

REFERENCES

- Alyokin, A.V., C. Mille, R.H. Messing, and J.J. Duan. 2001. Selection of Pupation Habitats by Oriental Fruit Fly Larvae in the Laboratory. *Journal of Insect Behaviour* 14: 57-67.
- Anonym a. 2008. 2008. Climate Changes: Evidence and Causes. Published by Royal Science and US National Academy of Science.
- Anonym b. 2015. White Striped Fruit Fly Pest Profile. http://www.cdffa.ca.gov/plant/pdep/target_pest_disease_profiles/white_stripped_ff_profile.html. Accessed on April 5, 2015.
- Anonym c. 2012. Queensland Fruit Fly: Plant Biosecurity Orange. <http://www.dpi.nsw.gov.au/factsheet>. Accessed on April 19, 2015.
- Anonym d. 2015. Statistical Yearbook of Indonesia. Statistic Indonesia.
- Armstrong, J.W. and P.A. Follet. 2007. Hot-water immersion quarantine treatment against mediterranean fruit fly and oriental fruit fly (Diptera: Tephritidae) eggs and larvae in litchi and longan fruit exported from Hawaii. *Journal of Economic Entomology* 100(4): 1091-1097.
- Augustinos, A.A., Elias E.S., Eleni D., Evdoxia G.K., Penelope M., Antigone Z., and Kostas D. M. 2008. Isolation and characterization of microsatellite markers from the olive fly, *Bactrocera oleae*, and their cross-species amplification in the Tephritidae family. *BMC Genomic* 9: 618.
- Bale, J.S., G.J. Masters, I.D. Hodkinson, C. Awmack, T.M. Bezemer, V.K. Brown, J. Butterfield, A. Buse, J.C. Coulson, J. Farrar, J.E.G. Good, R. Harrington, S. Hartley, T.H. Jones, R.L. Lindroth, M.C. Press, I. Symrnioudis, A.D. Watt, and J.B. Whittaker. 2002. Herbivory in global climate change research: direct effect of rising temperature on insect herbivores. *Global Change Biology* (2002) 8: 1-16.
- Becker, B.R. and B.A. Fricke. 1996. "Transpiration and Respiration of Fruits and Vegetables," *New Developments in Refrigeration for Food Safety and Quality*, International Institute of Refrigeration, Paris, France, and American Society of Agricultural Engineers, St. Joseph, Michigan, pp. 110-121. ISBN 0-929355-80-6.
- Boshua H., Q. Xie, R. Zhang. 2006. Depth of pupation and survival of the Oriental fruit fly, *Bactrocera dorsalis* (Diptera: Tephritidae) pupae at selected soil moistures. *Applend Entomology and Zoology* 41(3): 515-520. (Abstr.).
- Bush, G.L. 1992. Host race formation and sympatric speciation in *Rhagoletis Fruit Flies* (Diptera: Tephritidae). *Psyche a Journal of Entomology* 99(4): 335-357.

