

DAFTAR PUSTAKA

- Abbas, R. K. (2019). Chemical constituents of the goat margarine and antibacterial activity against bacterial pathogens in Sudan. *Journal of Pure and Applied Microbiology*, 13(1), 225–232. <https://doi.org/10.22207/JPAM.13.1.23>
- Abd El-Latif, H. H., Hassan, S. W. M., & Beltagy, E. A. (2021). Optimization and Characterization of Antimicrobial Agents Produced by Marine *Aspergillus terreus* she05 against *Aeromonas hydrophila* and other Applications. *Journal of Pure and Applied Microbiology*, 15(4), 2367–2381. <https://doi.org/10.22207/JPAM.15.4.62>
- Abdullah, B. M., Mehdi, M. A. H., Khan, A. R., & Pathan, J. M. (2020). Gas chromatography-mass spectrometry (Gc-ms) analysis of ajwain (*trachyspermum ammi*) seed extract. *International Journal of Pharmaceutical Quality Assurance*, 11(2), 231–234. <https://doi.org/10.25258/ijpqa.11.2.6>
- Aboshi, T., Ishiguri, S., Shiono, Y., & Murayama, T. (2018). Flavonoid glycosides in Malabar spinach *Basella alba* inhibit the growth of *Spodoptera litura* larvae. *Bioscience, Biotechnology and Biochemistry*, 82(1), 9–14. <https://doi.org/10.1080/09168451.2017.1406301>
- Adamski, Z., Blythe, L. L., Milella, L., & Bufo, S. A. (2020). Biological activities of alkaloids: From toxicology to pharmacology. *Toxins*, 12(4), 10–13. <https://doi.org/10.3390/toxins12040210>
- Addisu, S., & Assefa, A. (2016). Role of Plant Containing Saponin on Livestock Production ; A Review. *Advan. Biol. Res.*, 10(5), 309–314. <https://doi.org/10.5829/idosi.abr.2016.309.314>
- Adeniyi, S. A., Orjiekwe, C. L., Ehiagbonare, J. E., & Arimah, B. D. (2010). Preliminary phytochemical analysis and insecticidal activity of ethanolic extracts of four tropical plants (*Vernonia amygdalina*, *Sida acuta*, *Ocimum gratissimum* and *Telfaria occidentalis*) against beans weevil (*Acanthscelides obtectus*). *International Journal of Physical Sciences*, 5(6), 753–792.
- Adjavon, F. J. M. A., Li, X., Hu, B., Dong, L., Zeng, H., Li, C., & Hu, W. (2021). Adult House Fly (Diptera: Muscidae) Response to Black Soldier Fly (Diptera: Stratiomyidae) Associated Substrates and Potential Volatile Organic Compounds Identification. *Environmental Entomology*, 50(5), 1037–1044. <https://doi.org/10.1093/ee/nvab073>
- Agerbirk, N., Olsen, C. E., Bibby, B. O. M., Frandsen, H. O., Brown, L. E. A. D., Nielsen, J. K., & Renwick, J. A. A. (2003). A Saponin Correlated With Variable Resistance of *Barbarea vulgaris* to The Diamondback Moth *Plutella xylostella*. *Journal of Chemical Ecology*, 29(6), 1417–1433. <https://doi.org/10.1023/A:1024217504445>
- Agustini, N. W. S., Sunari, A. A. A. A., & Yuliadhi, K. A. (2019). Kelimpahan Populasi dan Persentase Serangan Lalat Buah (*Bactrocera* spp.) (Diptera: tephritidae) pada Tanaman Mentimun (*Cucumis sativus* L.) di Beberapa Kabupaten Provinsi Bali. *Journal of Agricultural Sciences and Biotechnology*, 8(1), 22–30. <https://ojs.unud.ac.id/index.php/JASB>
- Ahlquist, L., Bergström, G., & Liljenberg, C. (1978). Acyclic diterpene alcohols:

Occurrence and synthesis of geranylcitronellol, phytol and geranylgeraniol.
Progress in the Chemistry of Fats and Other Lipids, 16(C), 231–255.
[https://doi.org/10.1016/0079-6832\(78\)90046-0](https://doi.org/10.1016/0079-6832(78)90046-0)

- Ahmad, S., Hussain, A., Ullah, F., Jamil, M., Ali, A., Ali, S., & Luo, Y. (2021). 60Co- γ Radiation Alters Developmental Stages of *Zeugodacus cucurbitae* (Diptera: Tephritidae) Through Apoptosis Pathways Gene Expression. *Journal of Insect Science*, 21(5), 1–6. <https://doi.org/10.1093/jisesa/ieab080>
- Ainane, A., Khammour, Charaf, S., Elabboubi, M., Elkouali, M., Talbi, M., Benhima, R., Cherroud, S., & Ainane, T. (2019). Chemical composition and insecticidal activity of five essential oils: *Cedrus atlantica*, *Citrus limonum*, *Rosmarinus officinalis*, *Syzygium aromaticum* and *Eucalyptus globules*. *Materials Today: Proceedings*, 13, 474–485. <https://doi.org/10.1016/j.matpr.2019.04.004>
- Akhtar, Y., Yu, Y., Isman, M. B., & Plettner, E. (2010). Dialkoxybenzene and dialkoxyallylbenzene feeding and oviposition deterrents against the cabbage looper, *trichoplusia ni*: Potential insect behavior control agents. *Journal of Agricultural and Food Chemistry*, 58(8), 4983–4991. <https://doi.org/10.1021/jf9045123>
- Akter, T., & Sohel, M. M. H. (2020). Biology of the cucurbit fruit fly, *Bactrocera cucurbitae* (Coq) on host bottle gourd, *Lagenaria siceraria*. *Journal of Bioscience and Agriculture Research*, 25(2), 2098–2106. <https://doi.org/10.18801/jbar.250220.256>
- Aluja, M., & Prokopy, R. J. (1992). Host Search behaviour by *Rhagoletis pomonella* files: inter-tree movement patterns in response to wind-borne fruit volatiles under field conditions. *Physiological Entomology*, 17(1), 1–8. <https://doi.org/10.1111/j.1365-3032.1992.tb00983.x>
- Anh, L. T. T., Son, N. T., Van Tuyen, N., Thuy, P. T., Quan, P. M., Ha, N. T. T., & Tra, N. T. (2021). Antioxidative and α -glucosidase inhibitory constituents of *Polyscias guilfoylei*: experimental and computational assessments. *Molecular Diversity*, 1–15. <https://doi.org/10.1007/s11030-021-10206-6>
- Ansante, T. F., Ribeiro, L. P., & Vendramim, J. D. (2017). Acute and Chronic Toxicities of an Annonin-Based Commercial Bioinsecticide and a Joint Mixture with a Limonoid-Based Formulation to the Fall Armyworm. *Neotropical Entomology*, 46(2), 216–222. <https://doi.org/10.1007/s13744-016-0448-0>
- Arif, A. Bin, Susanto, S., Matra, D. D., & Widayanti, S. M. (2021). Identifikasi Senyawa Bioaktif dan Manfaatnya dari Beberapa Bagian Tanaman Abiu (*Pouteria caimito*). *J. Hort. Indonesia*, 12(1), 10–20.
- Arunmathi, C., & Malarvili, T. (2017). Analysis of bioactive compounds in methanol extract of *Aplotaxis auriculata* rhizome using GC-MS. *Journal of Pharmacognosy and Phytochemistry*, 6(3), 243–247.
- Asghar, S. F., Habib-ur-Rehman, Choudahry, M. I., & Atta-ur-Rahman. (2011). Gas chromatography-mass spectrometry (GC-MS) analysis of petroleum ether extract (oil) and bio-assays of crude extract of *Iris germanica*. *International Journal of Genetics and Molecular Biology*, 3(7), 95–100.
- Ashmawy, N. S., Gad, H. A., Al-musayeib, N., & El-ahmady, S. H. (2019). Phytoconstituents from *Polyscias guilfoylei* leaves with histamine-release inhibition activity. *De Gruyter*, 1–7. <https://doi.org/10.1515/znc-2018-0167>

- Ashmawy, N. S., Gad, H. A., Ashour, M. L., El-Ahmady, S. H., & Singab, A. N. B. (2020). The genus *Polyscias* (Araliaceae): A phytochemical and biological review. *Journal of Herbal Medicine*, 23(June 2019), 100377. <https://doi.org/10.1016/j.hermed.2020.100377>
- Astriyani, N. K. N. K., Supartha, I. W., & Sudiarta, I. P. (2016). Kelimpahan Populasi Dan Persentase Serangan Lalat Buah Yang Menyerang Tanaman Buah-Buahan Di Bali. *J. Agric. Sci. and Biotechnol.*, 5(1), 19–27. <http://ojs.unud.ac.id/index.php/JASB>
- Athikomkulchai, S., Tadtong, S., Ruangrunsi, N., & Hongratanaworakit, T. (2015). Chemical composition of the essential oil from croton oblongifolius and its antibacterial activity against propionibacterium acnes. *Natural Product Communications*, 10(8), 1459–1460. <https://doi.org/10.1177/1934578x1501000836>
- Attaullah, Zahoor, M. K., Zahoor, M. A., Mubarik, M. S., Rizvi, H., Majeed, H. N., Zulhussnain, M., Ranian, K., Sultana, K., Imran, M., & Qamer, S. (2020). Insecticidal, biological and biochemical response of *Musca domestica* (Diptera: Muscidae) to some indigenous weed plant extracts. *Saudi Journal of Biological Sciences*, 27(1), 106–116. <https://doi.org/10.1016/j.sjbs.2019.05.009>
- Azhagumurugan, C., Rajan, M. K., & Ester, M. (2014). G C - MS Analysis of Phytochemical Constituents and Nematicidal Activities of Leaf Extract of *Magilam*, *Mimusops elengi*. 9(4), 239–243. <https://doi.org/10.5829/idosi.wjz.2014.9.4.85132>
- Azzahra, C., Raihanah, M., Fauziah, Z., Rahmah, R., Irsan, C., Pertanian, F., Sriwijaya, U., Ilir, O., & Selatan, S. (2021). Strategi yang tepat dalam Pengendalian Hama Lalat Buah (*Bactrocera* sp.) pada Tanaman Jambu Air Hijau Deli (*Syzygium aqueum*). *Prosiding Seminar Nasional Lahan Suboptimal*, 242–248.
- Bartkiene, E., Bartkevics, V., Mozuriene, E., Lele, V., Zadeike, D., & Juodeikiene, G. (2019). The safety, technological, nutritional, and sensory challenges associated with lacto-fermentation of meat and meat products by using pure lactic acid bacteria strains and plant-lactic acid bacteria bioproducts. *Frontiers in Microbiology*, 10(MAY), 8–11. <https://doi.org/10.3389/fmicb.2019.01036>
- Bernard, B. M., Pakianathan, N., & Divakar, M. C. (1998). On The Antipyretic, Anti-inflammatory, Analgesic and Molluscicidal Properties of *Polyscias fruticosa* (L.) Harms. *Ancient Science of Life*, 17(4), 313–319. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3331125/>
- Beschi, D. A., Appavoo, M. R., & Wilsy, J. I. (2021). GC-MS analysis, collected from Kavalkinaru area, Tirunelveli District, Tamil Nadu, India. *European Journal of Molecular & Clinical Medicine*, 7(11), 4287–4292. https://ejmcm.com/article_6597.html
- Bodoira, R., & Maestri, D. (2020). Phenolic Compounds from Nuts: Extraction, Chemical Profiles, and Bioactivity. *Journal of Agricultural and Food Chemistry*, 68(4), 927–942. <https://doi.org/10.1021/acs.jafc.9b07160>
- Boncan, D. A. T., Tsang, S. S. K., Li, C., Lee, I. H. T., Lam, H. M., Chan, T. F., & Hui, J. H. L. (2020). Terpenes and terpenoids in plants: Interactions with environment and insects. *International Journal of Molecular Sciences*, 21(19),

