

BIBLIOGRAPHY

- Agostini-Costa T. S., F. V. Roberto, R. B. Humberto, S. Damaris., & A. G. Marcos. 2012. *Secondary Metabolites in Chromatography and Its Application. Brazil*. pp. 131-164.
- Alberida, H., Eliza., & R. N. Lova. 2014. Effect of Essential Oils on the *In Vitro* Growth of *Colletotrichum gloeosporioides* (Penz) Sacc., the Cause of Anthracnose Disease in Papaya (*Carica papaya* L.) Fruit. *Jurnal Sainstek*. 4(1): 57-64.
- Ambarwati, R. A. 2011. *Detection of Citronella Oil Adulteration by Testing Optical Rotation Using an ATAGO 2L Polarimeter*. Faculty of Engineering, Diponegoro University, Semarang.
- Anang, M. 2016. Study of Betel Leaf (*Piper betle*) Extract on the Mortality of the Rice Weevil (*Sitophilus oryzae* L.). *Jurnal Agrivet*. 6(4): 1-6.
- Andrew, W. 2025. *Color Wheel*. https://andrewwerth.com/color/#hue7_5Y. Accessed on December 22, 2025 (09:10).
- Anggaraito, Y. U., R. Susanti., R. S. Iswari., A. Yuniastusti, Lisdiana, W. H. Nugrahaningsih, N. A. Habibah., & S. H. Bintari. 2018. *Plant Secondary Metabolites: Application and Production*. Faculty of Mathematics and Natural Sciences, Semarang State University, Semarang. 205 pp.
- Antaboga, K. B., Supeno, & H. Haryanto. 2023. Effectiveness Test of Several Medicinal Plant Materials on the Repellency of Insect Pests Damaging Ciliwung Variety Rice in Rice Warehouses. *Jurnal Agroteksos*. 33(2): 444-455.
- Antika, S. R. V., L. P. Astuti, & R. Rachmawati. 2014. Development of *Sitophilus oryzae* Linnaeus (Coleoptera: Curculionidae) on Various Types of Food Sources. *Jurnal Hama Penyakit Tumbuhan*. 2(4): 77-78.
- Ardiansyah, A. F. 2016. Effect of the Application of Three Types of Inert Dust on Adult Mortality and Population Growth of *Sitophilus zeamais* Motschulsky (Coleoptera: Curculionidae) on Maize Seeds. *Undergraduate Thesis*. Agrotechnology Study Program. Faculty of Agriculture. Universitas Brawijaya. Malang. [https://repository.ub.ac.id/id/eprint/131878/1/Achmad_Firdaus_Ardiansyah.pdf] accessed on August 3, 2025.
- Aritonang, F.N., A. Gazali, & H. Ellya. 2024. Effect of Basil Leaf Powder and Fragrant Pandan Leaf Powder on the Mortality of Rice Weevils (*Sitophilus oryzae* L.) in Storage. *Agrotek View*. 7(3): 39-44.