- Cáceres C., J. Hendrichs, and M.J.B. Vreysen. 2014. Development and improvement of rearing techniques for fruit flies (Diptera: Tephritidae) of economic importance. *International Journal of Tropical Insect Science* 34: S1-S12.
- Cailon, R., C. Suppo, J. Casas, H.A. Woods, and S. Pincebourde. 2014. Warming decreases thermal heterogeneity of leaf surface: implications of behavioural thermoregulation by arthropods. *Functional Ecology* 28: 1449-1458.
- Cancino, J. and P. Montoya. 2006. Advances and perspective in the mass rearing of fruit fly parasitoids in Mexico. *Proc. of the 7th International Symposium of Fruit Flies of Economic Importance*, Salvador, Brazil 10-15 September 2006.
- Chapman, R.F. 1998. *The Insect: Function and Structure*. Ed. 4th. Cambridge Press, Melbourne.
- Chen, B.H. 1994. Development of *Trichogramma embryophagum* and *T. Ostrinae* (Hym.: Trichogrammatidae) at five temperatures and their relative recovery from host eggs. *Plant Protection Bulletin* 36: 293-299.
- Clarke, A. and K.P.P. Fraser. 2004. Why does metabolism scale with temperature? *Functional Ecology* 18: 243-251.
- Cunha, R.L.D., M.D. Hubinger, A.C.K. Sato, and G. S. Vieira. 2012. Guava. In: M. Siddiq, J. Ahmed, M. G. Lobo, and F. Ozadali (Eds.) *Tropical and Subtropical fruits: Postharvest Physiology, Processing and Packaging*. John Wiley and Sons, Inc, Oxford, p: 203-221.
- Daly, H.E., J.T. Doyen, P.R. Ehrlich. 1978. *Introduction to Insect Biology and Diversity*. McGraw-Hill, Inc.
- Dhilon, M.K., and H.C. Sharma. 2007. Effect of storage temperature and duration on viability of eggs of *Helicoverpa armigera* (Lepidoptera: Noctuidae). *Bulletin of Entomological Research* 97: 55-59.
- Dick, C.A., N.E. Rank, M. McCarthy, S. McWeeney, D. Hollis, E.P. Dahlhoff. 2013. Effect of temperature variation on male behavior and mating success in a montane beetle. *Physiological and Biochemical Zoology* 86(4): 432-440.
- Dong, Y.J., C.W. Song, Y.Y. Chuang, K.S. Chiang, W.J. Wu, L.L. Cheng, and C.C. Chen. 2011. Degree of fruit ripeness affecting infestation of papaya by two species of fruit flies (Diptera: Tephritidae). *Journal of Taiwan Agriculture Research* 60(4): 253-262.
- Drew, R.A.I. and M.C. Rimig. 1996. Overview – Tephritidae in the Pacific and southeast Asia. *Proceeding regional symposium of Management of Fruit Flies in the Pacific*, Nadi, Fiji. 28-31 October 1996.

- Duyck, P.F. and S. Quilici. 2002. Survival and development of different life stages of three *Ceratitis* spp. (Diptera: Tephritidae) reared at five constant temperatures. *Bulletin of Entomological Research* 92: 461-469.
- Frank, S.A. and I.R. Swingland. 1988. Sex ratio under conditional sex expression. *Journal of Theoretical Biology* 135: 415-418.
- Genç, H. and J.L. Nation. 2008. Survival and development of *Bactrocera oleae* Gmelin (Diptera:Tephritidae) immature stages at four temperatures in the laboratory. *African Journal of Biotechnology* 7: 2495-2500.
- Genç, H. 2014. Embryonic development of the olive fruit fly, *Bactrocera oleae* Rossi (Diptera: Tephritidae), in vivo. *Turkish Journal of Zoology* 38: 598-602.
- Gilbert, P., R.B. Huey, G.W. Gilchrist. 2001. Locomotor performance of *Drosophila melanogaster* interactions among developmental and adult temperatures, age, and geography. *Evolution* 55(1): 205-209.
- Gordillo, J.C.D. 1996. Mass rearing methods for fruit fly. *Proc. of The South American fruit fly, Anastrepha fraterculus* (Wied.); advances in artificial rearing, taxonomic status and biological studies, Vina del Mar, Chile, 1-2 November 1996.
- Guaneri, A.A., C. Lazzari, L. Diotaiuti, and M.G. Lorenzo. The effect of relative humidity on the behaviour and development of *Triatoma brasiliensis*. *Physiological Entomology* 27: 142-147.
- Hallman, G.J. 1996. Mortality of third instar caribbean fruit fly (Diptera: Tephritidae) reared in diet or grapefruit and immersed in heated water or grapefruit juice. *The Florida Entomologist* 79: 168-172.
- Hallman, G.L. and D.L. Denlinger. 1998. *Temperature Sensitivity in Insects and Application in Integrated Pest Management*. Westview Press: Oxford.
- Harrison, J.M. 1988. Temperature effects on intra- and extracellular acid-base status in the american locust, *Schistocerca nitens*. *Journal of Comparative Physiology B* 158: 763-770.
- Hasanuzzaman, M., K. Nahar, and M. Fujita. 2013. Extreme temperature responses, oxidative stress, and antioxidant defense in plants. In: K. Vahdati and C. Leslie. *Abiotic Stress – Plant Responses and Applications in Agriculture*. In Tech. p: 169-205.
- Hinton, H.E. 1981. *Biology of Insect Eggs*. Pergamon Press.
- Hulthen, A.D. and A.R. Clarke. 2006. The influence of soil moisture on *Bactrocera tryoni* (Forggatt) (Diptera: Tephritidae) pupae. *Australian Journal of Entomology* 45(1): 16-19.

