

DAFTAR PUSTAKA

- Bantacut T, Akbar M, dan Firdaus YR., 2015. Pengembangan jagung untuk ketahanan pangan, industri dan ekonomi. *Pangan*, 24(2): 135-148.
- Baudron F, Zaman-Allah, M A, Chaipa I, Chari N and Chinwada P., 2019. Understanding the factors influencing fall armyworm (*Spodoptera frugiperda* J.E. Smith) damage in African smallholder maize fields and quantifying its impact on yield. A case study in Eastern Zimbabwe. *Crop Protection*, 120, pp. 141–150. <https://doi.org/10.1016/j.cropro.2019.01.028>
- Bhusal K and Bhattarai K., 2019. A review on fall armyworm (*Spodoptera frugiperda*) and its possible management options in Nepal. *Journal of Entomology and Zoology Studies*, 7 (4): 1289–1292. <http://narc.gov.np/the-first>
- Badan Pusat Statistik. 2015. Produksi jagung dan kedelai menurut Provinsi, 2015. [diakses pada tanggal 13 April 2023]. Tersedia pada https://www.bps.go.id/indikator/indikator/view_data_pub/0000/api_pub/eHNUZGIwSjlsL0IRNjB0c2VhMGowQT09/da_05/1.
- Badan Standarisasi Nasional. SNI 01-3544:2013. Sirup. Badan Standarisasi Nasional Indonesia, Jakarta.
- CABI, 2007. *Crop Protection Compendium*. Wallingford. CAB International, UK.
- CABI, 2019. *Peregrinus maidis*. <https://www.cabi.org/isc/datasheet/39659#toPictures>.
- Calumpang S M F and Navasero MV., 2013. Behavioral response of the Asian corn borer *Ostrinia furnacalis* Guenee (Lepidoptera: Pyralidae) and the earwig *Euborelia annulipes* Lucas (Dermaptera: Anisolabiidae) to selected crops and weeds associated with sweet corn. *Philipp Agric Scientist*, 96(1): 84 – 90.
- De Groote H, Kimenju SC, Munyua B, Palmas S, Kassie M and Bruce A., 2020. Spread and impact of fall armyworm (*Spodoptera frugiperda* J.E. Smith) in maize production areas of Kenya. *Agriculture, Ecosystems and Environment*, 292: 106804. <https://doi.org/10.1016/j.agee.2019.106804>
- FAO, 2018. *Integrated Management of The Fall Armyworm on Maize*. <http://www.grainsa.co.za/upload/FAO---FAW-Guide.pdf>
- Hardke JT, Lorenz GM and Leonard BR, 2015. Fall armyworm (Lepidoptera: Noctuidae) ecology in Southeastern cotton. *Journal of Integrated Pest Management*, 6 (1). <https://doi.org/10.1093/jipm/pmv009>
- Harrison RD, Thierfelder C, Baudron F, Chinwada P, Midega C, Schaffner U and van den Berg J, 2019. Agro-ecological options for fall armyworm (*Spodoptera frugiperda* JE Smith) management: Providing low-cost, smallholder friendly solutions to an invasive pest. In *Journal of Environmental Management*, 243, Pp. 318–330. <https://doi.org/10.1016/j.jenvman.2019.05.011>