- Arlofa, N. 2015. Testing the Phytochemical Compound Content of Durian Peel as a Soap Making Material. *Journal of Chemtech*. 1(1): 18-22
- Astriani, D. 2012. Bioactivity Study of Kar Wangi and Citronella Formulations Against Corn Powdery Mildew *Sitophilus* spp. in Stored Corn Seeds. *Journal of Agriscience*. 3(4): 44-52.
- Agricultural Research and Development Agency. 2010. *Cultivation of Citronella*. Bogor. 34 pp. Central Statistics Agency. 2024. <https://www.bps.go.id/>. Accessed February 20, 2025 (10:15).
- Badan Standar Nasional. 2020. *Rice Quality Standards*. SNI 6128-2020. Jakarta. National Standards Agency.
- Banks, J. & P. Fields. 1995. *Physical Methods for Insect Control in Stored Grain Ecosystems*. In Jayas, D.S., N.G. White, and W.E. Muir (Ed. s.). Pp. 353-410. *Stored Grain Ecosystems*. Marcel Dekker, Inc. New York.
- Dadang., & D. Priyono. 2011. Development of Botanical Insecticide Formulation Technology for Vegetable Pest Control in an Effort to Produce Healthy Vegetable Products. *Indonesian Journal of Agricultural Sciences*. 16(2). 101.
- Dewi, S.R., & D.N.C. Hanifa. 2021. Characterization and Antibacterial Activity of Citronella Oil (*Cymbopogon nardus* L. Rendle) against *Propionibacterium acnes*. *Indonesian Pharmaceutical Journal*. 18(02): 371-379.
- Dila, R., N. Tanzerina, & N. Aminasih. 2021. Morphology and Anatomy of Vegetative Organs of the Greater Pandanus (*Pandanus amaryllifolius* Roxb.) in Swampy Areas. *Swiwijaya Bioscientia Journal*. 2(1): 1-7.
- Enda, K. 2017. Repellency Test of Pandanus Leaf Powder (*Pandanus amaryllifolius* Roxb.) Against Rice Weevils (*Sitophilus oryzae* L.) and Its Contribution to Plant Pest and Disease Research. *Undergraduate Thesis*. Raden Fatah State Islamic University.
- Gwijanggae, P., J. Manuekke, and G.S.J. Manengkey. 2017. Characteristics of *Sitophilus oryzae* and *S. zeamais* Imago on Rice and Corn. *Eugenia Journal*. 21(1): 226-233.
- Hadi, M. 2008. Making Environmentally Friendly Termite-Resistant Paper Using Kirinyuh (*Eupatorium odoratum*) Leaf Extract. *BIOMA*. Vol. 6(11): 12-18.

- Hastuti, H. 2008. *Killing Power of Pandanus amaryllifolius Roxb. Leaf Extract Against Anopheles aconitus Donitz Larvae*. Faculty of Medicine.
- Hasyim, A. 2010. Efficacy and Persistence of Lemongrass Oil as a Biopesticide Against *Helicoverpa armigera* Hubn (*Lepidoptera: Noctuidae*). *Journal of Horticulture*, 20 (4): 377–386.
- Hasyim, A., W. Setiawati., H. Jayanti., & E. H. Krestini. 2014. Repellency of essential oils against the onion storage pest *Ephestia cautella* (Walker) (*Lepidoptera: Pyralidae*) in the laboratory. *J Hort.* 24(4): 336-345.
- Hawa, L. Choviya, A. Lastriyanto, & S. Bangun. 2010. Modified Atmosphere Packaging of Hulled and Milled Rice. *Journal of Agricultural Technology*. 11(3): 177-183.
- Hendrival, H. & R. Meutia. 2016. The Effect of Rice Storage Period on *Sitophilus oryzae* (L.) Population Growth and Rice Damage. *Biogenesis: Scientific Journal of Biology*. 4(2): 95-101.
- Illing, I., W. Safitri., & Erfiana. 2017. Phytochemical Test of Dengen Fruit Extract. *Jurnal Dinamika*. 8(1): 1-19
- Isnaini, M., E. R. Pane., & S. Wiridianti. 2015. Testing Several Types of Botanical Insecticides Against Rice Weevils (*Sitophilus oryzae* L.). *Biota Journal*. 1(1): 1-9.
- Javandira, C., I. K. Widnyana, & I. G. A. Suryadarmawan, 2016. *Phytochemical study and potential of neem leaf extract (Azadiracta indica A. Juss.) as a botanical pesticide*. Institute for Research and Community Empowerment (LPPM) UNMAS Denpasar, 402–406.
- Junaedi, E., M. Yunus, & N. Edy. 2024. Effectiveness of Botanical Pesticides Against Rice Weevils *Sitophilus oryzae* L. (*Coleoptera: Curculionidae*). *Agroland: Journal of Agricultural Sciences*. 31(2): 176–187.
- Kardiman, A. 2005. *Botanical Pesticides, Capabilities, and Applications*. Penebar Swadaya.
- Kardinan, A. 2010. The Use of Botanical Pesticides as Local Wisdom in Plant Pest Control Towards an Organic Farming System. *Agricultural Innovation Development*. 4(4), 262-278.
- Kawengian, S. A. F., J. Wuisan, & M. A. Leman, 2017. Inhibitory Test of Citronella Leaf Extract (*Cymbopogon citratus*) on the Growth of *Streptococcus mutans*. *Jurnal e-GIGI*. 5(1): 7-11.