- Ismail, I. I., A.K. M. El-Nahal, A.H. Kamel, and T.S. Mostafa. 1988. Effect of light on the development of angoumois grain moth, *Sitotroga cerealella* Olivier (Lepidoptera: Gelechiidae). International Journal of Tropical Insect Science 9: 27-29. (Abstr.)
- Jaworski, T. and J. Hilszezański. 2013. The effect of temperature and humidity changes on insect development and their impact on forest ecosystems in the context of expected climate change. Forest Research Paper 74(4): 345-355.
- Khan, I., D. Damiens, S.M. Soliban, and J.R.L. Gilles. 2013. Effect of drying eggs and egg storage on hatchability and development of *Anopheles arabiensis*. Malaria Journal 12: 318.
- Kenis, M. 1996. Factors affecting sex ratio in rearing of *Coeloides sordidator* (Hym.: Braconidae). Entomophaga 41(2): 217-224.
- Khhermand, K., K. Kamali, Y. Fathipour, E.M. Goltapeh, and E.A. Ueckermann. 2007. Thermal requiremnet for development of *Sancassania rodionovi* (Acari: Acaridae) on mushrooms. Journal of Economic Entomology 100(4): 1098-1103.
- Liu, X. and Y. Hui 2009. Effect of temperature on development and survival of *Bactrocera correcta* (Diptera: Tephritidae). Scientific Research and Essay 4(5): 467-472.
- Lopez, J.L.Z., J. Dominguez G., T. Gomez S., P. Moreno. 1996. Mass rearing of the Mexican Fruit Fly, *Anastrepha ludens*, at the fruit flies biofactory in Metapa de Dominguez, Chapas, Mexico. Proc. of The South American furit fly, *Anastrepha fraterculus* (Wied.); advances in artificial rearing, taxonomic status and biological studies, Vina del Mar, Chile, 1-2 November 1996.
- Môro, F.V., W. Natale, C.F.D. Filho, and R.D.M. Prado. 2003. Morfologia de frutos de goiabeira. Revista brasileira de Fruticultura 1: 32-34.
- Muthuthantri, W.S.N. 2013. Citrus host utilisation by the Queensland fruit fly, *Bactrocera tryoni* (Frogatt) (Diptera: Tephritidae): from individuals to populations. Doctor of Philosophy Dissertation.
- Napoleon, M.E. and B.H. King. 1999. Offspring sex ratio response to host size in the parasitoid wasp *Spalangia endius*. Behavioral and Ecological Sociobiology 46: 325-332.
- Neven, L.G. 2010. Physiological responses of insect to heat. Postharvet Biology and technology 21: 103-111.

- Nizolek, O.K., M.R. Berenbaum, and E. H. De Lucia. 2012. Impact of elevated CO₂ and increased temperature on Japanese beetle herbivory. *Insect Science* 00: 1-11.
- Norhisham, A.R., F. Abood, M. Rita, and K.R. Hakeem. 2013. Effect of humidity on egg hatchability and reproductive biology of the bamboo borer (*Dinoderus minutus* Fabricius). *SpringerPlus* 2013 2: 9.
- Okasha, A.Y.K., A.M.M. Hassanein, and A.Z. Farahat. 1970. Effect of sub-lethal high temperature on an insect, *Rhodnius proxilus* (Stal.). *Journal of Experimental Biology* 53: 25-36.
- Omura, K., T. Dohino, M. Tanno, I. Miyazaki, and N. Suzuki. 2014. Vapor heat mortality test on the eggs of oriental fruit fly, *Bactrocera dorsalis*, infesting different fruit shape of fresh mango. *Research Bulletin of Plant Protection Service Japan* 50: 1-8.
- Piyaphongkul, J. 2013. Effect of thermal stress on the brown planthopper *Nilaparvata lugens* (Stal). PhD Dissertation.
- Potter, K.A., G. Davidowitz, and H.A. Woods. 2011. Cross-stage consequences of egg temperature in the insect *Manduca sexta*. *Functional Ecology* 25: 548-556.
- Potter, K., G. Davidowitz, and H.A. Woods. 2009. Insect eggs protected from high temperatures by limited homeothermy of plants leaves. *The Journal of Experimental Biology* 212: 3448-3454.
- Princebourde, S. and H.A. Woods. 2012. Climate uncertainty on leaf surfaces: biophysics of leaf microclimates and their consequences for leaf-dwelling organism. *Functional Ecology* 26: 844-853.
- Proverbs, M.D. and J.R. Newton. 1962. Effect of heat on the fertility of the codling moth *Carpocapsa pomonella* (L.) (Lepidoptera: Olethreutidae). *The Canadian Entomology* 94(3): 225- 233.
- Rausechenbach, I.Y. 1991. Changes in juvenile hormone and ecdysteroid content during insect development under heat stress. In: Ivanovi, J., Jankovi-Hladni, M. (Eds.), *Hormones and Metabolism in Insect Stress*. CRC Press, Boca Raton. Florida, pp. 116-148.
- Reinhardt, K., R. Dobler, and J. Abbott. 2015. An ecology of sperm: Sperm diversification by natural selection. *The Annual Review of Ecology, Evolution, and Systematics* 46: 435-459.
- Romoser, W.S. and J.G. Stoffolano, Jr. 1998. *The Science of Entomology*. McGraw-Hill, Inc.

