DAFTAR PUSTAKA

AB Ghaffar MB, Pritchard J, Ford-Lloyd B (2011) Brown Planthopper (*N. lugens* Stal) Feeding Behaviour on Rice Germplasm as an Indicator of Resistance. PLoS ONE 6(7): e22137.

Abbott, W. S. 1925. A Method of Computing the Effectiveness of an Insecticide, *Journal of Economic Entomology* 18 (2) 265–267.

Acda MN (2007) Toxicity of thiamethoxam against Philippine subterranean termites. J Insect Sci 7(26):1–6.

Ariyani, N. I., D. E. Andriyani, G. Rusmayadi. 2020. Karakter agronomi dan satuan panas padi varietas unggul pada berbagai dosis nitrogen di lahan pasang surut. *Enviro Scienteae* 16 (1): 95-108.

Baehaki, S dan I. Mejaya I. 2014. Wereng Cokelat sebagai Hama Global Bernilai Ekonomi Tinggi dan Strategi Pengendaliannya. *Pangan.Litbang.Pertanian*, 9: 1-12.

Baehaki, S. U. 2009. Strategi pengendalian hama terpadu tanaman padi dalam perspektif praktek pertanian yang baik (good agricultural practices). Jurnal Inovasi Pertanian. 2(1): 65-78.

Barik, S. R., Ganguly, P., Kunda, S. K., Kole, R. K., & Bhattacharyya, A. 2010. Persistence behaviour of thiamethoxam and lambda cyhalothrin in transplanted paddy. Bull Environ Contam Toxicol 85:419–422.

Baskin, C.C., and Baskin, J.M. 2014. Seeds: Ecology, Biogeography, and Evolution of Dormancy and Germination. 2nd Edition, Academic Press.

Bonmatin, J.M., Giorio, C., Girolami, V., Goulson, D., Kreutzweiser, D.P., Krupke, C., Liess, M., Long, E., Marzaro, M., Mitchell, E.A., 2015. Environmental fate and exposure; neonicotinoids and fipronil. Environ. Sci. Pollut. Res. 22 (1), 35e67

BPS. 2017. Laju Pertumbuhan Penduduk 2017. Badan Pusat Statistik. Jakarta. < https://www.bps.go.id/id/>. Diakses Pada Tanggal 05 Desember 2023.

BPS. 2023. Luas Panen dan Produksi Padi di Indonesia. Badan Pusat Statistik: Jakarta.

Casida, J.E., 2011. Neonicotinoid metabolism: compounds, substituents, pathways, enzymes, organisms, and relevance. *J. Agric. Food Chem.* 59, 2923e2931.

Chen L, Li F, Jia C, Yu P, Zhao E, He M, Jing J. 2021. Determination of thiamethoxam and its metabolite clothianidin residue and dissipation in cowpea by QuEChERS combining with ultrahigh-performance liquid chromatography–tandem mass spectrometry. Environ Sci Pollut R 28:8844–8852.

Cutler, G. C., Scott-Dupree, C. D., Tolman, J. H., & Harris, C. R. 2005. Neonicotinoid insecticide toxicity to non-target arthropods and an evaluation of efficacy and safety in commercial greenhouse trials. Pest Management Science, 61(2), 85-93.

Darmadi, D dan Tuti, A. 2018. Respons beberapa varietas padi (Oryza sativa L.) terhadap wereng batang coklat (*Nilaparvata lugens* Stal.) koloni Karawang. Jurnal Agrikultura 29(2) : 73-81.

Delgarde S, Rouland-Lefevre C (2002) Efficacy of actaraÒ 25WG on three species of Brazilian termite (Isoptera, Nasutitermitinae) crop pests. Sociobiology 40:699–710.

Ding, J., Li, H., Zhang, Z., Lin, J., Liu, F., & Mu, W. (2018). Thiamethoxam, Clothianidin, and Imidacloprid Seed Treatments Effectively Control Thrips on Corn Under Field Conditions. *Journal of Insect Science, 18*(6), 19; 1-8.

