/d15121165>
- Middleton-Welling, J., Dapporto, L., García-Barros, E., Wiemers, M., Nowicki, P., Plazio, E., Bonelli, S., Zaccagno, M., Šašić, M., Liparova, J., Schweiger, O., Harpke, A., Musche, M., Settele, J., Schmucki, R., & Shreeve, T. (2020). A new comprehensive trait database of European and Maghreb butterflies, Papilionoidea. *Scientific Data*, 7(1). <https://doi.org/10.1038/s41597-020-00697-7>
- Millah, N., Leksono, A. S., & Yanuwidi, B. (2023). Butterfly (Lepidoptera: Papilionoidae) diversity and structure community in Lumajang, East Java, Indonesia. *Nusantara Bioscience*, 15(1). <https://doi.org/10.13057/nusbiosci/n150115>
- Moreira, G. R. P., Silva, D. S., & Gonçalves, G. L. (2017). Comparative morphology of the prothoracic leg in heliconian butterflies: Tracing size allometry, podite fusions and losses in ontogeny and phylogeny. *Arthropod Structure and Development*, 46(4), 462–471. <https://doi.org/10.1016/j.asd.2017.03.008>
- Nanni, V., Caprio, E., Bombieri, G., Schiaparelli, S., Chiorri, C., Mammola, S., Pedrini, P., & Penteriani, V. (2020). Social Media and Large Carnivores: Sharing Biased News on Attacks on Humans. *Frontiers in Ecology and Evolution*, 8. <https://doi.org/10.3389/fevo.2020.00071>
- Nowack, J., Levesque, D. L., Reher, S., & Dausmann, K. H. (2020). Variable Climates Lead to Varying Phenotypes: “Weird” Mammalian Torpor and Lessons From Non-Holarctic Species. In *Frontiers in Ecology and Evolution* (Vol. 8). Frontiers Media S.A. <https://doi.org/10.3389/fevo.2020.00060>
- Nugraha, N. S., Rawana, R., Prijono, A., Nur Rohmah, W., Abigail Arroyo Pasaribu, P., Pratama Putra, D., & Kurdiyanto, K. (2024). Keanekaragaman Hayati dan Peranannya Dalam Ekosistem di Taman Kehati Tanggulangin. *Wahana Forestra: Jurnal Kehutanan*, 19(2), 168–175. <https://doi.org/10.31849/forestra.v19i2.17830>
- Palaoro, A. V., Monaenkova, D., Beard, C. E., Adler, P. H., & Kornev, K. G. (2024). Biomechanical drivers of the evolution of butterflies and moths with a coilable proboscis. *Proceedings of the Royal Society B: Biological Sciences*, 291(2035). <https://doi.org/10.1098/rspb.2024.0903>

- Parsaoran, A. W., Nabhan, A., Putra, K., Putri, J. N., Amirah, K. M., Naca, S. B., & Ruslan, H. (2024). Diversity of Butterfly Species of the Superfamily Papilionoideae in Two Types of Garden Habitats in the Tea and Quinine Research Center Area, Pasir Jambu District, Bandung Regency, West Java. *Journal of Tropical Biodiversity*, 5(1).
- Pinkert, S., Farwig, N., Kawahara, A. Y., & Jetz, W. (2025). Global hotspots of butterfly diversity are threatened in a warming world. *Nature Ecology and Evolution*, 9(5), 789–800. <https://doi.org/10.1038/s41559-025-02664-0>
- Rawat US, & Agarwal NK. (2015). *Biodiversity: Concept, threats and conservation*. 9(1).
- Rohman, N. A., Qohar, I. A., Tria Puspita, N., Harianto, S. P., Djoko Winarno, G., & Dewi, B. S. (2021). Analisis Keanekaragaman Fauna Study Kasus Pada 24 (Dua Puluh Empat) Taman Nasional Di Indonesia Fauna Diversity Analysis Case Study on 24 National Parks in Indonesian. In *JOPFE Journal* (Vol. 1, Number 2).
- Salamatin, A. A., Adler, P. H., & Kornev, K. G. (2021). Lepidopteran mouthpart architecture suggests a new mechanism of fluid uptake by insects with long proboscises. *Journal of Theoretical Biology*, 510. <https://doi.org/10.1016/j.jtbi.2020.110525>
- Seymoure, B. M. (2018). Enlightening butterfly conservation efforts: The importance of natural lighting for butterfly behavioral ecology and conservation. In *Insects* (Vol. 9, Number 1). MDPI AG. <https://doi.org/10.3390/insects9010022>
- Singh, A. A., Pooe, O., Kwezi, L., Lotter-Stark, T., Stoychev, S. H., Alexandra, K., Gerber, I., Bhiman, J. N., Vorster, J., Pauly, M., Zeitlin, L., Whaley, K., Mach, L., Steinkellner, H., Morris, L., Tsekoa, T. L., & Chikwamba, R. (2020). Plant-based production of highly potent anti-HIV antibodies with engineered posttranslational modifications. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-63052-1>
- Stavenga, D. G., Leertouwer, H. L., & Arikawa, K. (2023). Butterfly Wing Translucence Enables Enhanced Visual Signaling. *Insects*, 14(3). <https://doi.org/10.3390/insects14030234>
- Van Der Kooi, C. J., Stavenga, D. G., Arikawa, K., Belušič, G., & Kelber, A. (2026a). *Evolution of Insect Color Vision: From Spectral Sensitivity to Visual Ecology*. <https://doi.org/10.1146/annurev-ento-061720>
- Van Der Kooi, C. J., Stavenga, D. G., Arikawa, K., Belušič, G., & Kelber, A. (2026b). *Evolution of Insect Color Vision: From Spectral Sensitivity to Visual Ecology*. <https://doi.org/10.1146/annurev-ento-061720>
- Zhang, L., Quinn, B. K., Hui, C., Lian, M., Gielis, J., Gao, J., & Shi, P. (2024). New indices to balance α -diversity against tree size inequality. *Journal of Forestry Research*, 35(1). <https://doi.org/10.1007/s11676-023-01686-3>

Zhao, X., Li, F., Yan, Y., & Zhang, Q. (2022). Biodiversity in Urban Green Space: A Bibliometric Review on the Current Research Field and Its Prospects. In *International Journal of Environmental Research and Public Health* (Vol. 19, Number 19). MDPI. <https://doi.org/10.3390/ijerph191912544>