

BIBLIOGRAPHY

- Abadi, R. S., S. Saptorini., T. P. Rahardjo., & M. Muharram. 2022. Pengaruh Macam dan Konsentrasi Insektisida Hama Ulat Grayak (*Spodoptera frugiperda*) terhadap Pertumbuhan dan Produksi Tanaman Jagung Manis (*Zea Subsp. Mays*). *JINTAN: Jurnal Ilmiah Pertanian Nasional*, 2(1): 62-70.
- Ahmed, K.S., Idrees, A., Majeed, M.Z., Majeed, M.I., Shehzad, M.Z., Ullah, M.I., Afzal, A., & Li, J. 2022. Synergized Toxicity of Promising Plant Extracts and Synthetic Chemicals against Fall Armyworm *Spodoptera frugiperda* (J.E. Smith) (Lepidoptera: Noctuidae) in Pakistan. *Agronomy*, 12(6): 1289.
- Anderson, B., J. Hetrick., P. Doelling., & D. Spatz. 2009. Ecological Risk Assessment for Emamectin Benzoate Use as a Tree Injection Insecticide to Control Arthropod Pests. *United States Environmental Protection Agency: Washington, DC, USA*.
- Assefa, F., & Ayalew, D. 2019. Status and control measures of fall armyworm (*Spodoptera frugiperda*) infestations in maize fields in Ethiopia: A review. *Cogent Food & Agriculture*, 5(1): 2-16.
- Bagariang W., E. Tauruslina., U. Kulsum., T. Murniningtyas., H. Suyanto., S. Surono., N. A. Cahyana., & D. Mahmuda D. 2020. Efektivitas insektisida berbahan aktif klorantraniliprol terhadap larva *Spodoptera frugiperda* (JE Smith). *Jurnal Proteksi Tanaman*. 4(1): 29–37.
- Bonni, G., Houndete, T.A., Sekloka, E., Balle, R.A., & Kpindou, O.D. 2020. Field and Laboratory Testing of New Insecticides Molecules against *Spodoptera frugiperda* (JE Smith, 1797) Infesting Maize in Benin. *Issues in Biological Sciences and Pharmaceutical Research*, 8 (2): 65–71.
- CABI. 2019. *Spodoptera frugiperda* (Fall Armyworm). [https:// www.cabi.org/ISC/fallarmy worm](https://www.cabi.org/ISC/fallarmyworm). Di akses pada tanggal: 16 Oktober 2024.
- Damayanti, D, R., D. Megasari., & S. Khoiri. 2023. Serangan *Spodoptera frugiperda* (Lepidoptera: Noctuidae) pada Pertanaman Jagung di Kabupaten Lamongan. *Agropross: National Conference Proceedings of Agriculture*, 7 (3): 274-280.
- Deshmukh, S., Pavithra, H.B., Kalleshwaraswamy, C.M., Shivanna, B.K., Maruthi, M.S., & MotaSanchez, D. 2020. Field Efficacy of Insecticides for Management of Invasive Fall Armyworm, *Spodoptera frugiperda* (JE Smith) (Lepidoptera: Noctuidae) on Maize in India. *Florida Entomologist*, 103(2): 221–227.

- Devi, R., U. Chandra., R. K. Rajak., P. Kumar., S. K. Singh., & R. Veer. 2024. Biology of fall armyworm *Spodoptera frugiperda* (JE Smith) on maize under laboratory conditions. *International Journal of Environment and Climate Change*, 14(2): 463-469.
- Fitriani, A. A., D. Dulbari., & N. S. P. Nuryanti. 2023. Uji Keefektifan Insektisida Spinetoram Terhadap Ulat Grayak (*Spodoptera frugiperda* JE Smith): The Effectiveness Test of Spinetoram Insecticide Against Fall Armyworm (*Spodoptera frugiperda* JE Smith). *Jurnal Plantasimbiosa*, 5(2): 51-61.
