



REFERENSI

- Achmad, S., 2006. Rancang Bangun Alat Penyengat Nyamuk Listrik. *Traksi* 4: 76–83.
- Arimoto., H., Harwood., J.F., Nunn., P.J., Richardson., A.G., Gordon., S., Obenauer, P.J., 2015. Comparison of Trapping Performance Between the Original BG-Sentinel® Trap and BG-Sentinel 2® Trap 1. *J. Am. Mosq. Control Assoc.* 31: 384–387. doi:10.2987/moco-31-04-384-387.1
- Aseptianova, Wijayanti, T.F., Nuraini, N., 2017. Efektifitas pemanfaatan tanaman sebagai insektisida elektrik untuk mengendalikan nyamuk penular penyakit dbd. *Bioeksperimen* 3: 10–19.
doi:<https://doi.org/10.23917/bioeksperimen.v3i2.5178>
- Balestrino, F., Iyaloo, D.P., Elahee, K.B., Bheecarry, A., Campedelli, F., Carrieri, M., Bellini, R., 2016. A sound trap for Aedes albopictus (Skuse) male surveillance: Response analysis to acoustic and visual stimuli. *Acta Trop.* 164: 448–454. doi:10.1016/j.actatropica.2016.09.002
- Bazin, M., Williams, C.R., 2018. Mosquito traps for urban surveillance: collection efficacy and potential for use by citizen scientists. *J. Vector Ecol.* 43: 98–103. doi:10.1111/jvec.12288
- Becker, N., Petric, D., Zgomba, M., Boase, C., Madon, M., Dahl, C., Kaiser, A., 2010. Mosquitoes and Their Control, 2nd ed, Springer Heidelberg Dordrecht London New York. Springer, London. doi:10.1007/978-3-540-92874-4
- Bentley, M.T., Kaufman, P.E., Kline, D.L., Hogsette, J.A., 2009. Response of adult mosquitoes to light-emitting diodes placed in resting boxes and in the field. *J. Am. Mosq. Control Assoc.* 25: 285–291. doi:10.2987/08-5815.1
- Bernier, U.R., Kline, D.L., Allan, S.A., Barnard, D.R., 2007. Laboratory Comparison of Aedes aegypti Attraction to Human Odors and to Synthetic Human Odor Compounds and Blends. *J. Am. Mosq. Control Assoc.* 23: 288–293. doi:10.2987/8756-971X(2007)23[288:LCOAAA]2.0.CO;2
- Bernier, U.R., Kline, D.L., Allan, S.A., Barnard, D.R., Barnard, D.R., 2015. Laboratory studies of Aedes aegypti attraction to ketones, sulfides, and primary chloroalkanes tested alone and in combination with l-lactic acid.pdf. *J. Am. Mosq. Control Assoc.* 31: 63–70. doi:10.2987/14-6452R.1 URL:
- Bernier, U.R., Kline, D.L., Posey, K.H., Booth, M.M., Yost, R.A., Barnard, D.R., Bernier, U.R., Kline, D.L., Posey, K.H., Booth, M.M., Yost, R.A., Barnard, D.R., 2003. Synergistic Attraction of Aedes aegypti (L.) to Binary Blends of L-Lactic Acid and Acetone, Dichloromethane, or Dimethyl Disulfide. *J.*



Med. Entomol 40: 653–656. doi:10.1603/0022-2585-40.5.653

Brady., J., Costantini., C., Sagnon., N., Gibson., G., Coluzzi, M., 1997. The role of body odours in the relative attractiveness of different men to malarial vectors in Burkina Faso. *Ann. Trop. Med. Parasitol.* 91: 121–122. doi:10.1080/00034983.1997.11813252

Cator., L.J., Arthur., B.J., Ponlawat., A., Harrington., L.C., 2016. Behavioral Observations and Sound Recordings of Free-Flight Mating Swarms of *Ae. aegypti* (Diptera: Culicidae) in Thailand. *J Med Entomol* 48: 1–11. doi:10.1097/CCM.0b013e31823da96d.Hydrogen

Cilek, J.E., Hallmon, C.F., Johnson, R., 2011. Semi-Field Comparison of the Bg Lure, Nonanal, and 1-Octen-3-OL to Attract Adult Mosquitoes In Northwestern Florida. *J. Am. Mosq. Control Assoc.* 27: 393–397. doi:10.2987/11-6151.1