1–19. <https://doi.org/10.3390/ijms21197382>

- Cai, F., Watson, B. S., Meek, D., Huhman, D. V., Wherrett, D. J., Ben, C., Gentzbittel, L., Driscoll, B. T., Sumner, L. W., Bede, J. C., Meek, D., & Sumner, L. W. (2017). *Medicago truncatula* Oleanolic-Derived Saponins Are Correlated with Caterpillar Deterrence. 712–724. <https://doi.org/10.1007/s10886-017-0863-7>
- Campia, I., Lussiana, C., Pescarmona, G., Ghigo, D., Bosia, A., & Riganti, C. (2009). Geranylgeraniol prevents the cytotoxic effects of mevastatin in THP-1 cells, without decreasing the beneficial effects on cholesterol synthesis. *British Journal of Pharmacology*, 158(7), 1777–1786. <https://doi.org/10.1111/j.1476-5381.2009.00465.x>
- Castilhos, R. V., Grützmacher, A. D., & Coats, J. R. (2018). Acute Toxicity and Sublethal Effects of Terpenoids and Essential Oils on the Predator *Chrysoperla externa* (Neuroptera: Chrysopidae). *Neotropical Entomology*, 47(2), 311–317. <https://doi.org/10.1007/s13744-017-0547-6>
- Chakraborty, S., Sarkar, S., & Bhattacharya, M. (n.d.). GC-MS PROFILING OF PETROLEUM BENZENE EXTRACTS OF HERPETOSPERMUM DARJEELINGENSE DISPLAYS DISTINCT METABOLIC PROFILE FROM ‘TEA’ AND ‘NON - TEA’ GROWING. In *Multi-Disciplinary Approaches for Development of Agriculture and Allied Sectors in Global Scenario* (pp. 187–199). https://www.researchgate.net/profile/Sourav-Chakraborty-22/publication/356412686_GC-MS_PROFILING_OF_PETROLEUM_BENZENE_EXTRACTS_OF_HERPETOSPERMUM_DARJEELINGENSE_DISPLAYS_DISTINCT_METABOLIC_PROFILE_FROM_‘TEA’_AND_‘NON-TEA’_GROWING_HABITAT_OF_DARJEELING_HILL
- Chang, C. L., Caceres, C., & Jang, E. B. (2004). A novel liquid larval diet and its rearing system for melon fly, *Bactrocera cucurbitae* (Diptera: Tephritidae). *Annals of the Entomological Society of America*, 97(3), 524–528. [https://doi.org/10.1603/0013-8746\(2004\)097\[0524:ANLLDA\]2.0.CO;2](https://doi.org/10.1603/0013-8746(2004)097[0524:ANLLDA]2.0.CO;2)
- Chang, C. L., Cho, I. L. K., & Li, Q. X. (2009). Insecticidal activity of basil oil, trans-anethole, estragole, and linalool to adult fruit flies of *Ceratitis capitata*, *Bactrocera dorsalis*, and *Bactrocera cucurbitae*. *Journal of Economic Entomology*, 102(1), 203–209. <https://doi.org/10.1603/029.102.0129>
- Chaudhary, S., Kanwar, R. K., Sehgal, A., & Cahill, D. M. (2017). *Progress on Azadirachta indica Based Biopesticides in Replacing Synthetic Progress on Azadirachta indica Based Biopesticides in Replacing Synthetic Toxic Pesticides*. May. <https://doi.org/10.3389/fpls.2017.00610>
- Chaudhary, S., Kanwar, R. K., Sehgal, A., Cahill, D. M., Barrow, C. J., Sehgal, R., & Kanwar, J. R. (2017). Progress on *Azadirachta indica* based biopesticides in replacing synthetic toxic pesticides. *Frontiers in Plant Science*, 8(May), 1–13. <https://doi.org/10.3389/fpls.2017.00610>
- Chinnasamy, P. S., Parimala, S., & Kandhasamy, M. (2018). Phytochemical Evaluation of Seed and Fruit Pulp. *World Journal of Pharmaceutical Research*, 7(7), 1924–1932. <https://doi.org/10.20959/wjpr20187-11770>
- Cioffi, G., Lepore, L., Venturella, F., Piazza, F. D., & De Tommasi, N. (2008). Antiproliferative Oleanane Saponins from *Polyscias guilfoylei*. *Natural Product*

Communications, 3(10), 1667–1670.

<https://doi.org/10.1177/1934578X0800301017>

- Copeland, R. S., Wharton, R. A., Luke, Q., De Meyer, M., Lux, S., Zenz, N., Machera, P., & Okumu, M. (2006). Geographic distribution, host fruit, and parasitoids of African fruit fly pests *Ceratitis anonae*, *Ceratitis cosyra*, *Ceratitis fasciventris*, and *Ceratitis rosa* (Diptera: Tephritidae) in Kenya. *Annals of the Entomological Society of America*, 99(2), 261–278.
[https://doi.org/10.1603/0013-8746\(2006\)099\[0261:GDHFAP\]2.0.CO;2](https://doi.org/10.1603/0013-8746(2006)099[0261:GDHFAP]2.0.CO;2)
- Coquerel, Q. R. R., Démares, F., Geldenhuys, W. J., Le Ray, A. M., Bréard, D., Richomme, P., Legros, C., Norris, E., & Bloomquist, J. R. (2021). Toxicity and mode of action of the aporphine plant alkaloid liriodenine on the insect GABA receptor. *Toxicon*, 201(August), 141–147.
<https://doi.org/10.1016/j.toxicon.2021.08.019>
- Cornelius, M. L., Duan, J. J., & Messing, R. H. (2000). Volatile host fruit odors as attractants for the oriental fruit fly (diptera: tephritidae). *Journal of Economic Entomology*, 93(1), 93–100. <https://doi.org/10.1603/0022-0493-93.1.93>
- Corrêa, J. L., Veiga, F. F., Jarros, I. C., Costa, M. I., Castilho, P. F., de Oliveira, K. M. P., Rosseto, H. C., Bruschi, M. L., Svidzinski, T. I. E., & Negri, M. (2020). Propolis extract has bioactivity on the wall and cell membrane of *Candida albicans*. *Journal of Ethnopharmacology*, 256(December 2019), 112791.
<https://doi.org/10.1016/j.jep.2020.112791>
- Costa, M. S., Cossolin, J. F. S., Pereira, M. J. B., Sant'Ana, A. E. G., Lima, M. D., Zanuncio, J. C., & Serrão, J. E. (2014). Larvicidal and cytotoxic potential of squamocin on the midgut of *Aedes aegypti* (Diptera: Culicidae). *Toxins*, 6(4), 1169–1176. <https://doi.org/10.3390/toxins6041169>
- Cronin, M. T. D., Dearden, J. C., & Dobbs, A. J. (1991). QSAR studies of comparative toxicity in aquatic organisms. *The Science of the Total Environment*, 109–110(C), 431–439. [https://doi.org/10.1016/0048-9697\(91\)90198-N](https://doi.org/10.1016/0048-9697(91)90198-N)
- Cruz-Estrada, A., Ruiz-Sánchez, E., Cristóbal-Alejo, J., González-Coloma, A., Andrés, M. F., & Gamboa-Angulo, M. (2019). Medium-chain fatty acids from *Eugenia winzerlingii* leaves causing insect settling deterrent, nematicidal, and phytotoxic effects. *Molecules*, 24(9), 1–13.
<https://doi.org/10.3390/molecules24091724>
- Cui, C., Yang, Y., Zhao, T., Zou, K., Peng, C., Cai, H., Wan, X., & Hou, R. (2019). Insecticidal Activity and Insecticidal Mechanism of Total Saponins from *Camellia oleifera*. *Molecules*, 24(24), 1–12.
<https://doi.org/10.3390/molecules24244518>
- Czepa, A., & Hofmann, T. (2004). Quantitative studies and sensory analyses on the influence of cultivar, spatial tissue distribution, and industrial processing on the bitter off-taste of carrots (*Daucus carota* L.) and carrot products. *Journal of Agricultural and Food Chemistry*, 52(14), 4508–4514.
<https://doi.org/10.1021/jf0496393>
- Czyżewska, M. M., Chrobok, L., Kania, A., Jatczak, M., Pollastro, F., Appendino, G., & Mozrzymas, J. W. (2014). Dietary acetylenic oxylipin faltarinol differentially modulates GABAA receptors. *Journal of Natural Products*, 77(12), 2671–2677.

<https://doi.org/10.1021/np500615j>

- da Camara, C. A. G., Akhtar, Y., Isman, M. B., Seffrin, R. C., & Born, F. S. (2015). Repellent activity of essential oils from two species of Citrus against *Tetranychus urticae* in the laboratory and greenhouse. *Crop Protection*, 74, 110–115. <https://doi.org/10.1016/j.cropro.2015.04.014>
- Daisy, B. H., Strobel, G. A., Castillo, U., Ezra, D., Sears, J., Weaver, D. K., & Runyon, J. B. (2002). Naphthalene, an insect repellent, is produced by *Muscodor vitigenus*, a novel endophytic fungus. *Microbiology*, 148, 3737–3741.
- Dalimunthe, C. I., & Rachmawan, A. (2017). Prospek Pemanfaatan Metabolit Sekunder Tumbuhan Sebagai Pestisida Nabati Untuk Pengendalian Patogen Pada Tanaman Karet. *Warta Perkaretan*, 36(1), 15–28. <https://doi.org/10.22302/ppk.wp.v36i1.324>
- Damhougy, E., Bashar, M. E., El-Naggar, H. A., Ibrahim, H. A. H., & Fekry M. Abou Senna, A. (2017). Gc-MS Analysis of Bioactive Components of *Callyspongia Crassa* (Porifera) From Gulf of Aqaba Red Sea (Egypt). *Al Azhar Bulletin Of Science*, 9(March), 111–118.
- Datta, R., Kaur, A., Saraf, I., Singh, I. P., & Kaur, S. (2019). Effect of crude extracts and purified compounds of *Alpinia galanga* on nutritional physiology of a polyphagous lepidopteran pest, *Spodoptera litura* (Fabricius). *Ecotoxicology and Environmental Safety*, 168(October 2018), 324–329. <https://doi.org/10.1016/j.ecoenv.2018.10.065>
- De Leonardis, A., Aretini, A., Alfano, G., MacCiola, V., & Ranalli, G. (2008). Isolation of a hydroxytyrosol-rich extract from olive leaves (*Olea Europaea* L.) and evaluation of its antioxidant properties and bioactivity. *European Food Research and Technology*, 226(4), 653–659. <https://doi.org/10.1007/s00217-007-0574-3>
- Dhillon, M. K., Singh, R., Naresh, J. S., & Sharma, H. C. (2005). The melon fruit fly, *Bactrocera cucurbitae*: A review of its biology and management. *Journal of Insect Science*, 5, 1–16. <https://academic.oup.com/jinsectscience/article-abstract/5/1/40/893795>
- Dib, R., Makhoul, K., & Maalouf, R. (2016). Preliminary bioactivity investigation of *Styrax officinalis* fruit extract as potential biopesticide. *Journal of Pharmacognosy and Phytotherapy*, 8(12), 209–213. <https://doi.org/10.5897/JPP2016.0422>
- Dilek tepe, H. (2019). Qualitative Analysis of Alfalfa Seed Methanol Extract by GC-MS and Determination of Antioxidant Properties. *Celal Bayar Üniversitesi Fen Bilimleri Dergisi*, 15(2), 175–180. <https://doi.org/10.18466/cbayarfb.493017>
- Dowd, P. F., Berhow, M. A., & Johnson, E. T. (2011). Differential Activity of Multiple Saponins Against Omnivorous Insects with Varying Feeding Preferences. *Journal of Chemical Ecology*, 37, 443–449. <https://doi.org/10.1007/s10886-011-9950-3>
- Drew, R. A. I., & Romig, M. C. (1997). Overview-Tephritidae in The Pacific and Southeast Asia. In A. J. Allwood & R. A. I. Drew (Eds.), *Management of Fruit Flies in The Pacific. A regional symposium, Nadi, Fiji 28-31 Oktober 1996* (pp. 46–53). ACIAR Proceedings No 76.