- Hasbi AM, Rafiuddin R, dan Samudra IM, 2016. Biologi penggerek batang jagung *Ostrinia furnacalis* Gueneé yang diberi pakan buatan. Jurnal HAYATI, 2(1): 13-18.
- Hruska AJ, 2019. Fall armyworm (*Spodoptera frugiperda*) management by smallholders. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 14. <https://doi.org/10.1079/PAVSNNR201914043>
- Iyabu H, dan Isa I., 2019. Biokonversi limbah tongkol jagung menjadi bioetanol sebagai bahan bakar alternatif terbarukan. *Jamb J Chem.* 1(2): 42-49. DOI: <https://doi.org/10.34312/jambchem.v1i2.2516>.
- Kalshoven LGE., 1981. The Pest of Crops in Indonesia. Revised and Translated by PA van der Laan. PT. IchtiarBaru-Van Hoeve, Jakarta. 701 pp.
- Kandel S, and Poudel R., 2020. Fall Armyworm (*Spodoptera frugiperda*) in maize: an emerging threat in Nepal and its management. International Journal of Applied Sciences and Biotechnology, 8(3): 305–309. <https://doi.org/10.3126/ijasbt.v8i3.31610>
- Maya, Ramadhan TH, dan Hendarti I., 2020. Biologi *Ostrinia furnacalis* (Lepidoptera: Pyralidae) Yang Dipelihara dengan Pakan Buatan di Laboratorium. [Skripsi] Universitas Tanjungpura, Pontianak.
- Motezano Sosa-Gomez, Roque-Specht, Sousa-Silva, J., Moraes SP, Peterson J, and Hunt., 2018. Host Plants of *Spodoptera frugiperda* (Lepidoptera: Noctuidae) in the Americas. African Entomology, 286-300.
- Nagoshi RN, Meagher RL, and Hay-Roe M, 2012. Inferring the annual migration patterns of Fall Armyworm (Lepidoptera: Noctuidae) in the United States from mitochondrial haplotypes. Ecology and Evolution, 2 (7): 1458–1467. <https://doi.org/10.1002/ece3.268>
- Nonci N., 2004. Biologi dan musuh alami penggerek batang *Ostrinia furnacalis* Gueneé (Lepidoptera: Pyralidae) pada tanaman jagung. Jurnal Litbang Pertanian, 23: 8-14.
- Nonci, N., Kalgutny, Hary, S., Mirsam, H., Muis, A., Azrai, M., & Aqil, M. (2019). PENGENALAN FALL ARMYWORM (*Spodoptera frugiperda* J.E. Smith) HAMA BARU PADA TANAMAN JAGUNG DI INDONESIA. In Badan Penelitian dan Pengembangan Pertanian Balai Penelitian Tanaman Serealia (Vol. 73). Overton K, Maino JL, Day R, Umina PA, Bett B, Carnovale D, Ekesi S, Meagher R, and Reynolds OL, 2021. Global crop impacts, yield losses and action thresholds for fall armyworm (*Spodoptera frugiperda*): A review. In Crop Protection, 145. <https://doi.org/10.1016/j.cropro.2021.105641>
- Respyan., Rahardjo. dan Astuti. 2015. Pengaruh Inert Dust Terhadap Mortalitas *S. zeamais* Mostchulsky Pada Biji Jagung Dalam Simpanan. J. HPT.3(2). ISSN: 2338-4336.
- Saenong M, dan Sudjak, 2005. Pengelolaan Hama Penggerek Batang Jagung *Ostrinia furnacalis* Gueneé (Lepidoptera: Pyralidae). Prosiding Seminar Nasional Jagung. Balai Penelitian Tanaman Serealia. Sulawesi Selatan.

- Suarni, 2013. Pengembangan pangan tradisional berbasis jagung mendukung diversifikasi pangan. *IPTEK Tan Pangan*. 8(1): 39-47. <http://ejurnal.litbang.pertanian.go.id/index.php/ippan/article/view/2557/2197>
- Tobing, S. S. L., Marheni, & Hasanuddin. (2015). Uji Efektivitas *Metarhizium Anisopliae* Metch. dan *Beauveria Bassiana* Bals. Terhadap Ulat Grayak (*Spodoptera Litura* F.) Pada Tanaman Kedelai (*Glicyne Max L.*) Di Rumah Kassa. *Agroekoteknologi*, 4(1), 1659–1665.
- Trisyono Y, Suputa, V Aryuwandari, M Hartaman dan 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.
- University of Florida, 2018. Fall Armyworm, *Spodoptera frugiperda* (J.E. Smith). http://entnemdept.ufl.edu/creatures/field/fall_armyworm.htm
- United State Departement of Agriculture. 2017. USDA National Nutrient Database for Standart Reference. www.nal.usda.gov/fnic/foodcomp/search/
- Yanuartono, Indarjulianto S, Nururrozi A, Raharjo S, dan Purnamaningsih H., 2020. Metode peningkatan nilai nutrisi jerami jagung sebagai pakan ternak ruminansia. *J Tapro*. 21(1): 23-28. <https://doi.org/10.21776/ub.itapro.2020.021.01.3>

LAMPIRAN



Gambar 1. Pengamatan gejala kerusakan



Gambar 2. Gejala serangan *O. furnacalis* pada batang tanaman jagung



Gambar 3. Gejala serangan *O. furnacalis* pada daun tanaman jagung



Gambar 4. Larva *S. frugiperda* pada tanaman jagung yang diamati



Gambar 5. Gejala serangan larva instar awal *S. frugiperda* pada daun jagung



Gambar 6. Gejala serangan *S. frugiperda* pada titik tumbuh tanaman jagung