

DAFTAR PUSTAKA

- Afriyanita, Lina, E.C. & Darnetty. 2019. Aktivitas Insektisida Campuran Ekstrak Buah *Piper Aduncum*, Buah *Sapindus rarak*, dan Daun *Tephrosia vogelii* Terhadap Larva *Crocidolomia pavonana* (F.) (Lepidoptera: Crambidae). *Jurnal Proteksi Tanaman*, 3(1): 34–46.
- Andila, P., Warseno, T., Li'aini, A., Tirta, I.G., Wibawa, I.P.A.H. & Bangun, T.M. 2020. *Seri Koleksi Kebun Raya Eka Karya Bali Tanaman Berpotensi Penghasil Minyak Atsiri*. Jakarta: LIPI Press.
- Arneti. 2012. *Bioaktivitas Ekstrak Buah Piper aduncum L. (Piperaceae) Terhadap Crocidolomia pavonana (F.) (Lepidoptera : Crambidae) dan Formulasinya Sebagai Insektisida Botani*. Universitas Andalas.
- Bernard, C.B., Krishnamurty, H.G., Chauret, D., Durst, T., Philogène, B.J.R., Sánchez-Vindas, P., Hasbun, C., Poveda, L., San Román, L. & Arnason, J.T. 1995. Insecticidal Defenses of Piperaceae from the Neotropics. *Journal of Chemical Ecology*, 21(6): 801–814.
- Braga dos Santos, T. lohaine, Turchen, L.M., Dall'oglio, E.L., Butnariu, A.R. & Pereira, M.J.B. 2017. Phytochemical of Piper Essential Oil and Acute Toxicity against *Helicoverpa armigera* (Lepidoptera: Noctuidae). *Revista Brasileira de Ciencias Agrarias*, 12(4): 484–489.
- Brévault, T., Ndiaye, A., Badiane, D., Bal, A.B., Sembène, M., Silvie, P. & Haran, J. 2018. First Records of the Fall Armyworm, *Spodoptera frugiperda* (Lepidoptera: Noctuidae), in Senegal. *Entomologia Generalis*, 37(2): 129–142.
- Celis, Á.F., Mendoza, C.F., Roa, B.A. & Delgado, W.A. 2014. Effect of Piper Extracts in Fall Armyworm (*Spodoptera frugiperda* Smith), under Semi-Controlled Conditions. *Acta Horticulturae*, 1030: 49–54.
- Day, R., Abrahams, P., Bateman, M., Beale, T., Clottey, V., Cock, M., Colmenarez, Y., Corniani, N., Early, R., Godwin, J., Gomez, J., Moreno, P.G., Murphy, S.T., Oppong-Mensah, B., Phiri, N., Pratt, C., Silvestri, S. & Witt, A. 2017. Fall armyworm: Impacts and Implications for Africa. *Outlooks on Pest Management*, 28(5): 196–201.
- Djunaedy, A. 2009. Biopestisida Sebagai Pengendali Organisme Pengganggu Tanaman (OPT) yang Ramah Lingkungan. *Embryo*, 6(1): 88–95.
- Dutra, K.A., Wanderley Teixeira, V., Cruz, G.S., Silva, C.T.S., D'Assunção, C.G., Ferreira, C.G.M., Monteiro, A.L.B., Agra Neto, A.C., Lapa Neto, C.J.C., Teixeira, A.A.C. & Navarro, D.M.A.F. 2019. Morphological and Immunohistochemical Study of the Midgut and Fat Body of *Spodoptera frugiperda* (J.E. Smith) (Lepidoptera: noctuidae) Treated with Essential Oils of the Genus *Piper*. *Biotechnic and Histochemistry*, 94(7): 498–513.

- [FAO dan CABI] Food and Agriculture Organization dan Centre for Agriculture and Bioscience International. 2019. *Community-Based Fall Armyworm (*Spodoptera frugiperda*) Monitoring, Early Warning and Management Training of Trainers Manual*. First. FAO and CABI.
- [FAO] Food and Argiculture Organization. 2018. *Integrated management of the Fall Armyworm on maize*. FAO, ed. Rome: FAO.
- Goergen, G., Kumar, P.L., Sankung, S.B., Togola, A. & Tamò, M. 2016. First Report of Outbreaks of the Fall Armyworm *Spodoptera frugiperda* (J. E. Smith) (Lepidoptera, Noctuidae), a New Alien Invasive Pest in West and Central Africa. *PLoS ONE*, 11(10): 1–9.
- Guenhter, E. 1987. *Minyak Atsiri Jilid I*. Jakarta: UI-Press.
- Hartati, S.Y. 2012. Prospek Pengembangan Minyak Atsiri Sebagai Pestisida Nabati. *Perspektif*, 11(1): 45–58.
- Irawan, J., Rustam, R. & Fauzana, H. 2018. Uji Pestisida Nabati Sirih Hutan (*Piper aduncum* L.) Terhadap Larva Kumbang Tanduk *Oryctes rhinoceros* L . Pada Tanaman Kelapa Sawit. *Agroteknologi*, 9(1): 41–50.
- LeOra Software. 1987. *Polo-PC User's Guide*. LeOra Software Leskinen.
- Lina, E.C., Dadang, D., Manuwoto, S. & Syahbirin, G. 2015. Gangguan Fisiologi dan Biokimia *Crocidolomia pavonana* (F.) (Lepidoptera: Crambidae) Akibat Perlakuan Ekstrak Campuran *Tephrosia vogelli* Hook. dan *Piper aduncum* L. *Jurnal Entomologi Indonesia*, 12(2): 100–107.
- Lina, E.C., Dadang, Manuwoto, S., Syahbirin, G. & Prijono, D. 2013. Synergistic Action of Mixed Extracts of *Brucea javanica* (Simaroubaceae), *Piper aduncum* (Piperaceae), and *Tephrosia vogelii* (Leguminosae) against Cabbage Head Caterpillar, *Crocidolomia pavonana*. *Journal of Biopesticides*, 6(1): 77–83.
- Lina, E.C., Reflin, Erlina, L.H. & Tama, D.P. 2021. Nanoemulsion of Mixed *Tephrosia vogelii* and *Piper aduncum* as an Alternative Control of Cabbage Pest *Crocidolomia pavonana*. *IOP Conf. Series: Earth and Environmental Science*.
- Lina, E.C., Widhianingrum, I., Putri, M.E. & Evalia, N.F. 2018. Insecticidal Activity of *Piper aduncum* fruit and *Tephrosia vogelii* Leaf Mixed Formulations against *Plutella xylostella* (L.) (Lepidoptera : Plutellidae). *Journal of Biopesticides*, 11(1): 69–75.
- Lucena, D.C., Bertholdo-vargas, L.R. & Silva, W.C. 2017. Biological Activity of *Piper aduncum* Extracts on *Anticarsia gemmatalis* (Hübner) (Lepidoptera : Erebidae) and *Spodoptera frugiperda* (J.E. Smith) (Lepidoptera : Noctuidae). *Anais da Academia Brasileira de Ciências*, 89(3): 1869–1879.
- Maharani, Y., Dewi, V.K., Puspasari, L.T., Rizkie, L., Hidayat, Y. & Dono, D. 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.