Cilek, J. E., Mazu, T., Ikediobi, C.O., Ayuk-Takem, L., Latinwo, L.M., Bernier, U.R., Johnson, R., Hallmon, C.F., Farah, S.M., Onyeozili, E.N., 2011. Semi-Field Evaluation of Several Novel Alkenol Analogs of 1-octen-3-ol As Attractants to Adult *Aedes albopictus* and *Culex quinquefasciatus*. *J. Am. Mosq. Control Assoc.* 27: 256–262. doi:10.2987/10-6097.1

Clements, A.N., 2011. The biology of mosquitoes. *Biol. Mosquitoes* 3: 1–571. doi:10.1007/978-3-540-92874-4

Dekker, T., Carde, R.T., 2011. Moment-to-moment flight manoeuvres of the female yellow fever mosquito (*Aedes aegypti* L.) in response to plumes of carbon dioxide and human skin odour. *J. Exp. Biol.* 214: 3480–3494. doi:10.1242/jeb.055186

Drigger, D.P., OConnor, R.J., Kardatzke, J.T., Stup, J.L., Schiefer, B.A., 1980. The U.S. Army miniature solid state mosquito light trap 40: 172–178.

Durand, E., Cao, M.Y., Liu, C., Dunne, R., 2014. Mosquito Magnet Liberty. 2 569 737.

Elia, A.N.M.R., Chen, C.D., Lau, K.W., Lee, H.L., Low, V.L., Norma-Rashid, Y., Sofian-Azirun, M., 2018. Organophosphate and organochlorine resistance in larval stage of *aedes albopictus* (Diptera: Culicidae) in Sabah, Malaysia. *J. Econ. Entomol.* 111: 2488–2492. doi:10.1093/jee/toy184

Gad, A.A., Al-Dakhil, A.A., 2018. Efficacy of *Bacillus thuringiensis israelensis* (Bti) and four plant extracts on the mortality and development of *Culex quinquefasciatus* Say (Diptera : Culicidae). *Egypt. J. Biol. Pest Control* 28: 1–5. doi:doi.org/10.1186/s41938-018-0066-8



Grant, A.J., O'Connell, R.J., 1995. Electrophysiological Responses from Receptor Neurons in Mosquito Maxillary Palp Sensilla. *PubMed - NCBI* 177: 389–396. doi:10.1002/9780470514948.ch17

Halomoan, J.T., Suwandi, J.F., 2017. Pengendalian Vektor Virus Dengue dengan Metode Release of Insect Carrying Dominant Lethal (RIDL) Vector Control of Dengue Virus Using Release of Insect Carrying Dominant Lethal (RIDL) Method. *Majority* 6: 46–60.

Hao, H., Sun, J., Dai, J., 2012. Preliminary analysis of several attractants and spatial repellents for the mosquito , Aedes albopictus using an olfactometer. *J. Insect Sci.* 12: 1–10.

Hart, M., 2012. Making Waves: The Use Of Sound By A Mosquito And Three Moth Species. Department of Biological Sciences Faculty of Science Simon Fraser University, Canada.

Hendri, J., Kusnandar, A.J., Astuti, E.P., 2016. Identification Active Ingredients of Anti-mosquitoes Insecticide and The Susceptibility of DHF Vector to Organophosphate at Three DHF Endemic Cities in Banten Province. *Aspirator* 8: 77–86. doi:10.1175/JCLI3990.1

Hoel, D.F., Kline, D.L., Allan, S.A., 2009. Evaluation of Six Mosquito Traps for Collection of Aedes albopictus and Associated Mosquito Species in a Suburban Setting in North Central Florida ¹. *J. Am. Mosq. Control Assoc.* 25: 47–57. doi:10.2987/08-5800.1

Hoel, D.F., Kline, D.L., Allan, S.A., Grant, A., 2007. Evaluation of Carbon dioxide, 1-octen-3-ol, and lactic acid as baits in Mosquito Magnet TM Pro Traps for Aedes albopictus In North Central Florida. *J. Am. Mosq. Control Assoc.* 23: 11–17. doi:10.2987/8756-971X(2007)23[11:EOCDOA]2.0.CO;2