- Koneri, R., & H. H. Pontororing. 2016. Testing mahogany (*Swietenia macrophylla*) seed extract against *Aedes aegypti* larvae, the vector of dengue hemorrhagic fever. *The Indonesian Journal of Public Health*, 12(4): 216–223.
- Koehler, P. G. 2012. *Rice Weevil, Sitophilus Oryzae (Coleoptera: Curculionidae)*. Entomology And Nematology Department, Florida Cooperative Extension Service. Institute Of Food And Agricultural Sciences, University Of Florida. www.edis.ifas.ufl.edu/ig120. Accessed on February 21, 2025.
- Kurniati E. 2017. Repellency test of fragrant pandan (*Pandanus amaryllifolius* Roxb) leaf powder against rice weevils (*Sitophilus oryzae* L) and its contribution to the teaching material on plant pests and diseases for Grade VIII SMP/MTs. *Undergraduate Thesis*. Raden Patah State Islamic University.
- Kusumawati, D.E., & Istiqomah. 2022. *Botanical pesticides for controlling plant-disturbing organisms (OPT)*. Madza Media.
- Longstaff, B.C. 1981. Biology of the grain pest species of the genus *Sitophilus* (Coleoptera: Curculionidae): a critical review. *Protection Ecology*. 2: 82–130.
- Manueke, J., T. Max., & M. E. M. Juliet. 2015. Biology of *S. oryzae* and *S. zeamais* (Coleoptera; Curculionidae) on rice and shelled maize. *Jurnal Eugenia* 21(1): 20-31.
- Marnita, Y., M. R. Zati., & D. A. Ardiyanti. 2022. Innovation in Botanical Pesticides for Plant Pest and Disease Control in Rantau Panjang Village, Aceh Tamiang Regency. *Jurnal Abdi Masyarakat*. 6(1): 2–21.
- Mayasari, E. 2016. Effectiveness Test of Rice Weevil (*Sitophilus oryzae* L.) Pest Control Using Fragrant Pandan (*Pandanus amaryllifolius*) Leaf Extract. *Undergraduate Thesis*. Universitas Muhammadiyah Yogyakarta.
- Moniharapon, D. D., M. Nindatu., & F. Sarbuan. 2015. Effect of Soursop (*Annona muricata* L.) Leaves as a Botanical Insecticide on the Mortality of *Sitophilus oryzae*. *Jurnal Ilmu Budaya Tanaman: Agrologia*. 4(2): 114–118.
- Mssillou, I., H. Saghrouchni, M. Saber., A.J. Zannou., A. Balahbib, A. Bouyahya, A. Allali, B. Lyoussi, & E. Derwich. 2022. Efficacy and role of essential oils as bio-insecticide against the pulse beetle *Callosobruchus maculatus* (F.) in post-harvest crops. *Industrial Crops and Products*. 18(9): 115–786.

- Mulyanti, D. Yana, & R. Salima. 2022. Effectiveness test of botanical pesticides on the mortality of golden apple snail (*Pomacea canaliculata*) pests. *G-Tech: Jurnal Teknologi Terapan*. 6(2): 119–126.
- Nerio, L. S., J. Olivero-Verbel, & E. E. Stashenko. 2010. Repellent activity of essential oils: A review. *Bioresource Technology*. 101(1): 372–378.
- Noveriza, R., M. Mariana., & S. Yuliani. 2017. Effectiveness of citronella oil nanoemulsion formula against Potyvirus causing mosaic disease in patchouli plants. *Bul. Littro*. 28(1): 47-56.
- Nurhayati, S., & T. Wahyuni. 2018. Insecticidal effect of white guava (*Psidium guajava* L.) leaf ethanol extract on housefly (*Musca domestica* L.) larvae. *Jurnal Kesehatan Lingkungan Indonesia*. 17(2): 59-62.
- Osawa, T., I. Uritani, V. V. Garcia, & E. M. M. Mendoza. 1994. *Novel natural antioxidants for utilization in food and biological systems*. In *Postharvest Biochemistry of Plant Food-Materials in the Tropics*. Japan Scientific Societies Press.
- Pramono, S., A. R. Juafar., & C. Ginting. 2024. Effect of fragrant pandan and kaffir lime leaf powders on the mortality of rice weevils (*Sitophilus oryzae* L.). *Jurnal Agrotek Tropika*. 12(2): 243-248.
- Pramono, S., L. Wibowo, Solikhin & D. Jessica. 2024. Effectiveness of Lemongrass (*Cymbopogon citratus*) and Fragrant Pandan (*Pandanus amaryllifolius* Roxb.) Leaf Powders on the Mortality of *Callosobruchus chinensis* L. in Mung Beans. *Jurnal Agrotek Tropika*. 12(4): 890-896.
- Pratama, B. A. 2010. Effectiveness of Citronella (*Cymbopogon nardus* L.) Leaf Extract in Killing *Aedes aegypti* Larvae. *Undergraduate Thesis*. University of North Sumatra.
- Putra, W. 2015. *Kitab Herbal Nusantara (The Book of Indonesian Herbs)*. AgriFlo.
- Rachmat, R. 2009. Hermetic Grain Storage Technology to Minimize Quality and Quantity Losses. *Jurnal Pangan*. 17(2): 81-89.
- Raharjo, T. J. 2013. *Kimia Hasil Alam (Chemistry of Natural Products)*. Pustaka Pelajar.
- Rahayu, S. E., & S. Handayani. 2008. Morphological and Anatomical Diversity of *Pandanus* (Pandaceae) in West Java. *Jurnal Vis Vitalis*. 01(2): 29-44.