- Duraipandiyan, V., Ignacimuthu, S., & Gabriel Paulraj, M. (2011). Antifeedant and larvicidal activities of Rhein isolated from the flowers of *Cassia fistula* L. *Saudi Journal of Biological Sciences*, 18(2), 129–133.
<https://doi.org/10.1016/j.sjbs.2010.12.009>
- Duvauchelle, D. (2010). *Plant fact sheet: Panax. Polyscias guilfoylei* (Bull ex Cogn. & E. March.) Bailey. United States Department of Agriculture Natural Resources Conservation Service. USDA NRCS Hawaii Plant Materials Center, Ho'olehua, Hawai'i. <http://plnt-materials.nrcs.usda.gov>
- Eaton, A. L., Brodie, P. J., Callmander, M. W., Rakotondrajaona, R., Rakotobe, E., Rasamison, V. E., & Kingston, D. G. I. (2015). Bioactive oleanane glycosides from *polyscias duplicata* from the Madagascar dry forest [1]. *Natural Product Communications*, 10(4), 567–570.
<https://doi.org/10.1177/1934578x1501000407>
- El-Said, K. S., Hussein, S., Alrashdi, B. M., Mahmoud, H. A., Ibrahim, M. A., Elbakry, M., El-Tantawy, H., Kabil, D. I., & El-Naggar, S. A. (2022). Musa sp. Leaves Extract Ameliorates the Hepato-Renal Toxicities Induced by Cadmium in Mice. *Molecules*, 27(2), 1–13. <https://doi.org/10.3390/molecules27020559>
- El-Sayed, A. S. A., Moustafa, A. H., Hussein, H. A., El-Sheikh, A. A., El-Shafey, S. N., Fathy, N. A. M., & Enan, G. A. (2020). Potential insecticidal activity of *Sarocladium strictum*, an endophyte of *Cynanchum acutum*, against *Spodoptera littoralis*, a polyphagous insect pest. *Biocatalysis and Agricultural Biotechnology*, 24(January). <https://doi.org/10.1016/j.bcab.2020.101524>
- Elgindi, M., Abd Alkhalik, S., Melek, F., Hassan, M., & Abdelaziz, H. (2015). Saponins isolated from *Polyscias guilfoylei* F. Araliaceae. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 6(3), 545–549.
- Eltayeib, A. A., & Um Ismaeel, H. (2014). Extraction of *Cyperus rotundus* rhizomes oil, identification of chemical constituents and evaluation of antimicrobial activity of the oil in North Kordofan state. *International Journal of Advanced Research in Chemical Science (IJARCS)*, 1(9), 18–29. www.arcjournals.org
- Elya, B., & Kusmana, D. (2002). Effect of Pudding Leaf Infusion (*Polyscias guilfoylei* L.H. Bailey) Against the Quality of Male Rat Spermatozoa (*Rattus norvegicus*) Galur DDY. *Makara, Sains*, 6(2), 99–105.
<http://repository.ui.ac.id/contents/koleksi/2/1a278ed4706bfbecf665e681ade7b4418c45f3fe.pdf>
- Elya, B., Kusmana, D., & Krinalawaty, N. (2010). Spermatozoa Qualities of the *Polyscias guilfoylei* Plant. *Makara, Sains*, 14(1), 51–56.
<https://doi.org/10.7454/mss.v14i1.470>
- Erharuyi, O., Imieje, V. O., Oseghale, I. O., Ubhenin, A. E., Falodun, A. B., & Choudhary, M. I. (2017). Identification of Compounds and Insecticidal Activity of the Root of Pride of Barbados (*Caesalpinia Pulcherrima* L). *Journal of Applied Sciences and Environmental Management*, 21(2), 281.
<https://doi.org/10.4314/jasem.v21i2.8>
- Fontellas-Brandalha, T. M. L., & Zucoloto, F. S. (2004). Selection of oviposition sites by wild *Anastrepha obliqua* (Macquart) (Diptera: Tephritidae) based on the nutritional composition. *Neotropical Entomology*, 33(5), 557–562.
<https://doi.org/10.1590/s1519-566x2004000500003>

- Fragoso, D. F. M., Túler, A. C., Pratissoli, D., Carvalho, J. R., Valbon, W. R., Queiroz, V. T. d., Pinheiro, P. F., Costa, A. V., & Bueno, R. C. O. F. (2021). Biological activity of plant extracts on the small tomato borer *Neoleucinodes elegantalis*, an important pest in the Neotropical region. *Crop Protection*, 145(November 2020). <https://doi.org/10.1016/j.cropro.2021.105606>
- Gao, Z., Zhong, W., Chen, K., Tang, P., & Guo, J. (2020). Chemical composition and anti-biofilm activity of essential oil from *Citrus medica* L. var. *sarcodactylis* Swingle against *Listeria monocytogenes*. *Industrial Crops and Products*, 144(August 2019), 112036. <https://doi.org/10.1016/j.indcrop.2019.112036>
- Ginasti, U. D., Dono, D., & Sunarto, T. (2020). The Effect of Neem Seed Oil (*Azadirachta indica*) and Clove Leaf Oil (*Syzygium aromaticum*) Mixture on Cabbage Head Caterpillars (*Crociodomia pavonana*). *Cropsaver*, 3(2), 49–58. <https://doi.org/10.24198/cropsaver.v3i2.29855>
- Girard, M., & Bee, G. (2020). Invited review: Tannins as a potential alternative to antibiotics to prevent coliform diarrhea in weaned pigs. *Animal*, 14(1), 95–107. <https://doi.org/10.1017/S1751731119002143>
- Golawska, S. (2007). Deterrence and toxicity of plant saponins for the pea aphid *Acyrtosiphon pisum harris*. *Journal of Chemical Ecology*, 33(8), 1598–1606. <https://doi.org/10.1007/s10886-007-9333-y>
- Gupta, G., Agarwal, U., Kaur, H., Kumar, N. R., & Gupta, P. (2017). Aphicidal effects of terpenoids present in *Citrus limon* on *Macrosiphum roseiformis* and two generalist insect predators. *Journal of Asia-Pacific Entomology*, 20(4), 1087–1095. <https://doi.org/10.1016/j.aspen.2017.08.007>
- Hamza, Y. G., Danyaya, A. I., & Lawal, M. (2020). An In silico Analysis of Some Bioactive Compounds of *Psidium guajava* against Target Proteins of *Vibrio cholerae*. *Asian Journal of Biochemistry, Genetics and Molecular Biology*, 6(4), 14–24. <https://doi.org/10.9734/ajbgmb/2020/v6i430158>
- Hanh, T. T. H., Dang, N. H., & Dat, N. T. (2016). -Amylase and -Glucosidase Inhibitory Saponins from *Polyscias fruticosa* Leaves. *Journal of Chemistry*, 2016, 3–8. <https://doi.org/10.1155/2016/2082946>
- Haq, R., Khan, M. F., & Haq, E. (2012). Heavy Weight Protein Affected by Lead Acetate in *Bactrocera dorsalis*. *Journal of Basic and Applied Sciences*, 8, 411–415. <https://doi.org/10.6000/1927-5129.2012.08.02.26>
- Harborne, J.B. 1987. Metode Fitokimia. Penuntun cara modern menganalisis tumbuhan. Penerbit ITB. Bandung. 354 p
- Hasyim, A., Lukman, L., & Setiawati, W. (2020). *Teknologi Pengendalian Hama Lalat Buah*. IAARD PRESS, Badan Penelitian dan Pengembangan Pertanian.
- Hasyim, A., Setiawati, W., & Lukman, L. (2014). Teknologi Pengendalian Hama Lalat Buah Pada Tanaman Cabai. *Iptek Holtikultura*, 10(10), 20–25.
- Hauser, T. P., Christensen, S., Kuzina, V., Thines, M., Ploch, S., & Bark, S. (2021). Effects of a saponin-based insect resistance and a systemic pathogen.pdf. *Arthropod-Plant Interaction*, 1–16. <https://doi.org/10.1007/s11829-021-09858-w>
- Hebber, T., Fatimawali, & Antasionasti, I. (2021). EVALUATION OF BIOACTIVE COMPOUNDS EXTRACT OF BLACKBOARD TREE BARK (*Alstonia scholaris*

(L .) R . Br) AS ANTIMALARIA CANDIDATE USING MOLECULAR DOCKING
EVALUASI SENYAWA BIOAKTIF EKSTRAK KULIT BATANG KAYU TELOR (*Alstonia scholaris* (L .) R . Br) SEBAGAI. *PHARMACON-PROGRAM STUDI FARMASI, FMIPA, UNIVERSITAS SAM RATULANGI*, 10(3), 919–926.
<https://ejournal.unsrat.ac.id/index.php/pharmacon/article/view/35590/33313>

Hossain, M. A., Kabir, M. J., Salehuddin, S. M., Rahman, S. M. M., Das, A. K., Singha, S. K., Alam, M. K., & Rahman, A. (2010). Antibacterial properties of essential oils and methanol extracts of sweet basil *Ocimum basilicum* occurring in Bangladesh. *Pharmaceutical Biology*, 48(5), 504–511.
<https://doi.org/10.3109/13880200903190977>

Hossain, S., & Khalequzzaman, M. (2018). Toxicity of three plant leaf extracts against larvae and pupae of melon fruit fly , *Bactrocera cucurbitae* (Coquillett) (Diptera : Tephritidae). *Journal of Pharmacognosy and Phytochemistry*, 7(2), 3182–3186. <https://www.phytojournal.com/archives/2018/vol7issue2/PartAS/7-1-504-324.pdf>

Hussain, M., Debnath, B., Qasim, M., Steve Bamisile, B., Islam, W., Hameed, M. S., Wang, L., & Qiu, D. (2019). Role of saponins in plant defense against specialist herbivores. *Molecules*, 24(11), 1–21.
<https://doi.org/10.3390/molecules24112067>

Hussain, M., Qasim, M., & Bamisile, B. S. (2017). *Role of Saponins in Plant Defense against the Diamondback Moth , Plutella xylostella* (L .). June, 1–28.
<https://doi.org/10.20944/preprints201706.0035.v1>

Hussein, H. M., Ubaid, J. M., & Hameed, I. H. (2016). Insecticidal activity of methanolic seeds extract of *ricinus communis* on adults of *callosobruchus maculatus* (Coleoptera: Brauchidae) and analysis of its phytochemical composition. *International Journal of Pharmacognosy and Phytochemical Research*, 8(8), 1385–1397.