- Fitria F. 2018. Pertumbuhan dan Produksi Jagung (*Zea Mays*, L) pada Berbagai Pengelolaan Gulma Di Kabupaten Simalungun Provinsi Sumatera Utara. *Jurnal Pertanian Tropik*, 5(2): 284–289.
- Fiqriansyah, W., S. A. Putri., R. Syam., & S. Rahmadani. 2021. *Teknologi budidaya tanaman jagung (Zea mays) dan sorgum (Sorghum bicolor (L.) Moench)*. Makassar: Jurusan Biologi FMIPA UNM.
- Ginting, S., N. Nadrawati., A. Zarkani., & T. Sumarni. 2020. Natural Incidence of Entomopathogenic Fungus *Nomuraea Rileyi* on *Spodoptera frugiperda* Infesting Corn in Bengkulu. *Jurnal Hama dan Penyakit Tumbuhan Tropika*. 20(2): 85–91.
- Han, H., Liu, Y., Yang, S., Xue, H., Zhang, D. and Xie, Y., 2024. Temperature Influences The Toxicity, Behavioral, And Physiology Response Of Chlorfenapyr, Fipronil, Imidacloprid, And Indoxacarb to *Reticulitermes flaviceps*. *Journal of Asia-Pacific Entomology*, 27(2): 102-108.
- Hafeez, M., Li, X., Ullah, F., Zhang, Z., Zhang, J., Huang, J., Chen, L., Siddiqui, J. A., Ren, X., Zhou, S., Imran, M., Assiri, M. A., Zalucki, M. P., Lou, Y., & Lu, Y. 2022. Characterization of Indoxacarb Resistance in the Fall Armyworm: Selection, Inheritance, Cross-Resistance, Possible Biochemical Mechanisms, and Fitness Costs. *Biology*, 11(12): 1718.
- Hutagalung, R. P. S., S. F. Sitepu., & Marheni. 2020. Biologi Fall Armyworm (*Spodoptera frugiperda* JE Smith) (Lepidoptera: Noctuidae) di Laboratorium. *Jurnal Pertanian Tropik*, 8(1): 1-10.
- Insecticide Resistance Action Committee. 2020. IRAC mode of action classification scheme. Available at: <https://irac-online.org/documents/moa-classification/>
- Insecticide Resistance Action Committee. 2023. Introduction to resistance. Available at: <https://irac-online.org/training-centre/resistance/#:~:text=Resistance%20may%20be%20defined%20as,recommendation%20for%20that%20pest%20species>

- Jaramillo-Barrios, I. C., & B. M. Andrade. 2019. Economic Injury Level And Action Thresholds for *Spodoptera frugiperda* (J. E. Smith) (Lepidoptera: Noctuidae) in Maize Crops Economic Injury Level And Action Thresholds for *Spodoptera frugiperda* (J. E. Smith) (Lepidoptera: Noctuidae) in maize. *Revista Facultad Nacional de Agronomía Medellín*. 73(1): 9065-9076
- Kuhn, D., & N. Armes. 2012. Inhibitors Of Oxidative Phosphorylation Via Disruption of the Proton Gradient. 1070-1077 in Krämer, W, Schirmer, U., Jeschke, P., & Witschel, W. (Eds.). *Modern Crop Protection Compounds*. 2nd ed. Weinheim: Wiley-VCH.
- Kulye, M., S. Mehlhorn., D. Boaventura., N. Godley., S. K. Venkatesh., T. Rudrappa., ... & R. Nauen. 2021. Baseline susceptibility of *Spodoptera frugiperda* populations collected in India towards different chemical classes of insecticides. *Insects*, 12(8): 758.
- Maharani, Y., V. K. Dewi., L. T. Puspasari., L. Rizkie., Y. Hidayat., & D. Dono. 2019. Cases of Fall Army Worm *Spodoptera frugiperda* J. E. Smith (Lepidoptera: Noctuidae) Attack on Maize in Bandung, Garut and Sumedang District, West Java. *CROPSAVER - Journal of Plant Protection*, 2(1): 38-49.