Diptaningsari, D., Trisyono, Y.A., Aziz, P., and Arman, W. 2019. Inheritance and Realized Heritability of Resistance toImidacloprid in the Brown Planthopper, *Nilaparvata lugens* (Hemiptera: Delphacidae), From Indonesia. *Journal of Economic Entomology*. 112(4): 1831–1837.

Elbert, A., Haas, M., Springer, B., Thielert, W., & Nauen, R. 2008. Applied aspects of neonicotinoid uses in crop protection. Pest Management Science, 64(11), 1099-1105.

Firdaus, F., & Haryadi, N. T. 2022 . Fluktuasi populasi wereng batang coklat *Nilaparvata Lugens* (Stål) pada padi di Desa Sumberagung Kecamatan Sumberbaru Kabupaten Jember. *Jurnal HPT (Hama Penyakit Tumbuhan)*, 10 (2): 46–59.

Fujita, D., Kohli, A., & Horgan, F. G. 2013. Rice resistance to planthoppers and leafhoppers. Critical Reviews in Plant Sciences, 32(3), 162-191.

Guedes, R. N. C., Smagghe, G., Stark, J. D., & Desneux, N. 2016. Pesticide-induced stress in arthropod pests for optimized integrated pest management programs. Annual Review of Entomology, 61, 43-62.

Hasanah, I. 2007. Bercocok Tanam Padi. Azka Mulia Media. Jakarta.

Heong KL, KH Tan, CPF Garcia, LT Fabellar dan Z Lu. 2011. Research methods in toxicology and insecticide resistance monitoring of rice planthoppers. International Rice Research Institute. Los Baños. Philippines.

Hladik, M. L., Main, A. R. & Goulson, D. 2018. Environmental risks and challenges associated with neonicotinoid insecticides. Environ. Sci. Technol. 52, 3329–3335.

Horgan FG, Jauregui A, Peñalver Cruz A, Crisol Martínez E, Bernal CC. 2020. Changes in reflectance of rice seedlings during planthopper feeding as detected by digital camera: Potential applications for high-throughput phenotyping. PLoS ONE 15(8): e0238173.

Horgan, F. G., Ramal, A. F., Bentur, J. S., Kumar, R., Bhanu, K. V., Sarao, P. S., ... & Bernal, C. C. 2018. Virulence of brown planthopper (Nilaparvata lugens) populations from South and South-East Asia against resistant rice varieties. Crop Protection, 114, 37-43.

ISTA. 2018. *Ista handbook on seedling evaluation. Switzerland*: International Seed Testing Association.

Javaregowda, Naik LK (2005) Bioefficacy of thiamethoxam 25 WG against Paddy white backed plant hopper (WBPH) and their natural enemies. Pestology 29:31–33.

Kalshoven, LGE. 1981. The Pest of Crops in Indonesia. PT. Ichtiar Baru Van Hoeve, Jakarta.

Karlin A. Emerging structure of the nicotinic acetylcholine receptors. Nat Rev Neurosci. 2002; 3: 102-114.

Khusna, I. M., N. Mariana. 2021. Sistem pendukung keputtusan pemilihan bibit padi berkualitas dengan metode AHP dan topsis. *Jurnal Sisfokom* 10 (2) : 162-169.

Krupke, C. H. & Long, E. Y. 2015. Intersections between neonicotinoid seed treatments and honey bees. Curr. Opin. Insect Sci. 10, 8–13.

Lewis, K.A., Tzilivakis, J., Warner, D. and A. Green. 2016. An international database for pesticide risk assessments and management. *Human and Ecological Risk Assessment: An International Journal*, 22 (4): 1050-1064.

Maienfisch P, Angst M, Brandl F, Fischer W, Hofer D, Kayser H. 2001. Chemistry and biology of thiamethoxam: a second generation neonicotinoid. Pest Manag Sci 57:906–913.