- Rahma, M. I., Pramudi, & E. Liestiany. 2024. Organic Control of Rice Weevils (*Sitophilus oryzae* L.). *Jurnal Proteksi Tanaman Tropika*. 7(01): 823-830.
- Reo, A. R., S. Berhimpon, & R. Montolalu, 2017. Secondary Metabolites of the Gorgonian *Paramuricea clavata*. *Jurnal Ilmiah Platax*. 5(1): 42–48.
- Rumouw, D. 2017. Identification and Phytochemical Content Analysis of Plants Surrounding the Sahedaruman Protected Forest Area. *Jurnal LPPM Bidang Sains dan Teknologi*. 4(2): 53-66.
- Rusandi, R., M. Mardhiansyah, & T. Arlita. 2016. Utilization of Mahogany Seed Extract as a Botanical Pesticide to Control the Tobacco Cutworm (*Spodoptera litura* F.) in *Acacia crassicarpa* A. Cunn. ex Benth. Nurseries. *Jom Faperta UR*. 3(1): 250–258.
- Rustam, R., H. Fauzana., D. Salbiah., & N. H. Pamungkas. 2019. Effect of Applying Various Synthetic Insecticide Active Ingredients on the Predator *Eocanthecona furcellata* (Wolff) under Laboratory Conditions. *Jurnal Proteksi Tanaman*. 3(1): 18–25.
- Sabang, S. M., A. O. Landa, S. H. Virgianti, & M. R. Jura. 2024. Determination of Essential Oil Yields from the Extraction and Distillation of Mandarin Orange (*Citrus reticulata*) and Limau Orange (*Citrus amblycarpa*) Peels. *Media Eksakta*. 20(1): 28-33.
- Saenong, M. S. 2016. Indonesian Plants with Potential as Botanical Insecticides for Controlling the Maize Weevil (*Sitophilus* sp.). *Jurnal Litbang Pertanian*. 35(3):131-142.
- Sehnal, F., O. Nedved, & V. Kostal. 2003. *Temperature, Effects on Development and Growth*. In Resh, V.H. and R.T. Carde (Eds.). *Encyclopedia of Insects*. Academic Press.
- Septianingrum, E., & B. Kusbiantoro. 2016. Efforts to Extend the Shelf Life of Paddy or Rice Through the Control of Storage Factors and Storage Methods. In Hairmansis, A., W. Ratna, A. Guswara, Z. Mardiah, & M. Norviyani (Eds.), *Proceedings of the Rice Technology Meeting* (pp. 335-346). Indonesian Center for Rice Research.
- Setyono, A. 2010. Improvement of Post-Harvest Technology to Minimize Rice Yield Losses. *Agricultural Innovation Development*. 3(3): 212-216.
- Sibuea, P. 2010. Correlation of *Sitophilus oryzae* L. Population with Several Storage Factors for Bulog Rice in Medan. *Undergraduate Thesis*. State University of Medan.