Igwe, O. U., & Abii, T. (2014). Characterization of Bioactive Sesquiterpenes, Organic Acids and Their Derivatives from the Leaves of *Psidium guajava* Linn. *International Research Journal of Pure and Applied Chemistry*, 4(4), 456–467.
<https://doi.org/10.9734/irjpac/2014/8592>

Illescas-riquelme, C. P., Llanderal-cázares, C., Ruiz-montiel, C., Gonzales-Hernandez, H., Alatorre-Rosas, R., Cruz-Lopez, L., & Rojas, J. C. (2016). Evidence for male-produced aggregation pheromone in *Sphenophorus incurrens* (Coleoptera : Curculionidae). *Florida Entomologist*, 99(3), 522–527.

Indriyanti, D. R., Martono, E., Trisyono, A., & Witjaksono. (2013). Ketertarikan *Bactrocera carambolae* (Diptera: Tephritidae) pada Senyawa Volatil Olahan Limbah Kakao. *Biosaintifika*, 5(1), 25–29.
<https://journal.unnes.ac.id/nju/index.php/biosaintifika/article/view/2570/2623>

Jadhav, D. R., Mallikarjuna, N., Rathore, A., & Pogle, D. (2012). Effect of Some Flavonoids on Survival and Development of *Helicoverpa armigera* (Hübner) and *Spodoptera litura* (Fab) (Lepidoptera : Noctuidae). *Asian Journal of Agricultural Sciences*, 4(4), 298–307. <https://oar.icrisat.org/id/eprint/6082>

Jæger, D., O’Leary, M. C., Weinstein, P., Møller, B. L., & Semple, S. J. (2019). Phytochemistry and bioactivity of *Acacia sensu stricto* (Fabaceae: Mimosoideae). *Phytochemistry Reviews*, 18(1), 129–172.

<https://doi.org/10.1007/s11101-018-9583-z>

- Jang, E. B., Carvalho, L. A., & Stark, J. D. (1997a). Attraction of Female Oriental Fruit Fly, *Bactrocera dorsalis*, to Volatile Semiochemicals from Leaves and Extracts of A Nonhost Plant, *Panax* (*Polyscias guilfoylei*) in Laboratory and Olfactometer Assays. *Journal of Chemical Ecology*, 23(5), 1389–1401. <https://doi.org/10.1023/B:JOEC.0000006471.46161.8d>
- Jang, E. B., Carvalho, L. A., & Stark, J. D. (1997b). ATTRACTION OF FEMALE ORIENTAL FRUIT FLY, *Bactrocera dorsalis*, TO VOLATILE SEMIOCHEMICALS FROM LEAVES AND EXTRACTS OF A NONHOST PLANT, *PANAX* (*Polyscias guilfoylei*) IN LABORATORY AND OLFACTOMETER ASSAYS. *Journal of Chemical Ecology*, 23(5), 1389–1401. <https://doi.org/10.1023/B:JOEC.0000006471.46161.8d>
- Jangir, M., Pathak, R., Sharma, S., & Sharma, S. (2018). Biocontrol mechanisms of *Bacillus* sp., isolated from tomato rhizosphere, against *Fusarium oxysporum* f. sp. *lycopersici*. *Biological Control*, 123, 60–70. <https://doi.org/10.1016/j.biocontrol.2018.04.018>
- Jared, J. J., Murungi, L. K., Wesonga, J., & Torto, B. (2016). Steroidal glycoalkaloids: Chemical defence of edible African nightshades against the tomato red spider mite, *Tetranychus evansi* (Acari: Tetranychidae). *Pest Management Science*, 72(4), 828–836. <https://doi.org/10.1002/ps.4100>
- Jenkins, B., West, J. A., & Koulman, A. (2015). A review of odd-chain fatty acid metabolism and the role of pentadecanoic acid (C15:0) and heptadecanoic acid (C17:0) in health and disease. *Molecules*, 20(2), 2425–2444. <https://doi.org/10.3390/molecules20022425>
- Jiang, Z., Akhtar, Y., Bradbury, R., Zhang, X., & Isman, M. B. (2009). Comparative toxicity of essential oils of *litsea pungens* and *litsea cubeba* and blends of their major constituents against the cabbage looper, *trichoplusia ni*. *Journal of Agricultural and Food Chemistry*, 57(11), 4833–4837. <https://doi.org/10.1021/jf900274r>
- Joshi, P. R., Paudel, M. R., Chand, M. B., Pradhan, S., Pant, K. K., Joshi, G. P., Bohara, M., Wagner, S. H., Pant, B., & Pant, B. (2020). Cytotoxic effect of selected wild orchids on two different human cancer cell lines. *Heliyon*, 6(5), e03991. <https://doi.org/10.1016/j.heliyon.2020.e03991>
- Joy, R. J. (2010). *PLANT MATERIALS SPECIALIST REPORT : A SUMMARY OF PROMISING SPECIES IN FIELD PLANTINGS September 2010*. September, 1–5.
- Kalshoven LGE. 1981. *Pest of crops in Indonesia*. Revised and Translated by PA Van Der Laan. PT. Ichtiar Baru. Jakarta.
- Kamatou, G. P. P., & Viljoen, A. M. (2017). Comparison of fatty acid methyl esters of palm and palmist oils determined by GCxGC–ToF–MS and GC–MS/FID. *South African Journal of Botany*, 112, 483–488. <https://doi.org/10.1016/j.sajb.2017.06.032>
- Karau, G. M., Njagi, E. N. M., Machochi, A. K., Wangai, L. N., & Nthinga, M. J. (2015). Chemical Composition and in vitro Antioxidant Activities of *Ocimum americanum*. *Advances in Analytical Chemistry*, 5(2), 42–49. <https://doi.org/10.5923/j.aac.20150502.03>

- Kardinan, A. (2011). Kearifan Lokal Dalam Pengendalian Hama. *Pengembangan Inovasi Pertanian*, 4(4), 262–278.
- Kaur, D., Kaur, G., Thind, J., Singh, R., & Division, P. P. (2021). Efficacy Of certain Botanicals Against Melon Fruit Fly (*Bactrocera cucurbitae*) (Diptera : Tephritidae). *Agriways*, 9(June), 39–44. <http://www.agriwaysjournal.com/wp-content/uploads/journals/volume9.1/efficacyofcertainbotanicals.pdf>
- Kaushik, S., Kaushik, S., Kumar, R., Dar, L., & Yadav, J. P. (2020). In-vitro and in silico activity of *Cyamopsis tetragonoloba* (Gaur) L. supercritical extract against the dengue-2 virus. *VirusDisease*, 31(4), 470–478. <https://doi.org/10.1007/s13337-020-00624-9>
- Kayesth, S., Kumar, S., Shazad, M., & Gupta, K. K. (2019). Effects of hexane extract of *Lantana camara* leaves on reproductive bioactivities of *Dysdercus koenigii* Fabricius (Heteroptera: Pyrrhocoridae). *Acta Ecologica Sinica*, xxx(3), 1–7. <https://doi.org/10.1016/J.CHNAES.2019.05.007>
- Kerdchoechuen, O., Laohakunjit, N., Singkornard, S., & Matta, F. B. (2010). Essential oils from six herbal plants for biocontrol of the maize weevil. *HortScience*, 45(4), 592–598. <https://doi.org/10.21273/hortsci.45.4.592>
- Khan, I. H., & Javaid, A. (2020). Anticancer, antimicrobial and antioxidant compounds of quinoa inflorescence. *Advancements in Life Sciences*, 8(1), 68–72.
- Khan, S., & Hugar, P. S. (2019). Biology of melon fruit fly, *Bactrocera cucurbitae* (Coq.) (Diptera: Tephritidae). *J. Exp. Zool. India*, 22(1), 189–191.
- Kobaek-Larsen, M., Nielsen, D. S., Kot, W., Krych, Ł., Christensen, L. P., & Baatrup, G. (2018). Effect of the dietary polyacetylenes faltarinol and faltarindiol on the gut microbiota composition in a rat model of colorectal cancer. *BMC Research Notes*, 11(1), 1–6. <https://doi.org/10.1186/s13104-018-3527-y>
- Koomson, D. A., Kwakye, B. D., Darkwah, W. K., Odum, B., Asante, M., & Aidoo, G. (2018). Phytochemical constituents, total saponins, alkaloids, flavonoids and vitamin c contents of ethanol extracts of five *Solanum torvum* fruits. *Pharmacognosy Journal*, 10(5), 946–950. <https://doi.org/10.5530/pj.2018.5.160>
- Koyama, J., Kakinohana, H., & Miyatake, T. (2004). Eradication of the Melon Fly, *Bactrocera cucurbitae*, in Japan: Importance of Behavior, Ecology, Genetics, and Evolution. *Annual Review of Entomology*, 49(1), 331–349. <https://doi.org/10.1146/annurev.ento.49.061802.123224>
- Kubar, M. I., Khoso, F. N., Khatri, I., Khuhro, N. H., & Gilal, A. A. (2021). Effect of Different Management Strategies on Melon Fruit Fly, *Bactrocera cucurbitae* (Coquillett), Infestation in Cucurbit Vegetables. *Sarhad Journal of Agriculture*, 37(3), 915–920. <https://doi.org/10.17582/JOURNAL.SJA/2021/37.3.915.920>
- Kumar, D., Bhat, Z. A., Kumar, V., Shah, M. Y., Khan, N. A., & Chashoo, I. A. (2012). ANTI-INFLAMMATORY ACTIVITY OF *Stachys tibetica* OIL BY GC-MS. *Chemistry of Natural Compound*, 48(5), 792–793.
- Kurniati, R., Saidi, N., & Nasution, R. (2018). ANTIFEEDANT ACTIVITY FROM NEEM LEAF EXTRACT (*Azadirachta indica* A Juss). *Jurnal Natural*, 18(1), 7–10. <https://doi.org/10.24815/jn.v18i1.8781>