Maienfisch, P., H. Huerlinmann, A. Rindlisbacher, L. Gsell, H. Dettwiler, J. Haettenshwiler, E. Sieger, M. Walti. 2001. The discovery of thiamethoxam: a second-generation neonicotinoid. *Pest Management Science* 57: 165 - 176.

Makarim A. K., & E. Suhartatik. 2009. Morfologi Dan Fisiologi Tanaman Padi. Balai Besar Penelitian Tanaman Padi. Subang.

Mochida,O., &Okada, T. 1979. Taxonomy and biology of Nilaparvata lugens (Homoptera; Delphacidae). In Brown Planthopper; Treat to Rice Production in Asia. International Rice Research Institute Los Banos, Phillipines.

Moekasan TK dan RS Basuki. 2007. Status resistensi Spodoptera exigua Hubn. pada tanaman bawang merah asal Kabupaten Cirebon, Brebes, dan Tegal terhadap insektisida yang umum digunakan di daerah tersebut. Jurnal Hortkultura 17(4): 323-354.

Ningsih, N. F., E. Ratnasari, dan U. Faizah. 2016. Pengaruh ekstrak daun kumis kucing (*Orthosiphon aristatus*) terhadap mortalitas hama wereng coklat (*Nilaparvata lugens*). Lentera Bio 5(1): 14-19.

Palalo, M. M.. 2020. Uji viabilitas dan vigor benih padi *(Oriza sativa* L.) varietas mengkongga dan ciherang pada kadar air optimal. Fakultas Pertanian, Universitas Bosowa. Skripsi.

Panda, N.,and Khush, GS. 1995. Host Plant Resistance to insect. CAB international rice research institute. Los Banos Phillipines. 431p.

Pardani, E., Z. Hayati, M. Aktrinisia. 2018. Studi adaptasi pertumbuhan dan produksi beberapa varietas padi (*Oryza sativa*) di tanah gambut. *Jurnal Agrologia*, 292-298.

Piyaphongkul J, Pritchard J, Bale J . 2012. Can Tropical Insects Stand the Heat? A Case Study with the Brown Planthopper *Nilaparvata lugens* (Stål). PLoS ONE 7(1): e29409.

Purkayastha, R.P., and Mukherjee, D. 2006. Impact of Pesticides on the Viability and Germination of Seeds. Pesticide Research Journal, 18(2), pp. 163-167.

Rodrigues, K.J.A., Santana, M.B., Do Nascimento, J.L.M., Picanco-Diniz, D.L.W., Maues, L.A.L., Santos, S.N., Ferreira, V.M.M., Alfonso, M., Duran, R., Faro, L.R.F., 2010. Behavioral and biochemical effects of neonicotinoid thiamethoxam on the cholinergic system in rats. Ecotoxicology and Environmental Safety 73 (1), 101–107.

Saenong, M. S. 2016. Tumbuhan Indonesia Potensial Sebagai Insektisida Nabati untuk Mengendalikan Hama Kumbang Bubuk Jagung (Sitophilus spp.). Jurnal Litbang Pertanian Vol. 35. Nol. 3.

Seagraves, M. P., and J. G. Lundgren. 2012. Effects of neonicitinoid seed treat-ments on soybean aphid and its natural enemies. J. Pest Sci. 85: 125–132.

Sembiring J., & J. A. Mendes. 2022. Populasi Wereng Batang Coklat (*Nilaparvata lugens*) danWereng Hijau (*Nephotettix virescens*) padaTanaman Padi Varietas Inpara 2 di Kampung Bokem Kabupaten Merauke Papua. Sainmatika: Jurnal Ilmiah Matematika dan Ilmu Pengetahuan Alam 19 (2): 201 – 207.

Senewe, R. E., S. Permatasari, dan M. Pesireron. 2020. Respon Hama Wereng Coklat Nilaparvata lugens Stal. (Hemiptera: Delphacidae) Terhadap Ketahanan Dan Kerentanan Varietas Padi. Jurnal Budidaya Pertanian, 16(1): 51-55.