- Silalahi, M. 2018. *Pandanus amaryllifolius* Roxb. (Utilization and Potential as a Food Preservative). *Pro-Life Journal*. 5(3): 626-636.
- Sitanggang, P. B. U., C. Solichah, & E. Wahyurini. 2020. Bioactivity Test of Essential Oils from Kaffir Lime (*Citrus hystrix*) Leaves and Citronella (*Cymbopogon nardus* L.) against the Maize Weevil (*Sitophilus zeamays*) in Stored Corn Seeds. *Proceedings of the National Seminar of the Faculty of Agriculture*, UPN “Veteran” Yogyakarta 2020, October 14, 2020, Eastparc Hotel Yogyakarta.
- Soenandar, M., N. A. Muanis., & R. Ari. 2010. *Practical Guide to Making Organic Pesticides*. PT Agro Media Pustaka.
- Sousa, A. H., L. R. D. A. Faroni, F. Rezende, M. A. G. Pimentel, & G. N. Silva. 2009. Population growth of *Cathartus quadricollis* (Guérin-Ménéville) (Coleoptera: Silvanidae) in products stored at different temperatures. *African Journal of Food Scienc*. 3(11): 347–351.
- Sudarmo, S. 2005. *Botanical Pesticides: Production and Utilization*. Kanisius Publisher.
- Sukandar, D., S. Hermanto, & S. Nurichawati. 2017. Characterization of Active Compounds for Controlling Rice Weevils (*Sitophilus oryzae* L.) from the Essential Oil Distillate of *Pandanus amaryllifolius* Roxb. *Jurnal Kimia Valensi*. 1(3): 129-134.
- Sumardjo, D. 2009. *Introduction to Chemistry*. EGC Medical Book Publishers.
- Susanto, A.N., D. Dono, & C. Nasahi. 2023. Utilization of Citronella Oil (*Cymbopogon nardus* L.) and Castor Oil (*Ricinus communis* L.) for the Control of Cabbage Cluster Caterpillar (*Crocidolomia pavonana* F.). *Jurnal Agrimasta*. 1(1): 10-18.
- Wakte, K.V., A. B. Nadaf, S. Krishnan, & R. J. Thengane. 2007. Studies on Lower Epidermal Papillae, the Site of Storage of Basmati Rice Aroma Compounds in *Pandanus amaryllifolius* Roxb. *Current Science*. 93(2): 238-242.
- Wardani, N. P., I. G. K. Adiputra, & A. A. K. Suardana. 2020. Repellent Effectiveness of Fragrant Pandan Leaf Powder (*Pandanus amaryllifolius* Roxb) against Rice Weevils (*Sitophilus oryzae* L.) in Red Rice (*Oryza nivara*). *Widya Biologi*. 11(01): 30-40.
- Widawati & Prasetyorini. 2013. Citronella and Patchouli Distillation Waste as an Insecticide to Repel Houseflies (*Musca domestica*). *Jurnal Teknik Industri Pertanian*. 15(1): 10-16.

- Wijayanti, S. B. 2018. Study on the Control of Rice Weevil Pests (*Sitophilus oryzae* L.) using Holy Basil Leaf Extract (*Ocimum sanctum*) as a Natural Insecticide. *Undergraduate Thesis*. Universitas Muhammadiyah Yogyakarta.
- Willem, H. G., Erwin, & S. P. Aman. 2013. Utilization of Citronella Plants (*Cymbopogon nardus* L.) as a Natural Antioxidant. *Mulawarman Chemistry Journal*. 10(2): 74-78.
- Wulandari, S., S. Oemry, & Y. Pangestiniingsih. 2014. Effect of grain texture in several commodities on the number of *Sitophilus oryzae* L. (Coleoptera: Curculionidae) adults under laboratory conditions. *Jurnal Online Agroekoteknologi* 2(3): 1189-1195.
- Yudansha, A., T. Himawan, & L.P. Astuti. 2013. Development and growth of *Sitophilus oryzae* L. (Coleoptera: Curculionidae) on various rice types at different environmental humidity levels. *Jurnal HPT* 1(3): 1–8.
- Yunita, E.A., N.H. Suprapti, & J.W. Hidayat. 2009. Effect of *Eupatorium riparium* (Teklan) leaf extract on the mortality and larval development of *Aedes aegypti*. *BIOMA* 11(1): 11-17.