- Kurniawidjaja, L. M., Lestari, F., Tejamaya, M., & Ramdhan, D. H. (2021). Konsep Dasar Toksikologi Industri. In *Fkm Ui*. Fakultas Kesehatan Masyarakat Universitas Indonesia.
- Lakshmi, K. V., Sudhikumar, A. V., & Aneesh, E. M. (2021). Synergistic effect of *Croton bonplandianum* Baill. with Cypermethrin and Lambda-cyhalothrin against *Aedes aegypti* Linn, a Dengue fever vector. *South African Journal of Botany*, 140, 103–109. <https://doi.org/10.1016/j.sajb.2021.03.034>
- Lani, Y. S., Darmayasa, I. B. G., & Parwanayoni, N. M. S. (2021). Elusidasi Dan Daya Hambat Ekstrak Etanol Daun Sembung Delan (*Sphaeranthus indicus* L.) Terhadap *Candida albicans* ATCC 1023. *Metamorfosa: Journal of Biological Sciences*, 8(2), 336. <https://doi.org/10.24843/metamorfosa.2021.v08.i02.p18>
- Lengkong, M., Rante, C. S., & Meray, M. (2011). APLIKASI MAT DALAM PENGENDALIAN LALAT BUAH *Bactrocera* sp . *Eugenia*, 17(2), 121–128.
- Li, H. (2020). Evaluation of bioactivity of butternut squash (*Cucurbita moschata* D.) seeds and skin. *Food Science and Nutrition*, 8(7), 3252–3261. <https://doi.org/10.1002/fsn3.1602>
- Li, Y., Tan, W. L., Guo, K., Gao, X. W., Wei, J., Yi, D., Zhang, C., & Wang, Q. (2021). Synthesis and Biological Evaluation of Falcarinol-Type Analogues as Potential Calcium Channel Blockers. *Journal of Natural Products*, 84(8), 2138–2148. <https://doi.org/10.1021/acs.jnatprod.1c00136>
- Liang, Y., & Lin, S. (2020). Intercalation of zwitterionic surfactants dramatically enhances the performance of low-pressure nanofiltration membrane. *Journal of Membrane Science*, 596, 1–28. <https://doi.org/10.1016/j.memsci.2019.117726>
- López, S. B., López, M. L., Aragón, L. M., Tereschuk, M. L., Slanis, A. C., Feresin, G. E., Zygadlo, J. A., & Tapia, A. A. (2011). Composition and anti-insect activity of essential oils from *Tagetes* L species (Asteraceae, Helenieae) on *Ceratitis capitata* Wiedemann and *Triatoma infestans* Klug. *Journal of Agricultural and Food Chemistry*, 59(10), 5286–5292. <https://doi.org/10.1021/jf104966b>
- Lou-Bonafonte, J. M., Martínez-Beamonte, R., Sanclemente, T., Surra, J. C., Herrera-Marcos, L. V., Sanchez-Marco, J., Arnal, C., & Osada, J. (2018). Current Insights into the Biological Action of Squalene. *Molecular Nutrition and Food Research*, 62(15), 1–59. <https://doi.org/10.1002/mnfr.201800136>
- Lozano-Grande, M. A., Gorinstein, S., Espitia-Rangel, E., Dávila-Ortiz, G., & Martínez-Ayala, A. L. (2018). Plant Sources, Extraction Methods, and Uses of Squalene. *International Journal of Agronomy*, 2018, 1–13. <https://doi.org/10.1155/2018/1829160>
- Ma, K., Tang, Q., Liang, P., Xia, J., Zhang, B., & Id, X. G. (2019). Toxicity and sublethal effects of two plant allelochemicals on the demographical traits of cotton aphid , *Aphis gossypii* Glover (Hemiptera : Aphididae). *PLoS ONE*, 14(11), 1–13. <https://doi.org/10.1371/journal.pone.0221646>
- Maha, D. A. S., Widaningsih, D., & Darmiati, N. N. (2019). Kelimpahan Populasi Lalat Buah (*Bactrocera* spp .) dan Persentase Serangannya pada Buah Labu (*Cucurbita maxima* Duch) di Provinsi Bali. *Jurnal Agroekoteknologi Tropika*, 8(3), 354–361. <https://ojs.unud.ac.id/index.php/JAT>
- Mahmud, N. (2017). *Advanced phytochemical screening of solanum torvum* (fruits,

leaves and stems) / Nurfarahin Mahmud. 25495, 6–8.

- Martínez, L. C., Plata-Rueda, A., Zancunio, J. C., & Serrão, J. E. (2015). Bioactivity of six plant extracts on adults of *demotispa neivai* (Coleoptera: Chrysomelidae). *Journal of Insect Science*, 15(34), 1–5. <https://doi.org/10.1093/jisesa/iev021>
- Maysaroh, S., Yolanda, R., & Lubis, R. R. (2015). Identifikasi lalat buah (Diptera: Taphritidae) pada perkebunan cabai merah (*Capsicum annum* L) di Jalur 03 Desa Kepenuhan Sejati Kecamatan Kepenuhan Kabupaten Rohan Hulu. *Jurnal Ilmiah Mahasiswa FKIP Prodi Biologi*, 1–4.
- McLaughlin, N. P., Butler, E., Evans, P., Brunton, N. P., Koidis, A., & Rai, D. K. (2010). A short synthesis of (+) and (-)-falcarinol. *Tetrahedron*, 66(51), 9681–9687. <https://doi.org/10.1016/j.tet.2010.10.049>
- McQuate, G. T., & Vargas, R. I. (2007). Assessment of attractiveness of plants as roosting sites for the melon fly, *Bactrocera cucurbitae*, and oriental fruit fly, *Bactrocera dorsalis*. *Insect Science*, 7(57), 1–13. <https://doi.org/10.1673/031.007.5701>
- Mesquita, F. L. T., Mendonca, A. L., da Silva, C. E., Correia, A. M. de O., Sales, D. F. M., Cabral-Junior, C. R., & do Nascimento, R. R. (2011). INFLUENCE OF SACCHARUM OFFICINARUM (POALES : POACEAE) VARIETY ON THE REPRODUCTIVE BEHAVIOR OF DIATRAEA FLAVIPENNELLA (LEPIDOPTERA : CRAMBIDAE) AND ON THE ATTRACTION OF THE PARASITOID COTESIA FLAVIPES (HYMENOPTERA : BRACONIDAE). *Floroda Entomologist*, 94(3), 420–427.
- Michihata, T., Yano, T., & Enomoto, T. (2002). Volatile compounds of headspace gas in the japanese fish sauce. *Bioscience, Biotechnology and Biochemistry*, 66(10), 2251–2255. <https://doi.org/10.1271/bbb.66.2251>
- Mir, A. S. H., Dar, S. A., Mir, G. M., & Ahmad, S. B. (2014). Biology of *Bactrocera cucurbitae* (Diptera : Tephritidae) on Cucumber. *Florida Etomologist*, 97(2), 753–758.
- Miresmailli, S., & Isman, M. B. (2014). Botanical insecticides inspired by plant – herbivore chemical interactions. *Trends in Plant Science*, 19(1), 29–35. <https://doi.org/10.1016/j.tplants.2013.10.002>
- Mirhaghparast, S. K., Zibae, A., Hajizadeh, J., & Ramzi, S. (2020). Toxicity and physiological effects of the tea seed saponin on *Helicoverpa armigera*. *Biocatalysis and Agricultural Biotechnology*, 25(February), 101597. <https://doi.org/10.1016/j.bcab.2020.101597>
- Mohanadas, K., & Mukund, K. N. (2013). A biochemical method for the management of vegetable and mango fruit pests, *Bactrocera cucurbitae* and *B. dorsalis* (Diptera : Tephritidae). *Short Communication, Acta Biologica Indica*, 2(1), 378–380.
- Mölken, T. Van, Kuzina, V., Munk, K. R., Olsen, C. E., Sundelin, T., Dam, N. M. Van, Hauser, T. P., Molken, T. Van, Kuzina, V., Rysbjerg, K., Carl, M., & Olsen, E. (2018). *International Association for Ecology Consequences of combined herbivore feeding and pathogen infection for fitness of *Barbarea vulgaris* plants* Published by : Springer in cooperation with International Association for Ecology Stable URL : <http://www.jstor>. May. <https://doi.org/10.1007/s00442-014-2928-4>

- Muñoz, I. J., Schilman, P. E., & Barrozo, R. B. (2020). Impact of alkaloids in food consumption, metabolism and survival in a blood-sucking insect. *Scientific Reports*, 10(1), 1–10. <https://doi.org/10.1038/s41598-020-65932-y>
- Muryati, -, Hasyim, A., & de Kogel, W. (2007). Distribusi Spesies Lalat Buah Di Sumatera Barat Dan Riau. *Jurnal Hortikultura*, 17(1), 61–68.
- Nandika, D., Karlinasari, L., Arinana, A., Batubara, I., Sitanggang, P. S., Santoso, D., Witasari, L. D., Rachmayanti, Y., Firmansyah, D., Sudiana, I. K., & Hertanto, D. M. (2021). Chemical components of fungus comb from Indo-Malayan termite *macrotermes gilvus* hagen mound and its bioactivity against wood-staining fungi. *Forests*, 12(11), 1–17. <https://doi.org/10.3390/f12111591>
- Napal, G. N. D., & Palacios, S. M. (2015). Bioinsecticidal effect of the flavonoids pinocembrin and quercetin against *Spodoptera frugiperda*. *Journal of Pest Science*, 88, 629–635. <https://doi.org/10.1007/s10340-014-0641-z>
- Nawrath, T., Mgode, G. F., Weetjens, B., Kaufmann, S. H. E., & Schulz, S. (2012). The volatiles of pathogenic and nonpathogenic mycobacteria and related bacteria. *Beilstein Journal of Organic Chemistry*, 8, 290–299. <https://doi.org/10.3762/bjoc.8.31>
- Nazarudin, M. F., Paramisparam, A., Khalid, N. A., Albaz, M. N., Shahidan, M. S., Yasin, I. S. M., Isha, A., Zarin, M. A., & Aliyu-Paiko, M. (2020). Metabolic variations in seaweed, *Sargassum polycystum* samples subjected to different drying methods via ¹H NMR-based metabolomics and their bioactivity in diverse solvent extracts. *Arabian Journal of Chemistry*, 13(11), 7652–7664. <https://doi.org/10.1016/j.arabjc.2020.09.002>
- Nenaah, G. (2011). Toxicity and growth inhibitory activities of methanol extract and the β -carboline alkaloids of *Peganum harmala* L. against two coleopteran stored-grain pests. *Journal of Stored Products Research*, 47(3), 255–261. <https://doi.org/10.1016/j.jspr.2011.04.004>
- Newmark, L. (1997). and Cancer Risk : Hypothesis group. *Carcinogenesis*, 6(December), 1101–1103. <https://aacrjournals.org/cebpa/article/6/12/1101/154330/Squalene-olive-oil-and-cancer-risk-a-review-and>
- Nguyen, N. H., Nguyen, T. T., Ma, P. C., Ta, Q. T. H., Duong, T. H., & Vo, V. G. (2020). Potential antimicrobial and anticancer activities of an ethanol extract from *bouea macrophylla*. *Molecules*, 25(8), 1–15. <https://doi.org/10.3390/molecules25081996>
- Njateng, G. S. S., Du, Z., Gatsing, D., Donfack, A. R. N., Talla, M. F., Wabo, H. K., Tane, P., Mouokeu, R. S., Luo, X., & Kuate, J.-R. (2015). Antifungal properties of a new terpenoid saponin and other compounds from the stem bark of *Polyscias fulva* Hiern (*Araliaceae*). *BMC Complementary and Alternative Medicine*, 15(25), 1–12. <https://doi.org/10.1186/s12906-015-0541-7>
- Njateng, G. S. S., Du, Z., Gatsing, D., Mouokeu, R. S., Liu, Y., Zang, H.-X., Gu, J., Luo, X., & Kuate, J.-R. (2017). Antibacterial and antioxidant properties of crude extract , fractions and compounds from the stem bark of *Polyscias fulva* Hiern (*Araliaceae*). *BMC Complementary and Alternative Medicine*, 17(99), 1–8. <https://doi.org/10.1186/s12906-017-1572-z>
- Nomura, M., & Iitaka, T. (2002). Effects of synthesized tannin on the growth and

survival of a generalist herbivorous insect , the common cutworm , Spodoptera litura Fabricius (Lepidoptera : Noctuidae). *Applied Entomology and Zoology*, 37(2), 285–289. <https://doi.org/10.1303/aez.2002.285>

Nuringtyas, T. R., Verpoorte, R., Klinkhamer, P. G. L., van Oers, M. M., & Leiss, K. A. (2014). Toxicity of Pyrrolizidine Alkaloids to Spodoptera exigua Using Insect Cell Lines and Injection Bioassays. *Journal of Chemical Ecology*, 40(6), 609–616. <https://doi.org/10.1007/s10886-014-0459-4>

Oka, I. N. 2005. *Pengendalian Hama Terpadu dan Implementasinya di Indonesia*. Gadjah Mada University Press. Yogyakarta.