- Makale, F., I. Mugambi., M. K. Kansime., I. Yuka., M. Abang., B. S. Lechina., M. Rampeba., & I. Rwomushana. 2022. Fall armyworm in Botswana: Impacts, Farmer Management Practices and Implications for Sustainable Pest Management. *Pest Manag. Sci.* 78: 1060–1070.
- Montezano D. G., A. Specht., D. Sosa-Gomez., V. Roque-Specht., J. Sousa-Silva., S. Paula-Moraes., J. Peterson & T. Hunt. 2018. Host plants of *Spodoptera frugiperda* (Lepidoptera: Noctuidae) in the Americas. *African Entomology* 26(2): 286-300.
- Mamahit, J. M. E., J. Manueke., & S. E. Pakasi. 2020. Hama Invasif Ulat Grayak *Spodoptera frugiperda* (JE Smith) pada Tanaman Jagung di Kabupaten Minahasa. *Prosiding Seminar Nasional Lahan Suboptimal*. 10 (2), 616-624. Palembang 20 Oktober 2020: Fakultas Pertanian Universitas Sriwijaya.
- Nadrawati, S. G., & A. Zarkani. 2019. Identifikasi Hama Baru dan Musuh Alaminya pada Tanaman Jagung, di Kelurahan Sidomulyo, Kecamatan Seluma, Bengkulu. *Laporan Penelitian. Bengkulu. Fakultas Pertanian, Universitas Bengkulu*.
- Nelly, N., H. Hamid., E.C. Lina., & Y. Yunisman. 2021. Distribution and Genetic Diversity of *Spodoptera frugiperda* JE. Smith (Noctuidae: Lepidoptera) on maize in West Sumatra, Indonesia. *Jurnal Biodiversitas* 22(5), 2504-2511.

- Paeru, R.H., & T. Q. Dewi. 2017. *Panduan Praktis Budidaya Jagung*. Jakarta: Penebar Swadaya. Cetak 1.
- Pitterna, T. 2019. Chloride Channel Activators/New Natural Products: Avermectins And Milbemycins. In: Kramer W, Schimer U, Jeschke P, Witschel M (Eds.), *Modern Crop Protection Compound*. 3rd ed. 1305–1326. Weinheim: WileyVCH.
- Prabaningrum, L., & T. K. Moekasan. 2022. *Ulat Grayak, Spodoptera spp: Hama Polifag, Bioekologi dan Pengendaliannya*. Jakarta: IAARD Press.
- Prawita, S. M. 2024. Kerja Bersama Insektisida Emamectine Benzoat dan Klorantraniliprol pada Ulat Grayak Jagung *Spodoptera frugiperda* (Lepidoptera: Noctuidae). *Skripsi*. Bogor: Jurusan Hama dan Penyakit Tanaman. Institut Pertanian Bogor.
- Purwanto, S. 2008. *Perkembangan Produksi dan Kebijakan dalam Peningkatan Produksi Jagung*. Direktorat Budi Daya Serealia, Direktorat Jenderal Tanaman Pangan
- Raghavendra, K., T. K. Barik., P. Sharma., R. M. Bhatt., H. C. Srivastava., U. Sreehari., & A. P. Dash. 2011. Chlorfenapyr: A New Insecticide With Novel Mode of Action can Control Pyrethroid Resistant Malaria Vectors. *Malaria journal*, 10 (3): 1-7.
- Riwandi, M., H. Hardjaningsih & H. Hasanudin. 2014. *Teknik Budidaya Jagung dengan Sistem Organik di Lahan Marjinal*. UNIB Press. Bengkulu. 56 hal.
- Rohmah, A., L. Lianah., & F. Falakh. 2022. Efektivitas Insektisida Ammate Terhadap Kematian Hama Ulat Grayak (*Spodoptera frugiperda* J. E. Smith) Tanaman Jagung Di Desa Mlatirejo Bulu Rembang. *Klorofil: Jurnal Ilmu Biologi Dan Terapan*, 6(2), 63-68.