Huang, Y.-M., 2004. Zootaxa 700 The subgenus Stegomyia of Aedes in the Afrotropical Region with keys to the species (Diptera: Culicidae), 1st ed. Magnolia Press, Auckland, New Zealand. doi:10.11646/zootaxa.700.1.1

Iman, H., Ernawan, B., 2014. Kualitas Nyamuk Jantan Mandul Aedes aegypti L . Hasil Iradiasi Gamma : Efek Iradiasi Pada Fase Pupa dan Dewasa Quality of Gamma-Sterilized Male of Aedes aegypti L .: The Effect of Irradiating on Pupal and Adult Stage. *A Sci. J. Appl. Isot. Radiat.* 10: 149–158.

Jakhete, S.S., Allan, S.A., Mankin, R.W., 2018. Short Communication Wingbeat Frequency-Sweep and Visual Stimuli for Trapping Male Aedes aegypti (Diptera : Culicidae). *J. Med. Entomol.* 54: 1415–1419. doi:10.1093/jme/tjx074



Johnson, B.J., Rohde, B.B., Zeak, N., Staunton, K.M., Prachar, T., Ritchie, S.A., 2018. A low-cost , battery-powered acoustic trap for surveilling male Aedes aegypti during rear-and- release operations. *PLoS One* 2: 1–10. doi:10.1371/journal.pone.0201709

Junaedi, Nurmayady, D., 2012. Perancangan Pembangkit Tegangan Tinggi Direct Current Pada Sistem Electrospinning. *Issn 1979-2409* 37–45.

Kemenkes RI, 2017.
<Http://Www.Depkes.Go.Id/Resources/Download/Pusdatin/Lain-Lain//Datadaninformasikesehatanindonesia2016-Smallersize-Web.Pdf>. *Profil Kesehat. Indones.* 100.

Kirby, M.J., Green, C., Milligan, P.M., Sismanidis, C., Jasseh, M., Conway, D.J., Lindsay, S.W., 2008. Risk factors for house-entry by malaria vectors in a rural town and satellite villages in the Gambia. *Malar. J.* 7: 1–9. doi:10.1186/1475-2875-7-2

Kline, D.L., Bernier, U.R., Hogsette, J.A., 2012. Efficacy of Three Attractant Blends Tested in Combination with Carbon Dioxide Against Natural Populations of Mosquitoes and Biting Flies at the Lower Suwannee Wildlife Refuge. *J. Am. Mosq. Control Assoc.* 28: 123–127. doi:10.2987/11-6200R.1

Koecher, W., 2002. Mosquito & Blackfly terminator. CA 2314001 A1.

Kollars, I.T.M., Air, B., Masters, E., Us, M.O., Kollars, P.G., Air, B., 2005. Insect/ Arthropod Trap. US 6,920,716 B2.

Kusriastuti, R., Sutomo, S., 2005. Evolution of Dengue Prevention and Control Programme in Indonesia DF / DHF Disease Burden. *Dengue Bull.* 29: 1–7.

Lebl, K., Brugger, K., Rubel, F., 2013. Predicting Culex pipiens/restuans population dynamics by interval lagged weather data. *Parasites and Vectors* 6: 1–11. doi:10.1186/1756-3305-6-129

Lee, K.-W., 2005. A Case Study of Substance Field Analysis and Resource Analysis ; Development of New Mosquito Traps. *Triz J.* 2: 1–4.

Lundström, J.N., Olsson, M.J., 2010. Functional neuronal processing of human body odors. *Vitam. Horm.* 83: 1–23. doi:10.1016/S0083-6729(10)83001-8

Malar., M., Sivanathan., 2006. The Ecology and Biologi of Aedes aegypti (L.) and Aedes albopictus (Skuse) (Diptera: Culicidae) and the Resistance status of Aedes albopictus (Field strain) against Organophoshates in Penang Malaysia. Malaya.



Marc Zemel, M., Adam Schillen, D.H., 2009. Insect Trap. US D786,389 S.

Mathew, N., Ayyanar, E., Shanmugavelu, S., Muthuswamy, K., 2013. Mosquito attractant blends to trap host seeking Aedes aegypti. *Parasitol. Res.* 112: 1305–1312. doi:10.1007/s00436-012-3266-2

McDonald, M., 2015. Landscape of New Vector Control Products | VectorWorks. CDC; USAID and Johns Hopkins Center for Communication Progtams, United States.