Sharma, K.K., U.S. Singh, P. Sharma, A. Kumar, and L. Sharma. 2015. Seed treatments for sustainable agriculture-A review. *Journal of Applied and Natural Science* 7(1): 521–539.

Sianipar, M. S. 2018. Fluktuasi populasi serangga wereng batang coklat (*Nilaparvata lugens*) pada lahan sawah di Kabupaten Kerawang Jawa Barat. *Jurnal Agrologia* 7 (2): 90-98.

Sianipar, M. S., L. Jaya, R. Sinaga. 2020. Kemampuan ekstrak daun mimba (*Azadirachta indica*) menekan populasi wereng batang cokelat (Nilaparvata Lugens) pada tanaman padi. *Agrologia* 9 (2): 105-109.

Sofyan D. A., Koesmaryono Y., Hidayati R. 2019. Analisis pengaruh faktor cuaca terhadap dinamika populasi wereng batang coklat (*Nilaparvata lugens* Stål) yang tertangkap lampu perangkap. *Jurnal Entomologi Indonesia*, 16 (1): 1-8.

Srinivasa Babu K, Sharma AK. 2003. Bioefficacy of a new molecule, thiamethoxam against foliar aphids of wheat (Triticum aes-tivum). Indian J Agr Sci 73:574–575

Supriadi. 2018. Inovasi perlakuan benih dan imlementasinya untuk memproduksi benih bermutu tanaman rempah dan obat. *Jurnal Litbang Pertanian* 37 (2): 71-80.

Syahrawati, M., O. A. Putra, R. Rusli, E. Sulyanti. 2019. Population structure of brown planthopper (Nilaparvata lugens, Hemiptera: Delphacidae) and attack level in

endemic area of Padang city, Indonesia. Asian J. Agric. Biol. Special Issue: 271-276.

Tang. T., X. Liu, P. Wang, W. Fu, M. Ma. 2017. Thiamethoxam seed treatment for control of rice thrips (Chloethrips oryzae) and its effects on the growth and yield of rice (Oryza sativa). Crop Protection 98: 136 – 142.

Triscowati, D. W., B. Sartono dan A. Kurnia. 2019. Classification of Rice-Plant Growth Phase Using Supervised Random Forest Method Based on Landsat-8 Multitemporal Data. *International Journal of Remote Sensing and Earth Sciences*. 16 (2):187-196.

Utama, M. Z. H. 2015. Budidaya Padi Lahan Marjinal Kiat Meningkatkan Produksi Padi.Yogyakarta : Andi.

Vadodaria MP, Patel UG, Patel CJ, Patel RB, Maisuria IM. 2001. Thiamethoxam (Cruiser) 70 WS: a new seed dresser against sucking pests of cotton. Pestology 25:13–18.

Van Steenis. 1981. Floristic Altitudinal Zones in Malesia. *Botanical Journal* 89: 289-292.

Watanabe T & H Kitagawa. 2000. Photosynthesis and translocation of assimilates in rice plants following phloem feeding by the planthopper *Nilaparvata lugens* (Homoptera: Delphacidae). *Economic Entomology* 93: 1192-1198.

Wati, C. 2017. Identifikasi hama tanaman padi (*Oriza Sativa* L) dengan perangkap cahaya di kampung desay Distrik Prafi Provinsi Papua Barat. *Jurnal Triton, 8* (2): 81-87.

Wu C, Dong F, Mei X, Ning J, She D. 2019. Distribution, dissipation, and metabolism of neonicotinoid insecticides in the cotton eco-system under foliar spray and root irrigation. J Agric Food Chem 67:12374–12381.

Zhang, Y., Xu, J., Zhang, W., & Lei, Z. .2018. Neonicotinoid insecticides translocate to nectar and pollen, and reduce reproductive success in pollinators. Nature, 561(7721), 109-113.