Osuntokun, O. T., Yusuf-Babatunde, M. A., & Fasila, O. O. (2020). Components and Bioactivity of Ipomoea batatas (L.) (Sweet Potato) Ethanolic Leaf Extract. *Asian Journal of Advanced Research and Reports*, 10–26. <https://doi.org/10.9734/ajarr/2020/v10i130232>

Owen, R. W., Mier, W., Giacosa, A., Hull, W. E., Spiegelhalter, B., & Bartsch, H. (2000). Phenolic compounds and squalene in olive oils: The concentration and antioxidant potential of total phenols, simple phenols, secoiridoids, lignans and squalene. *Food and Chemical Toxicology*, 38(8), 647–659. [https://doi.org/10.1016/S0278-6915\(00\)00061-2](https://doi.org/10.1016/S0278-6915(00)00061-2)

Padmashree, Ashwathanarayana, Naika, R., & B., R. (2018). Antioxidant, cytotoxic and nutritive properties of Ipomoea staphylina Roem & Schult. plant extracts with preliminary phytochemical and GCMS analysis. *Asian Journal of Pharmacy and Pharmacology*, 4(4), 473–492. <https://doi.org/10.31024/ajpp.2018.4.4.16>

Pajaro-Castro, N., Caballero-Gallardo, K., & Olivero-Verbel, J. (2017). Toxicity of naphthalene and benzene on Tribolium castaneum herb. *International Journal of Environmental Research and Public Health*, 14(6), 1–10. <https://doi.org/10.3390/ijerph14060667>

Pan, C., Chen, Y. G., Ma, X. Y., Jiang, J. H., He, F., & Zhang, Y. (2011). Phytochemical constituents and pharmacological activities of plants from the genus Adiantum: A review. *Tropical Journal of Pharmaceutical Research*, 10(5), 681–692. <https://doi.org/10.4314/tjpr.v10i5.18>

Pan, L., Wang, R., Zhang, Y. R., Feng, Y. Q., & Luo, Y. Q. (2015). Antifeedant activity of gutta-percha against larvae of the Hyphantria cunea and Anoplophora glabripennis. *Journal of Plant Interactions*, 10(1), 315–319. <https://doi.org/10.1080/17429145.2015.1107919>

Pandey, A. K., Singh, P., & Tripathi, N. N. (2014). Chemistry and bioactivities of essential oils of some Ocimum species: An overview. *Asian Pacific Journal of Tropical Biomedicine*, 4(9), 682–694. <https://doi.org/10.12980/APJTB.4.2014C77>

Papantoniou, D., Vergara, F., Weinhold, A., Quijano, T., Khakimov, B., Pattison, D. I., Bak, S., van Dam, N. M., & Martínez-Medina, A. (2021). Cascading effects of root microbial symbiosis on the development and metabolome of the insect herbivore manduca sexta L. *Metabolites*, 11(11), 1–23. <https://doi.org/10.3390/metabo11110731>

Perich, M. J., Wells, C., Bertsch, W., & Tredways, K. E. (1995). ISOLATION OF THE INSECTICIDAL COMPONENTS OF TAGETES MINUTA (COMPOSITAE

) AGAINST MOSQUITO LARVAE AND ADULTS '. *Journal of the American Mosquito Control Association*, 11(3), 307–310.
<https://core.ac.uk/download/pdf/21597568.pdf>

- Prabhu, K., Rao, M. R. K., Balakrishna, P., Bharath, A. K., Vishal, S. K., Ravi, A., Kalaivannan, J., & Dinakar, S. (2020). The gas chromatography-mass spectrometry study of one Ayurvedic Rasayana, Sonitha Amritha Rasayanam. *Drug Invention Today*, 14(5), 707–711.
- Prasannakumari, J. J., Padmam, P., & Arokia Doss, V. (2017). Therapeutic effect of hydro-ethanolic extract of pothos scandens L on key carbohydrate metabolizing enzymes and xenobiotic marker enzymes in DMBA induced experimental mammary carcinoma. *Indian Journal of Pharmaceutical Education and Research*, 51(3), 418–426. <https://doi.org/10.5530/ijper.51.3.70>
- Preece, K., Glávits, R., Foster, J. R., Murbach, T., Endres, J. R., Hirka, G., Vértési, A., Béres, E., & Szakonyiné, I. P. (2021). A toxicological evaluation of geranylgeraniol. *Regulatory Toxicology and Pharmacology*, 124(May), 1–15. <https://doi.org/10.1016/j.yrtph.2021.104975>
- Prejeena, V., Suresh, S. N., & Varsha, V. (2016). PRELIMINARY PHYTOCHEMICAL SCREENING, ANTIMICROBIAL AND GAS CHROMATOGRAPHY- MASS SPECTROMETRY (GC-MS) ANALYSIS OF COSTUS PICTUS D DON. *International Journal of Recent Advances in Multidisciplinary Research*, 03(12), 2092–2099.
- Priyanka, R., & Nakkeeran, S. (2019). Ochrobactrum ciceri mediated induction of defence genes and antifungal metabolites enhance the biocontrol efficacy for the management of Botrytis leaf blight of Lilium under protected conditions. *Journal of Plant Pathology*, 101(2), 323–337. <https://doi.org/10.1007/s42161-018-00212-3>
- Purup, S., Larsen, E., & Christensen, L. P. (2009). Differential effects of faltarinol and related aliphatic c-17-polyacetylenes on intestinal cell proliferation. *Journal of Agricultural and Food Chemistry*, 57(18), 8290–8296. <https://doi.org/10.1021/jf901503a>
- Putra, N.S., & Suputa. (2013). *Lalat buah hama. Bioekologi & strategi tepat mengelola populasinya*. Penerbit SMARTANIA Publishing. Yogyakarta. 101 p.
- Qasim, M., Islam, W., Ashraf, H. J., Ali, I., & Wang, L. (2020). Saponins in Insect Pest Control. In K. G. R. J.-M. Mérillon (Ed.), *Co-Evolution of Secondary Metabolites, Reference Series in Phytochemistry* (pp. 897–924). Springer Nature Switzerland AG 2020. https://doi.org/10.1007/978-3-319-76887-8_39-1
- Qiu, B., Wang, W., & Yang, X. (2019). Computational Prediction of Ammonia-Borane Dehydrocoupling and Transfer Hydrogenation of Ketones and Imines Catalyzed by SCS Nickel Pincer Complexes. *Frontiers in Chemistry*, 7, 1–28. <https://doi.org/10.3389/fchem.2019.00627>
- Rachmawaty, Mu'Nisa, A., Hasri, Pagarra, H., Hartati, & Maulana, Z. (2018). Active Compounds Extraction of Cocoa Pod Husk (*Theobroma Cacao* L.) and Potential as Fungicides. *Journal of Physics: Conference Series*, 1028(1). <https://doi.org/10.1088/1742-6596/1028/1/012013>
- Ramli, N. H., Yusup, S., Quitain, A. T., Johari, K., & Kueh, B. W. Bin. (2019). Optimization of saponin extracts using microwave-assisted extraction as a

- sustainable biopesticide to reduce *Pomacea canaliculata* population in paddy cultivation. *Sustainable Chemistry and Pharmacy*, 11(August 2018), 23–35. <https://doi.org/10.1016/j.scp.2018.12.002>
- Rao, C. V., Newmark, H. L., & Reddy, B. S. (1998). Chemopreventive effect of squalene on colon cancer. *Carcinogenesis*, 19(2), 287–290. <https://doi.org/10.1093/carcin/19.2.287>
- Rashwan, R. S., & Hammad, D. M. (2020). Toxic effect of *Spirulina platensis* and *Sargassum vulgar* as natural pesticides on survival and biological characteristics of cotton leaf worm *Spodoptera littoralis*. *Scientific African*, 8, e00323. <https://doi.org/10.1016/j.sciaf.2020.e00323>
- Rawani, A., Ray, A. S., Ghosh, A., Sakar, M., & Chandra, G. (2017). Larvicidal activity of phytosteroid compounds from leaf extract of *Solanum nigrum* against *Culex vishnui* group and *Anopheles subpictus*. *BMC Research Notes*, 10(1), 1–8. <https://doi.org/10.1186/s13104-017-2460-9>
- Reddy, L. H., & Couvreur, P. (2009). Squalene: A natural triterpene for use in disease management and therapy. *Advanced Drug Delivery Reviews*, 61(15), 1412–1426. <https://doi.org/10.1016/j.addr.2009.09.005>
- Rharrabe, K., Jbilou, R., Bouayad, N., Ajaha, A., & Aarab, A. (2020). Journal of Asia-Pacific Entomology Harmaline ingestion effect on development, metabolites and midgut of the red flour beetle, *Tribolium castaneum*. *Journal of Asia-Pacific Entomology*, 23, 29–35. <https://doi.org/10.1016/j.aspen.2019.10.013>
- Riffell, J. A., Abrell, L., & Hildebrand, J. G. (2008). Physical processes and real-time chemical measurement of the insect olfactory environment. *Journal of Chemical Ecology*, 34(7), 837–853. <https://doi.org/10.1007/s10886-008-9490-7>
- Robinson, T. 1995. Kandungan organik tumbuhan tinggi. Edisi ke enam. Penerbit ITB. Bandung. 367 p.
- Rousse, P., Duyck, P. F., Quilici, S., & Ryckewaert, P. (2005). Adjustment of field cage methodology for testing food attractants for fruit flies (Diptera: Tephritidae). *Annals of the Entomological Society of America*, 98(3), 402–408. [https://doi.org/10.1603/0013-8746\(2005\)098\[0402:AOFCMF\]2.0.CO;2](https://doi.org/10.1603/0013-8746(2005)098[0402:AOFCMF]2.0.CO;2)
- Roussis, V., Tsoukatou, M., Chinou, I. B., & Harvala, C. (2002). Composition and antibacterial activity of the essential oils of two *Helichrysum stoechas* varieties growing in the island of Crete. *Journal of Essential Oil Research*, 14(6), 459–461. <https://doi.org/10.1080/10412905.2002.9699920>
- Saemram, N., Suwannakud, K., Boonthai, P., Noikotr, K., Chaveerach, A., Tanee, T., Sudmoon, R., & Siripiyasing, A. P. (2021). Efficiency evaluation and usages of *Thunbergia alata*, *Thunbergia erecta* and their combination. *Indian Journal of Pharmaceutical Sciences*, 83(3), 494–503. <https://doi.org/10.36468/pharmaceutical-sciences.798>
- Safna, M. I., Visakh, U. V., & Gangadharan, A. (2019). Biological activity of hexane extract of *Hemigraphis colorata*, an indigenous wound healing plant. *Materials Today: Proceedings*, 25(xxxx), 294–297. <https://doi.org/10.1016/j.matpr.2020.01.461>
- Saha, S., Walia, S., Kumar, J., Dhingra, S., & Parmar, B. S. (2010). Screening for

Feeding Deterrent and Insect Growth Regulatory Activity of Triterpenic Saponins from *Diploknema butyracea* and *Sapindus mukorossi*. *Journal of Agricultural and Food Chemistry*, 58(1), 434–440.
<https://doi.org/10.1021/jf902439m>