McNelly, J.R., 1989. The CDC trap as a special monitoring tool. *Proc. Seventy-Sixth Annu. Meet. New Jersey Mosq. Control Assoc. Inc.* 26–33.

Menda, G., Nitzany, E.I., Shamble, P.S., Wells, A., Harrington, L.C., Miles, R.N., Hoy, R.R., 2019. The Long and Short of Hearing in the Mosquito Aedes aegypti, Current Biology. Elsevier Ltd. doi:10.1016/J.CUB.2019.01.026

Montell, C., Zwiebel, L.J., 2016. Mosquito Sensory Systems, in: Advances in Insect Physiology. Elsevier Ltd., USA, pp. 293–328.
doi:10.1016/bs.aiip.2016.04.007

Muir, L.E., Kay, B.H., Thorne, M.J., 1992. Aedes aegypti (Diptera: Culicidae) vision: response to stimuli from the optical environment. *J. Med. Entomol.* 29: 445–450. doi:10.1093/jmedent/29.3.445

Mulyaningsih, B., Umniyati, S.R., Satoto, T.B.T., Diptyanus, A., Nugrahaningsih, D.A.A., Selian, Y., 2018. Insecticide resistance and mechanisms of Aedes aegypti (Diptera: Culicidae) in Yogyakarta. *J. thee Med. Sci. (Berkala Ilmu Kedokteran)* 50: 24–32.
doi:10.19106/jmedsci005001201803

Nolen, J.A., Greenwich, W., Winner, D., Brooks, J., Hartford, W., Us, C.T., Laverack, J., Us, C.T., Weaver, G., May, R., Us, K.S., Mosher, R., Us, K.S., Us, C.T., 2003. MOSQUITO AND BITING INSECT ATTRACTING AND KILLINGAPPARATUS. US 6594946 B2.

Nuryunarsih, D., 2015. Sociodemographic Factors to Dengue Hemorrhagic Fever Case in Indonesia. *J. Kesehat. Masy. Nas.* 10: 10–16.

Okumu, F.O., Titus, E., Mbeyela, E., Killeen, G.F., Moore, S.J., 2009. Limitation of using synthetic human odours to test mosquito repellents. *Malar. J.* 8. doi:10.1186/1475-2875-8-150

Peter D. Wraight, 2002. Rotatable Insect Trap Device. 4,676,022.

Ponlawat, A., Khongtak, P., Jaichapor, B., Pongsiri, A., Evans, B.P., 2017. Field



evaluation of two commercial mosquito traps baited with different attractants and colored lights for malaria vector surveillance in Thailand. *Parasites and Vectors* 10: 1–10. doi:10.1186/s13071-017-2315-1

Prada, P.A., Curran, A.M., Furton, K.G., 2011. The evaluation of human hand odor volatiles on various textiles: A comparison between contact and noncontact sampling methods. *J. Forensic Sci.* 56: 866–881.
doi:10.1111/j.1556-4029.2011.01762.x

Pratamawati, D.A., Irawan, A.S., Widiarti, 2013. Relationship Between Knowledge of Vector With Household Insecticide Usage Behaviour In Dengue Hemorrhagie Fever Endemic Areas In Bali Province. *J. Vectora IV*: 99–116.

Putri, N.W., Huwaid, S.U., 2019. Analisis Partisipasi Masyarakat Dalam Program Pengendalian Vektor DBD. *J. Kesehat.* 7621.
doi: <https://doi.org/10.23917/jurnal%20kesehatan.v0i1.7779>

Qiu, Y.T., 2010. Sensory and behavioural responses of the malaria mosquito *Anopheles gambiae* to human odours. Wageningen University.

Qiu, Y.T., van Loon, J.J.A., 2010. Olfactory physiology of blood-feeding vector mosquitoes, in: Olfaction in Vector-Host Interactions. pp. 39–61.