- Sartiami, D., D. Dadang., I. S. Harahap., Y. M. Kusumah., & R. Anwar. 2020. First Record Fall Armyworm (*Spodoptera frugiperda*) in Indonesia and its Occurrence in Three Provinces. *IOP Conference Series: Earth and Environmental Science*. 468:012021.
- Setiawan, A.N. and Supriyadi, A., 2014. Uji Efektivitas Berbagai Konsentrasi Pestisida Nabati Bintaro (*Cerbera manghas*) Terhadap Hama Ulat Grayak (*Spodoptera litura*) pada Tanaman kedelai. *Planta Tropika*, 2(2): 99-105.
- Sharanabasappa, S., C. M. Kalleshwaraswamy., M. S. Maruthi., & H. B. Pavithra. 2018. Biology Of Invasive Fall Army Worm *Spodoptera frugiperda* (J.E. Smith) (Lepidoptera: Noctuidae) on Maize. *Indian Journal of Entomology*, 80(3): 540-543.

- Sholikhah, W. 2020. Uji Efektifitas Beberapa Bahan Aktif Insektisida Sintetik dalam Mengendalikan Hama Fall Armyworm *Spodoptera frugiperda* (Lepidoptera: Noctuidae) di Laboratorium. *Skripsi*. Malang: Hama Penyakit Tanaman. Fakultas Pertanian. Universitas Brawijaya.
- Sinyong, K., Mubin, N. and Prijono, D., 2023. Tingkat resistensi insektisida Emamectine benzoat terhadap ulat krop *Crocidolomia pavonana* (F.)(Lepidoptera: Crambidae) di Kabupaten Cianjur, Jawa Barat. *Jurnal Entomologi Indonesia*, 20(3): 247-247.
- Subekti, N. A., R. Syafruddin., E. Efendi., & S. Sunarti. 2007. *Morfologi tanaman dan fase pertumbuhan jagung*. Balai Penelitian Tanaman Serealia. Maros. 204 hlm.
- Subiono, T. 2020. Preferensi *Spodoptera frugiperda* (Lepidoptera: Noctuidae) pada Beberapa Source Pakan. *Jurnal Agroekoteknologi Tropika Lembab*, 2(2): 130-134.
- Sulardi, S., & O. Amelia. 2023. *Agribisnis Budidaya Jagung*. Medan: Dewangga Energi Internasional. 120 hlm.
- Sumaryati, B., D. Sartiami., & S. Santoso. 2023. Biology and life table of fall armyworm, *Spodoptera frugiperda* Smith (Lepidoptera: Noctuidae) on baby corn (*Zea mays* Linn.) as alternative feed. *Jurnal Entomologi Indonesia*, 20(2): 188-188.
- Surtinah & S. Lidar. 2012. Pertumbuhan Vegetatif dan Kadar Gula Biji Jagung Manis (*Zea mays saccharata* Sturt) di Pekanbaru. *Jurnal Ilmiah Pertanian*, 13(2): 73-78.
- Suryani, J.N., Trisyono, Y.A. and Martono, E., 2022. Susceptibility of *Spodoptera frugiperda* JE Smith (Lepidoptera: Noctuidae) Collected From Central Java Province to Emamectin Benzoate, Chlorantraniliprole, And Spinetoram. *Jurnal Perlindungan Tanaman Indonesia*, 26(2): 159-165.
- Trisyono Y., S. Suputa., V. E. F. Aryuwandari., M. Hartaman., & J. Jumari. 2019. Occurrence of Heavy Infestation by the Fall Armyworm *Spodoptera frugiperda*, a new alien invasive pest, in corn in Lampung Indonesia. *Jurnal Perlindungan Tanaman Indonesia*, 23(1): 156-160.
- Zulkarnain. 2013. *Budidaya Sayuran Tropis*. Bumi Aksara. Jakarta. 219 hlm.