- Saifudin, A. 2014. Senyawa Alam Metabolit Sekunder. Teori, Konsep dan Pemurnian. Penerbit Deepublish. Yogyakarta. 117 p.
- Saikarthik, J., Ilango, S., Vijayakumar, J., & Vijayaraghavan, R. (2017). Phytochemical analysis of methanolic extract of seeds of *Mucuna pruriens* by gas chromatography mass spectrometry. *International Journal of Pharmaceutical Sciences and Research*, 8(7), 2916–2921.
[https://doi.org/10.13040/IJPSR.0975-8232.8\(7\).2916-21](https://doi.org/10.13040/IJPSR.0975-8232.8(7).2916-21)
- Salem, M. A., Farid, M. M., El-Shabrawy, M., Mohammed, R., Hussein, S. R., & Marzouk, M. M. (2020). Spectrometric analysis, chemical constituents and cytotoxic evaluation of *Astragalus sieberi* DC. (Fabaceae). *Scientific African*, 7.
<https://doi.org/10.1016/j.sciaf.2019.e00221>
- Sánchez-Fernández, R. E., Diaz, D., Duarte, G., Lappe-Oliveras, P., Sánchez, S., & Macías-Rubalcava, M. L. (2016). Antifungal Volatile Organic Compounds from the Endophyte *Nodulisporium* sp. Strain GS4d2II1a: a Qualitative Change in the Intraspecific and Interspecific Interactions with *Pythium aphanidermatum*. *Microbial Ecology*, 71(2), 347–364. <https://doi.org/10.1007/s00248-015-0679-3>
- Sanderson, H., Tibazarwa, C., Greggs, W., Versteeg, D. J., Kasai, Y., Stanton, K., & Sedlak, R. I. (2009). High Production volume chemical amine oxides [C8-C20] category environmental risk assessment. *Risk Analysis*, 29(6), 857–867.
<https://doi.org/10.1111/j.1539-6924.2009.01208.x>
- Santana, O., Reina, M., Fraga, B. M., Sanz, J., & González-Coloma, A. (2012). Antifeedant activity of fatty acid esters and phytosterols from *echium wildpretii*. *Chemistry and Biodiversity*, 9(3), 567–576.
<https://doi.org/10.1002/cbdv.201100083>
- Sapkota, R., Dahal, K. C., & Thapa, R. B. (2010). Damage assessment and management of cucurbit fruit flies in spring-summer squash. *Journal of Entomology and Nematology*, 2(1), 7–12. <http://www.academicjournals.org/JEN>
- Sarianto, M., Rado, Kusuma, G. F., Asriza, R. O., Fabiani, V. A., & Kafillah, M. (2019). Characterization of methyl ester compound of *Carica papaya* seed oil through Transesterification using CaO Catalyst from *Strombus canarium* shells. *IOP Conference Series: Earth and Environmental Science*, 353(1).
<https://doi.org/10.1088/1755-1315/353/1/012008>
- Sarma, R., Adhikari, K., Mahanta, S., & Khanikar, B. (2019). Combinations of Plant Essential Oil Based Terpene Compounds as Larvicidal and Adulticidal Agent against *Aedes aegypti* (Diptera: Culicidae). *Scientific Reports*, 9(1), 1–12.
<https://doi.org/10.1038/s41598-019-45908-3>
- Sarwar, M., Hamed, M., Rasool, B., Yousaf, M., & Hussain, M. (2013). Full Length Research Paper Host Preference and Performance of Fruit Flies *Bactrocera zonata* (Saunders) and *Bactrocera cucurbitae* (Coquillett) (Diptera: Tephritidae) For Various Fruits and Vegetables. *International Journal of Scientific Research in Environmental Sciences*, 1(8), 188–194.
<https://doi.org/10.12983/ijres-2013-p188-194>

- Sayed, S. M., Alotaibi, S. S., Gaber, N., & Elarrnaouty, S.-A. (2020). Evaluation of Five Medicinal Plant Extracts on Aphis. *Insect*, 11, 1–10. <https://www.mdpi.com/2075-4450/11/6/398>
- Shrivastava, G., Ownley, B. H., Augé, R. M., Toler, H., Dee, M., Vu, A., Köllner, T. G., & Chen, F. (2015). Colonization by arbuscular mycorrhizal and endophytic fungi enhanced terpene production in tomato plants and their defense against a herbivorous insect. *Symbiosis*, 65(2), 65–74. <https://doi.org/10.1007/s13199-015-0319-1>
- Shymanovich, T., Saari, S., Lovin, M. E., Jarmusch, A. K., Jarmusch, S. A., Musso, A. M., Charlton, N. D., Young, C. A., Cech, N. B., & Faeth, S. H. (2015). Alkaloid Variation Among Epichloid Endophytes of Sleepygrass (*Achnatherum robustum*) and Consequences for Resistance to Insect Herbivores. *Journal of Chemical Ecology*, 41(1), 93–104. <https://doi.org/10.1007/s10886-014-0534-x>
- Siderhurst, M. S., & Jang, E. B. (2006). *Attraction of Female Oriental Fruit Fly, Bactrocera dorsalis, to Terminalia catappa Fruit Extracts in Wind Tunnel and Olfactometer Tests*. 55, 45–55.
- Silva, A. A., Hall, D. G., Gottwald, T. R., Andrade, M. S., Maldonado, W., Alessandro, R. T., Lapointe, S. L., Andrade, E. C., & Machado, M. A. (2016). *Repellency of selected Psidium guajava cultivars to the Asian citrus psyllid, Diaphorina citri*. 84, 14–20. <https://doi.org/10.1016/j.cropro.2016.02.006>
- Silva, T. R. F. B., Almeida, A. C. de S., Moura, T. de L., da Silva, A. R., Freitas, S. de S., & Jesus, F. G. (2016). Effect of the flavonoid rutin on the biology of *Spodoptera frugiperda* (Lepidoptera : Noctuidae). *Acta Scientiarum, Agronomy Moringa*, 38(2), 165–170. <https://doi.org/10.4025/actasciagron.v38i2.27956>
- Singh, B., Singh, J. P., Kaur, A., & Singh, N. (2018). Phenolic compounds as beneficial phytochemicals in pomegranate (*Punica granatum* L.) peel: A review. *Food Chemistry*, 261(December 2017), 75–86. <https://doi.org/10.1016/j.foodchem.2018.04.039>
- Singh, R., Koul, O., Rup, P. J., & Jindal, J. (2010). Evaluation of Dietary Toxicity of Some Essential Oil Allelochemicals for The Management of *Chilo partellus* (Swinhoe). *Journal of Plant Protection Research*, 50(3), 293–301. <https://doi.org/10.2478/v10045-010-0051-z>
- Sitompul, A. F., Oemry, S., & Pangestiniingsih, Y. (2014). UJI EFEKTIFITAS INSEKTISIDA NABATI TERHADAP MORTALITAS *Leptocorisa acuta* Thunberg. (Hemiptera : Alydidae) PADA TANAMAN PADI (*Oryza sativa* L.) DI RUMAH KACA. *Jurnal Online Agroekoteknologi*, 2(3), 1075–1080. <https://media.neliti.com/media/publications/99756-ID-uji-efektifitas-insektisida-nabati-terha.pdf>
- Siwi, S.S, Hidayat, P., & Suputa. (2006). Taksonomi dan Bioekologi Lalat buah penting *Bactrocera* spp. (Diptera: Tephritidae) di Indonesia. In M. Soehardjan (Ed.), *BB-Biogen dan AusAid Australia*. Kerjasama BB-Biogen dan AusAid Australia.
- Siwi, Sri Suharsimi, Hidayat, P., & Suputa. (2006). *Taksonomi dan Bioekologi Lalat buah penting di Indonesia. Diptera: Tephritidae*. BB-Biogen dan AusAid Australia.

- Smith-Pardo, A. (2013). The melon fruit fly , *Bactrocera cucurbitae* (Coquillett) (Diptera , Tephritidae), a serious threat to fruit pro *Boletin Del Museo Entomológico*, 5(4), 16–25.
- Sodiq, M., Sudarmadji, & Sutoyo. (2015). Efektifitas Atraktan terhadap Lalat Buah Belimbing di Jawa Timur. *AGROTROP*, 5(1), 71–79.
https://scholar.google.co.id/scholar?hl=id&as_sdt=0%2C5&q=Sodiq%2C+Sudarmadji%2C+efektivitas+atraktan&btnG=
- Sohrab, Prasad, C., & Hasan, W. (2018). Study on the biology and life cycle of cucurbit fruit fly. *Journal of Pharmacognosy and Phytochemistry*, 1, 223–226.
<https://www.researchgate.net/publication/323869706>
- Sreedhra, K., Krishna, A., & Harish, S. (2012). EFFECT OF INSECT ATTRACTANTS, MICRONUTRIENTS AND GROWTH REGULATORS ON CROP GROWTH, FLOWERING BEHAVIOUR AND SEED YIELD IN ALFALFA (*MEDICAGO SATIVA* L.). *Forage Res.*, 38(3), 144–150.
<http://forageresearch.in/wp-content/uploads/2014/01/383-144-150.pdf>
- Stefanson, A. L., & Bakovic, M. (2018). Falcarinol is a potent inducer of heme oxygenase-1 and was more effective than sulforaphane in attenuating intestinal inflammation at diet-achievable doses. *Oxidative Medicine and Cellular Longevity*, 2018, 1–15. <https://doi.org/10.1155/2018/3153527>
- Steiner, L. F. (1952). Methyl Eugenol as an Attractant for Oriental Fruit Fly. *Journal of Economic Entomology*, 45(2), 241–248. <https://doi.org/10.1093/jee/45.2.241>
- Stohs, S. J., Ohia, S., & Bagchi, D. (2002). Naphthalene toxicity and antioxidant nutrients. *Toxicology*, 180(1), 97–105. [https://doi.org/10.1016/S0300-483X\(02\)00384-0](https://doi.org/10.1016/S0300-483X(02)00384-0)
- Su, Q., Zhou, Z., Zhang, J., Shi, C., Zhang, G., Jin, Z., & Wang, W. (2017). Effect of plant secondary metabolites on common cutworm , *Spodoptera litura* (Lepidoptera : Noctuidae). *Entomological Research*, 1–9.
<https://doi.org/10.1111/1748-5967>
- Sundu, R., Mingvanish, W., Arung, E. T., Kuspradini, H., & Khownum, K. (2015). ANTIOXIDANT AND ANTIMICROBIAL ACTIVITIES OF CRUDE METHANOLIC EXTRACT OF *Polyscias guilfoylei* LEAVES. *PACCON 2015 Proceedings “ Innovative Chemistry for Sustainability of the AEC and Beyond,”* 2015, 161–165.
- Susanti, A. D., Ardiana, D. ., P. Gumilar, G., & G. Bening, Y. (2012). POLARITAS PELARUT SEBAGAI PERTIMBANGAN DALAM PEMILIHAN PELARUT UNTUK EKSTRAKSI MINYAK BEKATUL DARI BEKATULVARIETAS KETAN (*ORIZA SATIVA GLATINOSA*). *Symposium Nasional RAPI XI FT UMS*, 8–14.
https://publikasiilmiah.ums.ac.id/xmlui/bitstream/handle/11617/3847/Paper_TK.02.pdf?sequence=1&isAllowed=y
- Susanto, A., Supriyadi, Y., Tohidin, T., Susniahti, N., & Hafizh, V. (2017). Fluktuasi Populasi Lalat Buah *Bactrocera* spp. (Diptera : Tephritidae) pada Pertanaman Cabai Merah (*Capsicum Annuum*) di Kabupaten Bandung, Jawa Barat. *Agrikultura*, 28(3), 141–150. <https://doi.org/10.24198/agrikultura.v28i3.15747>
- Taha-Salaime, L., Lebedev, G., Abo-Nassar, J., Marzouk, S., Inbar, M., Ghanim, M., & Aly, R. (2020). Activity of *Ajuga iva* extracts against the African cotton leafworm *Spodoptera littoralis*. *Insects*, 11(11), 1–13.