Ritchie, S.A., Kline, D.L., 1995. Comparison of CDC and EVS Light Traps Baited with Carbon Dioxide and Octenol for Trapping Mosquitoes in Brisbane, Queensland (Diptera: Culicidae). *Aust. J. Entomol.* 34: 215–218.
doi:10.1111/j.1440-6055.1995.tb01322.x

Robertson, H.M., Kent, L.B., 2009. Evolution of the Gene Lineage Encoding the Carbon Dioxide Receptor in Insects. *J. Insect Sci.* 9: 1–14.
doi:10.1673/031.009.1901

Rohani, A., Azahary, A.R.A., Zurainee, M.N., Wan Najdah, W.M.A., Zamree, I., Hanif, M.O., Ariffin, M.M., Zuhaimaz, H., Suzilah, I., Lee, H.L., 2016. Comparative Human Landing Catch and CDC Light Trap in Mosquito Sampling in Knowlesi Malaria Endemic Areas in Peninsula Malaysia. *Adv. Entomol.* 04: 1–10. doi:10.4236/ae.2016.41001

Rohe, D.L., Fall, R.P., 1979. A Miniature Battery Powered CO₂ Baited Light Trap For Mosquito Borne Encephalitis Surveillance. *Econ. Geol.* 4: 24–27.

Rose, A., Gordon, U., Geier, M., Eiras, A., 2006. The BG-Sentinel , a novel mosquito trap for research and surveillance. *GIESSEN* 15: 345–348.

Rueda, L.M., 2008. Global diversity of mosquitoes (Insecta: Diptera: Culicidae) in freshwater. *Hydrobiologia* 595: 477–487. doi:10.1007/s10750-007-9037-x



- Rueda, L.M., 2004. Pictorial keys for the identification of mosquitoes (Diptera: Culicidae) associated with Dengue Virus Transmission. Auckland, New Zealand. doi:<http://dx.doi.org/10.11646/zootaxa.589.1.1>
- Ruliansyah, A., Gunawan, T., Juwono.M, S., 2011. Pemanfaatan Citra Penginderaan Jauh dan Sistem Informasi Geografis untuk Pemetaan Daerah Rawan Demam Berdarah Dengue (Studi Kasus di Kecamatan Pangandaran Kabupaten Ciamis Provinsi Jawa Barat) 3: 72–81.
- Russell, R.C., 2004. The relative attractiveness of carbon dioxide and octenol in CDC- and EVS-type light traps for sampling the mosquitoes Aedes aegypti (L.), Aedes polynesiensis Marks, and Culex quinquefasciatus say in Moorea, French Polynesia. *J. Vector Ecol.* 29: 309–314.
- Satoto, T.B.T., Alvira, N., Wibawa, T., Diptyanus, A., 2017. Improvement to Early Warning System the Transmission of Dengue Fever through Controlling Potential Factor in Public Elementary School At Yogyakarta. *Kesmas Natl. Public Heal. J.* 11: 178. doi:[10.21109/kesmas.v11i4.1248](https://doi.org/10.21109/kesmas.v11i4.1248)
- Satoto, T.B.T., Umniyati, S., Suardipa, A., Sintorini, M., 2016. Effects of Temperature, Relative Humidity, and DEN-2 Virus Transovarial Infection on Viability of Aedes aegypti. *Kesmas Natl. Public Heal. J.* 7: 331. doi:[10.21109/kesmas.v7i7.32](https://doi.org/10.21109/kesmas.v7i7.32)
- Singh, S.P., Mohan, L., 2013. Variations in the Ommatidia and Compound Eyes of Three Species of Mosquito Vectors 1: 16–21.
- Smallegange, R.C., Schmied, W.H., Van Roey, K.J., Verhulst, N.O., Spitzen, J., Mukabana, W.R., Takken, W., 2010. Sugar-fermenting yeast as an organic source of carbon dioxide to attract the malaria mosquito Anopheles gambiae. *Malar. J.* 9: 292. doi:[10.1186/1475-2875-9-292](https://doi.org/10.1186/1475-2875-9-292)
- Soenjono, S.J., Suwarja, Pandean, M.M., 2017. Status Resistensi Vektor Demam Berdarah Dengue Aedes aegypti terhadap Malathion di Kota Tomohon Resistance Status o f Aedes aegypti Against Malathion , in Tomohon City. *J. Vektor Penyakit* 11: 43–48.
- Stone, C.M., Tuten, H.C., Dobson, S.L., 2013. Determinants of Male Aedes aegypti and Aedes polynesiensis (Diptera: Culicidae) Response to Sound: Efficacy and Considerations for use of Sound Traps in the Field. *J. Med. Entomol.* 50: 723–730. doi:[full/10.1603/ME13023](https://doi.org/10.1603/ME13023)
- Supartha, I.W., 2008. Pengendalian Terpadu Vektor Virus Demam Berdarah Dengue , Aedes aegypti (Linn .) dan Aedes albopictus (Skuse)(Diptera : Culicidae). *Makal. disampaikan dalam Semin. DiesUnud 2008* 3–6.