- Rull, J., F.D. Fleischer, J. Arredondo. 2007. Irradiation of *Anastrepha ludens* (Diptera: Tephritidae) revisited: optimizing sterility introduction. *Journal of Economic Entomology* 100(4): 1153-1159.
- Sarwar, M. 2015. Quarantine treatments for mortality of eggs and larvae of fruit flies (Diptera: Tephritidae) invading fresh horticulture perishable produces. *International Journal of Animal Biology* 1(5): 196-201.
- Siwi S.S., P. Hidayat, Suputa. Taksonomi dan Bioekologi Lalat Buah Penting di Indonesia (Diptera: Tephritidae). Balai Besar Penelitian dan Pengembangan Bioteknologi dan Sumberdaya Genetika Pertanian.
- Stürup, M., B. Baer-Imhoof, D.R. Nash, J.J. Boomsma, B. Baer. 2013. When every sperm counts: factor affecting male fertility in the honeybee *Apis mellifera*. *Behavioral Ecology* 26(6): 1-7.
- Telles-Romero, R., J. Toledo, E. Hernández, J.L. Quintero-Fong, and L. Cruz-Lopéz. 2011. Effect of temperature on pupa developmetn and sexual maturity of laboratory *Anastrepha obliqua* adults. *Bulletin of Entomological Research* 1-7.
- Tsitsipis, J.A. 1980. Effect of constant temperature on larval and pupal development of olive fruit lies reared on artificial diet. *Environmental Entomology* 9: 764-768.
- Tsitsipis, J.A. and C. Abarzis. 1980. Relative humidity effect, at 20°C, on eggs of the olive fruit fly, *Dacus oleae* (Diptera: Tephritidae), reared on artificial diet. *Entomology Experimental and Applied* 28: 92-99.
- Qian, H., B. Cong, Z. Zhang, Q. Dai. 2013. The effect of some environmental and biological factors on reproductive characters of *Trichogramma* spp. *African Journal of Agriculture Research* 8(19): 2195-2203.
- Vargas, R.I., W.A. Walsh, D. Kanehisa, J.D. Stark, and T. Nishida. 2000. Comparative development of three Hawaiian Fruit Flies (Diptera: Tephritidae) at alternating temperatures. *Annual Entomology Society of America* 93(1): 75-81.
- Vijaysegaran, S. 1996. Fruit Fly Research and Development on Tropical Asia. Proceeding of regional symposium of Management of Fruit Flies in the Pacific, Nadi, Fiji. 28-31 October 1996.
- Wang, X., M.W. Johnson, K.M. Daane, and H. Nadel. 2009. High Summer Temperature Affect the Survival and Reproduction of Olive Fruit Fly (Diptera: Tephritidae). *Environmental Entomology* 35(5): 1496-1504.
- Willink, E., G. Gastaminza, A. Salvatore, M.C. Gramajo, M. Acenolaza, R. Avila, and P. Favre. 2006. Quarantine cold treatments for *Ceratitidis capitata* and

Anastrepha fraterculus (Diptera: Tephritidae) for citrus in Argentina: Conclusion after 10 years of research. Proc. of the 7th International Symposium of Fruit Flies of Economic Importance, Salvador, Brazil 10-15 September 2006.

Wood, H.A. and R.T. Bonnacaze. 2006. Insect eggs at a transition between diffusion and reaction limitation: temperature, oxygen, and water. *Journal of Theoretical Biology* 243: 483-492.

Wood, H.A. and R.I. Hill. 2004. Temperature-dependent oxygen limitation in insect eggs. *The Journal of Experimental Biology* 207: 2267-2276.