- Mayuni. 2006. *Teknologi dan Analisa Minyak Atsiri*. Padang: Andalas University Press.
- Misni, N., Sulaiman, S., Othman, H. & Omar, B. 2009. Repellency of Essential Oil of *Piper aduncum* Against *Aedes albopictus* in the Laboratory. *Journal of the American Mosquito Control Association*, 25(4): 442–447.
- Nonci, N., Kalqutny, S.H., Misram, H., Muis, A., Azrai, M. & Aqil, M. 2019. *Pengenalan Fall Armyworm (Spodoptera frugiperda J.E. Smith) Hama Baru pada Tanaman Jagung di Indonesia*. Maros:Balai Penelitian Tanaman Serealia.
- Perry, A.S., Yamamoto, I., Ishaaya, I. & Perry, R. 1998. *Insecticides in Agriculture and Environment: Restrospects and Prospects*. New York: Springer.
- Prasanna, B.M., Regina, E. & Virginia, M, P. 2018. *Fall Armyworm in Africa*. First Edit. Mexico: CDMX: CIMMYT.
- Sanini, C., Massarolli, A., Krinski, D. & Butnariu, A.R. 2017. Essential Oil of Spiked Pepper, *Piper aduncum* L. (Piperaceae), for the Control of Caterpillar Soybean Looper, *Chrysodeixis includens* Walker (Lepidoptera: Noctuidae). *Revista Brasileira de Botanica*, 40(2): 399–404.
- Sari, E. 2008. *Operasi Pemisahan Diffusional Distilasi, Absorpsi dan Stripping*. Padang: Bung Hatta University Press.
- Scott, I.M., Jensen, H.R., Philogene, B.J.R. & Arnason, J.T. 2008. A Review of *Piper* spp. (Piperaceae) Phytochemistry, Insecticidal Activity and Mode of Action. *Phytochemistry Reviews*, 7(1): 65–75.
- Shu, B., Zou, Y., Yu, H., Zhang, W., Li, X., Cao, L. & Lin, J. 2021. Growth Inhibition of *Spodoptera frugiperda* Larvae by Camptothecin Correlates with Alteration of the Structures and Gene Expression Profiles of the Midgut. *BMC Genomics*, 22(1): 1–13.
- Siahaya, V.G. 2021. Pengaruh Dosis/Konsentrasi Subletal Terhadap Berbagai Perilaku Serangga. *Agrologia*, 10(1): 25–38.
- Souto, R.N.P., Harada, A.Y., Andrade, E.H.A. & Maia, J.G.S. 2012. Insecticidal Activity of Piper Essential Oils from the Amazon Against the Fire Ant *Solenopsis saevissima* (Smith) (Hymenoptera: Formicidae). *Neotropical Entomology*, 41(6): 510–517.
- Syahputra, E., Prijono, D., Dadang, Manuwoto, S. & Darusman, L.K. 2006. Respons Fisiologi *Crocidiolomia pavonana* terhadap Fraksi Aktif *Calophyllum soulattri*. *HAYATI Journal of Biosciences*, 13(1): 7–12.
- Syahroni, Y.Y. 2013. Aktivitas Insektisida Campuran Buah *Piper aduncum* (Piperaceae) dan *Sapindus rarak* (Sapindaceae) terhadap Larva *Crocidiolomia pavonana*. [Skripsi]. Departemen Proteksi Tanaman, Institut Pertanian Bogor. Bogor.
- Yusuf, R. 2012. Potensi dan Kendala Pemanfaatan Pestisida Nabati Dalam Pengendalian Hama Pada Budidaya Sayuran Organik. Seminar UR-UKM ke-7 "Optimalisasi Riset Sains dan Teknologi Dalam Pembangunan Berkelanjutan" Riau : 2012. 171–173.