doi:10.1016/S0021-9150(01)00750-X

Supriyadi., Idriyawati., N., Hartono., R., 2016. Efektifitas pencegahan demam berdarah dengue (dbd) dengan pemanfaatan limbah untuk. *Ilmu Kependidikan dan Kebidanan* II: 264–274.

Syed, Z., Leal, W.S., 2009. Acute olfactory response of Culex mosquitoes to a human- and bird-derived attractant. *Proc. Natl. Acad. Sci.* 106: 18803–18808.
doi:10.1073/pnas.0906932106

Tan, A.W., Loke, S.R., Benjamin, S., Lee, H.L., Chooi, K.H., Sofian-Azirun, M., 2012. Spray application of Bacillus thuringiensis israelensis (Bti strain AM65-52) against *Aedes aegypti* (L.) and *Ae. albopictus* Skuse populations and impact on dengue transmission in a dengue endemic residential site in Malaysia. *Southeast Asian J. Trop. Med. Public Health* 43: 296–310.
doi:10.1371/journal.pone.0170079

Tauxe, G.M., MacWilliam, D., Boyle, S.M., Guda, T., Ray, A., 2013. Targeting a dual detector of skin and CO₂ to modify mosquito host seeking. *NIH* 1: 233–245. doi:10.1016/j.cell.2013.11.013.

Tontowi, A.E., 2016. Desain Produk Inovatif & Inkubasi Bisnis Kompetitif, 2nd ed. Gadjah Mada University Press, Yogyakarta.

Breugel, V.F., Riffell, J., Fairhall, A., Dickinson, M.H., 2015. Mosquitoes Use Vision to Associate Odor Plumes with Thermal Targets. *Curr. Biol.* 25: 2123–2129. doi:10.1016/j.cub.2015.06.046

Verhulst, N.O., Mukabana, W.R., Takken, W., Smallegange, R.C., 2011. Human skin microbiota and their volatiles as odour baits for the malaria mosquito *Anopheles gambiae* s.s. *Entomol. Exp. Appl.* 139: 170–179.
doi:10.1111/j.1570-7458.2011.01119.x

Vinauger, C., Breugel, F. Van, Locke, L.T., Fairhall, A.L., Akbari, O.S., Riffell, J.A., 2019. Visual-Olfactory Integration in the Human Disease Vector Mosquito *Aedes aegypti*. *Curr. Biol.* 29: 2509–2516.
doi:10.1016/j.cub.2019.06.043

Vinauger, C., Lahondère, C., Wolff, G.H., Locke, L.T., Liaw, J.E., Parrish, J.Z., Akbari, O.S., Dickinson, M.H., Riffell, J.A., 2018. Modulation of Host Learning in *Aedes aegypti* Mosquitoes. *Curr. Biol.* 28: 333-344.e8.
doi:10.1016/j.cub.2017.12.015

Weinzierl, R., Henn, T., Koehler, P.G., 2007. Insect Attractants and Traps 1. Florida, USA, pp. 1–8.



White., H.M., 2019. Sonic insect repeller. US3886492A.

Zhou, Y., Zhang, Z., Fu, Y., Zhang, G., Yuan, S., Anton, S., 2018. Carbon Dioxide , Odorants , Heat and Visible Cues Affect Wild Mosquito Landing in Open Spaces. *Behav. Neurosci.* 12: 1–9. doi:10.3389/fnbeh.2018.00086

Zwiebel, L.J., Takken, W., 2014. Olfactory regulation of mosquito-host interactions. *Insect Biochem. Mol. Biol.* 34: 645–652. doi:10.1016/j.ibmb.2004.03.017