<https://doi.org/10.3390/insects11110726>

- Tammar, S., Salem, N., Wannes, W. A., Limam, H., Bourgou, S., Fares, N., Dakhlaoui, S., Hammami, M., Khammassi, S., Re, G. Del, Hessini, K., & Msaada, K. (2021). Chemometric profiling and bioactivity of verbena (*Aloysia citrodora*) methanolic extract from four localities in Tunisia. *Foods*, 10(12), 1–16. <https://doi.org/10.3390/foods10122912>
- Tan, K., & Serit, M. (1994). Adult Population Dynamics of *Bactrocera dorsalis* (Diptera : Tephritidae) in Relation to Host Phenology and Weather in Two Villages of Penang Island , Malaysia. *Community and Ecosystem Ecology*, 23(2), 267–275. <https://doi.org/10.1093/ee/23.2.267>
- Tan, P. Van. (2018). The Determination of Total Alkaloid, Polyphenol, Flavonoid and Saponin Contents of Pogang gan (*Curcuma* sp.). *International Journal of Biology*, 10(4), 42. <https://doi.org/10.5539/ijb.v10n4p42>
- Teves, G. I. (2014). Taking a Wind Break. *Molokai Native Hawaiian Beginning Farmer Program-July 2014 Newsletter*. University of Hawaii at Manoa, July, 1–13.
- Tian, X., Li, Y., Hao, N., Su, X., Du, J., Hu, J., & Tian, X. (2021). The antifeedant, insecticidal and insect growth inhibitory activities of triterpenoid saponins from *Clematis aethusifolia* Turcz against *Plutella xylostella* (L.). *Pest Management Science*, 77(1), 455–463. <https://doi.org/10.1002/ps.6038>
- Tuyet, N. T. A., Thu, N. T. A., Hang, N. T. T., Suong, N. N., & Phung, N. K. P. (2009). Oleanane Saponins from *Polyscias guilfoylei* Bail. (Araliaceae). *Science & Technology Development*, 12(10), 21–28. <https://doi.org/10.32508/stdj.v12i10.2295>
- Tuyet, N. thi A., & Phung, N. K. P. (2007). CHEMICAL EXAMINATION OF POLYSCIAS SERRATA BALF. FAMILY ARALIACEAE. *Journal of Chemistry*, 45(1), 102–105.
- Udayan, D., Nair, S. N., Juliet, S., Ravindran, R., Athalathil, S., Adarshkrishna, T. P., Ajithkumar, K. G., Sreelekha, K. P., Chandrashekar, L., & Ghosh, S. (2020). Acaricidal Activity of *Artemisia nilagirica* Leaves against *Rhipicephalus* (*Boophilus*) *annulatus* Ticks. *Planta Medica*, 86(18), 1335–1344. <https://doi.org/10.1055/a-1161-0220>
- Ullah, M., Inayatullah, M., Ahmed, N., Sohail, K., Ahmed, S., & Kamran, M. (2015). Evaluation of vegetable extracts as natural lures for female *Bactrocera cucurbitae* (Diptera : Tephritidae). *Journal of Entomology and Zoology Studies*, 3(4), 458–461. https://www.researchgate.net/profile/Nazeer-Ahmed-10/publication/282291836_Evaluation_of_vegetable_extracts_as_natural_lures_for_female_Bactrocera_cucurbitae_Diptera_Tephritidae/links/560aab3608ae1396914cc814/Evaluation-of-vegetable-extracts-as-natural-lu
- Untung, K. 2007. *Kebijakan Perlindungan Tanaman*. Universitas Gajah Mada Press. Yogyakarta.
- Varnika, Sharma, R., Singh, A., Shalini, & Sharma, N. (2020). Micropropagation and screening of phytochemicals present among in vitro raised and wild plants of *rauvolfia serpentina*. *Walailak Journal of Science and Technology*, 17(11), 1177–1193. <https://doi.org/10.48048/wjst.2020.6492>

- Varsha, V., Suresh, S. N., & Prejeena, V. (2016). Phytochemical Screening, GS-MS Analysis and Antibacterial. *International Journal of Recent Advances in Multidisciplinary Research*, 03(12), 2079–2085. <https://www.ijramr.com/sites/default/files/issues-pdf/1083.pdf>
- Wang, J., Liu, X., Jin, T., He, H., & Liu, L. (2019). Preparation of nanocellulose and its potential in reinforced composites: A review. *Journal of Biomaterials Science, Polymer Edition*, 30(11), 919–946. <https://doi.org/10.1080/09205063.2019.1612726>
- Wang, S., Qi, Y., Desneux, N., Shi, X., Biondi, A., & Gao, X. (2016). Sublethal and transgenerational effects of short-term and chronic exposures to the neonicotinoid nitenpyram on the cotton aphid *Aphis gossypii*. *Journal of Pest Science*, 1–8. <https://doi.org/10.1007/s10340-016-0770-7>
- Weems, Jr., H. V., Heppner, J. B., & Fasulo, T. R. (2012). Melon Fly, *Bactrocera cucurbitae* Coquillett (Insecta: Diptera: Tephritidae). *IFAS Extension, Universitas of Florida, EENY-199*, 1–5. <https://doi.org/10.32473/edis-in356-2004>
- Widiyaningrum, P., Indriyanti, D. R., Priyono, B., Asiyah, N., & Putri, P. L. F. (2020). Antifeedant effect of some medicinal plant extracts against rice weevil. *Pakistan Journal of Biological Sciences*, 23(7), 953–958. <https://doi.org/10.3923/pjbs.2020.953.958>
- Yadav, R., & Agarwala, M. (2011). Phytochemical Analysis of Some Medicinal Plants. *Journal of Phytology*, 3(12), 10–14. <https://doi.org/10.38106/lmrj.2021.36>
- Yadav, S. K., & Patel, S. (2017). Insecticidal and repellent activity of some plant extracts against *Myzus persicae* (Sulzer) and *Brevicoryne brassicae* (Linnaeus). *Journal of Entomology and Zoology Studies*, 5(2), 1434–1439. https://www.researchgate.net/profile/Sunil-Yadav-14/publication/320311294_Insecticidal_and_repellent_activity_of_some_plant_extracts_against_Myzus_persicae_Sulzer_and_Brevicoryne_brassicae_Linnaeus/links/59dd5f54a6fdcc276fa2f119/Insecticidal-and-repellent
- Yang, H., Piao, X., Zhang, L., Song, S., & Xu, Y. (2018). Ginsenosides from the stems and leaves of *Panax ginseng* show antifeedant activity against *Plutella xylostella* (Linnaeus). *Industrial Crops and Products*, 124, 412–417. <https://doi.org/10.1016/j.indcrop.2018.07.054>
- Yatsynin, V. G., Rubanova, E. V., & Okhrimenko, N. V. (1996). Identification of female-produced sex pheromones and their geographical differences in pheromone gland extract composition from click beetles (Col., Elateridae). *Journal of Applied Entomology*, 120(8), 463–466. <https://doi.org/10.1111/j.1439-0418.1996.tb01636.x>
- Ye, H., & Liu, J. (2007). Population dynamics of oriental fruit fly *Bactrocera dorsalis* (Diptera: Tephritidae) in Xishuangbanna, Yunnan Province, China. *Frontiers of Agriculture in China*, 1(1), 76–80. <https://doi.org/10.1007/s11703-007-0014-y>
- Young, J. F., Duthie, S. J., Milne, L., Christensen, L. P., Duthie, G. G., & Bestwick, C. S. (2007). Biphasic effect of falcarinol on CaCo-2 cell proliferation, DNA damage, and apoptosis. *Journal of Agricultural and Food Chemistry*, 55(3), 618–623. <https://doi.org/10.1021/jf0616154>

- Youssef, F. S., Hamoud, R., Ashour, M. L., Singab, A. N., & Wink, M. (2014). Volatile oils from the aerial parts of *Eremophila maculata* and their antimicrobial activity. *Chemistry and Biodiversity*, 11(5), 831–841. <https://doi.org/10.1002/cbdv.201300366>
- Youssef, N. H., Qari, S. H., Behiry, S. I., Dessoky, E. S., El-Hallous, E. I., Elshaer, M. M., Kordy, A., Maresca, V., Abdelkhalek, A., & Heflish, A. A. (2021). Antimycotoxigenic activity of beetroot extracts against *alternaria alternata* mycotoxins on potato crop. *Applied Sciences (Switzerland)*, 11(9), 1–17. <https://doi.org/10.3390/app11094239>
- Yu, H., & Fugetsu, B. (2010). A novel adsorbent obtained by inserting carbon nanotubes into cavities of diatomite and applications for organic dye elimination from contaminated water. *Journal of Hazardous Materials*, 177(1–3), 138–145. <https://doi.org/10.1016/j.jhazmat.2009.12.007>
- Zaka, S. M., Iqbal, N., Saeed, Q., Akrem, A., Batool, M., Khan, A. A., Anwar, A., Bibi, M., Azeem, S., Rizvi, D. e. N., Bibi, R., Khan, K. A., Ghramh, H. A., Ansari, M. J., & Latif, S. (2019). Toxic effects of some insecticides, herbicides, and plant essential oils against *Tribolium confusum* Jacquelin du val (Insecta: Coleoptera: Tenebrionidae). *Saudi Journal of Biological Sciences*, 26(7), 1767–1771. <https://doi.org/10.1016/j.sjbs.2018.05.012>
- Zaniol, F., Calisto, J. F. F., Cozzer, G., Ferro, D. M., Dias, J. L., Rodrigues, L. G. G., Mazzutti, S., Rezende, R. S., Simões, D. A., Ferreira, S. R. S., Dal Magro, J., & Oliveira, J. V. (2020). Comparative larvicidal effect of *Pterodon* spp. extracts obtained by different extraction methods. *Journal of Supercritical Fluids*, 166, 1–7. <https://doi.org/10.1016/j.supflu.2020.104993>
- Zayed, M. Z., & Samling, B. (2016). Phytochemical constituents of the leaves of *Leucaena leucocephala* from Malaysia. *International Journal of Pharmacy and Pharmaceutical Sciences*, 8(12), 174–179. <https://doi.org/10.22159/ijpps.2016v8i12.11582>
- Zaynab, M., Sharif, Y., Abbas, S., Afzal, M. Z., Qasim, M., Khalofah, A., Ansari, M. J., Khan, K. A., Tao, L., & Li, S. (2021). Saponin toxicity as key player in plant defense against pathogens. *Toxicon*, 193(November 2020), 21–27. <https://doi.org/10.1016/j.toxicon.2021.01.009>
- Zhang, A., Liu, Z., Lei, F., Fu, J., Zhang, X., Ma, W., & Zhang, L. (2017). Antifeedant and oviposition-detering activity of total ginsenosides against *Pieris rapae*. *Saudi Journal of Biological Sciences*, 24(8), 1751–1753. <https://doi.org/10.1016/j.sjbs.2017.11.005>
- Zhang, J. W., Li, S. K., & Wu, W. J. (2009). The main chemical composition and in vitro antifungal activity of the essential oils of *Ocimum basilicum* Linn. var. *pilosum* (Willd.) Benth. *Molecules*, 14(1), 273–278. <https://doi.org/10.3390/molecules14010273>
- Zhang, M., K, S., Chaudhuri, & Kubo, I. (1993). *Quantification of Insect Growth a N D Its Use in Screening of Naturally Occurring*. 19(6).
- Zhang, X. C., Zhu, L., Li, X. Y., Liu, L. C., & Lai, P. X. (2021). Chemical composition, and evaluation of antibacterial, antibiofilm and synergistic effects with conventional antibiotics of essential oil from *mallotus repandus*. *Records of Natural Products*, 15(4), 324–329. <https://doi.org/10.25135/rnp.217.20.10.1854>