

Literature cited

- [1] Tracy, E. F. (2015). The promise of biological control for sustainable agriculture: a stakeholder-based analysis. *Journal of Science Policy & Governance*, 5(1).
- [2] Mbaluto, C. M., Ayelo, P. M., Duffy, A. G., Erdei, A. L., Tallon, A. K., Xia, S., ... & Becher, P. G. (2020). Insect chemical ecology: chemically mediated interactions and novel applications in agriculture. *Arthropod-Plant Interactions*, 14(6), 671-684.
- [3] Weeks, E. N., Machtinger, E. T., Leemon, D., & Geden, C. J. (2018). chap 12. Biological control of livestock pests: entomopathogens. *Pests and vector-borne diseases in the livestock industry*, Ed. Garros et al. p337.
- [4] Brady, J. (1970a). Litter mites and their effects on poultry. *World's poultry science journal*, 26(3), 658-668.
- [5] Brady, J. (1970b). The mites of poultry litter: observations on the bionomics of common species, with a species list for England and Wales. *Journal of Applied Ecology*, 331-348.
- [6] Roy, L., Taudière, A., Papaix, J., Blatrix, R., Chiron, G., Zriki, G., ... & Barnagaud, J. Y. (2020). Evaluating the link between predation and pest control services in the mite world. *Ecology and evolution*, 10(18), 9968-9980.
- [7] Entrekin, D. L., & Oliver Jr, J. H. (1982). Aggregation of the chicken mite, *Dermanyssus gallinae* (Acari: Dermanyssidae). *Journal of Medical Entomology*, 19(6), 671-678.
- [8] El Adouzi, M., Arriaga-Jiménez, A., Dormont, L., Barthes, N., Labalette, A., Lapeyre, B., ... & Roy, L. (2020). Modulation of feed composition is able to make hens less attractive to the poultry red mite *Dermanyssus gallinae*. *Parasitology*.
- [9] Jalil, M., & Rodriguez, J. G. (1970a). Biology of and odor perception by *Fuscuropoda vegetans* (Acarina: Uropodidae), a predator of the house fly. *Annals of the Entomological Society of America*, 63(4), 935-938.
- [10] Jalil, M., & Rodriguez, J. G. (1970b). Studies of behavior of *Macrocheles muscaedomesticae* (Acarina: Macrochelidae) with emphasis on its attraction to the house fly. *Annals of the Entomological Society of America*, 63(3), 738-744.
- [11] McCormick, A. C., Unsicker, S. B., & Gershenson, J. (2012). The specificity of herbivore-induced plant volatiles in attracting herbivore enemies. *Trends in plant science*, 17(5), 303-310.
- [12] Barker, P. S. (1968). Bionomics of *Androlaelaps casalis* (Berlese)(Acarina: Laelapidae) a predator of mite pests of stored cereals. *Canadian Journal of Zoology*, 46(6), 1099-1102.
- [13] Roy, L., & Buronfosse, T. (2011). Using mitochondrial and nuclear sequence data for disentangling population structure in complex pest species: a case study with *Dermanyssus gallinae*. *PLoS One*, 6(7), e22305.
- [14] Durden, L. A., & Wilson, N. (1991). Parasitic and phoretic arthropods of sylvatic and commensal white-footed mice (*Peromyscus leucopus*) in central Tennessee, with notes on Lyme disease. *The Journal of parasitology*, 219-223.
- [15] Roy, L., Dowling, A. P., Chauve, C. M., & Buronfosse, T. (2010). Diversity of phylogenetic information according to the locus and the taxonomic level: an example from a parasitic mesostigmatid mite genus. *International journal of molecular sciences*, 11(4), 1704-1734.
- [16] Roy, L., El Adouzi, M., Moraza, M. L., Chiron, G., de Janti, E. V., Le Peutrec, G., & Bonato, O. (2017). Arthropod communities of laying hen houses: An integrative pilot study toward conservation biocontrol of the poultry red mite *Dermanyssus gallinae*. *Biological Control*, 114, 176-194.
- [17] Pyke, G. H. (1984). Optimal foraging theory: a critical review. *Annual review of ecology and systematics*, 15(1), 523-575.
- [18] Steidle, J. L., & Van Loon, J. J. (2003). Dietary specialization and infochemical use in carnivorous arthropods: testing a concept. *Entomologia Experimentalis et Applicata*, 108(3), 133-148.
- [19] Maeda, T. (2006). Genetic variation in foraging traits and life-history traits of the predatory mite *Neoseiulus womersleyi* (Acari: Phytoseiidae) among isofemale lines. *Journal of insect behavior*, 19(5), 573.

- [20] Nachappa, P., Margolies, D. C., Nechols, J. R., & Morgan, T. J. (2010). Response of a complex foraging phenotype to artificial selection on its component traits. *Evolutionary Ecology*, 24(4), 631-655.
- [21] Sokolowski, M. B. (1980). Foraging strategies of *Drosophila melanogaster*: a chromosomal analysis. *Behavior genetics*, 10(3), 291-302.
- [22] de Belle, J. S., & Sokolowski, M. B. (1987). Heredity of rover/sitter: alternative foraging strategies of *Drosophila melanogaster* larvae. *Heredity*, 59(1), 73-83.
- [23] Fitzpatrick, M. J., Feder, E., Rowe, L., & Sokolowski, M. B. (2007). Maintaining a behaviour polymorphism by frequency-dependent selection on a single gene. *Nature*, 447(7141), 210-212.
- [24] Ingram, K. K., Oefner, P., & Gordon, D. M. (2005). Task-specific expression of the foraging gene in harvester ants. *Molecular Ecology*, 14(3), 813-818.
- [25] George, E. A., Bröger, A. K., Thamm, M., Brockmann, A., & Scheiner, R. (2020). Inter-individual variation in honey bee dance intensity correlates with expression of the foraging gene. *Genes, Brain and Behavior*, 19(1), e12592.
- [26] Fujiwara, M., Sengupta, P., & McIntire, S. L. (2002). Regulation of body size and behavioral state of *C. elegans* by sensory perception and the EGL-4 cGMP-dependent protein kinase. *Neuron*, 36(6), 1091-1102.
- [27] Nosil, P., Feder, J. L., & Gompert, Z. (2021). How many genetic changes create new species?. *Science*, 371(6531), 777-779.
- [28] Roy, L., Dowling, A. P. G., Chauve, C. M., & Buronfosse, T. (2009a). Delimiting species boundaries within *Dermanyssus Duges*, 1834 (Acari: Dermanyssidae) using a total evidence approach. *Molecular Phylogenetics and Evolution*, 50(3), 446-470.
- [29] Roy, L., Dowling, A. P. G., Chauve, C. M., Lesna, I., Sabelis, M. W., & Buronfosse, T. (2009b). Molecular phylogenetic assessment of host range in five *Dermanyssus* species. In *Control of Poultry Mites (Dermanyssus)* (pp. 115-142). Springer, Dordrecht.
- [30] Seehausen, O. L. E., Takimoto, G., Roy, D., & Jokela, J. (2008). Speciation reversal and biodiversity dynamics with hybridization in changing environments. *Molecular ecology*, 17(1), 30-44.
- [31] Yang, L., Norris, E. J., Jiang, S., Bernier, U. R., Linthicum, K. J., & Bloomquist, J. R. (2020). Reduced effectiveness of repellents in a pyrethroid-resistant strain of *Aedes aegypti* (Diptera: culicidae) and its correlation with olfactory sensitivity. *Pest management science*, 76(1), 118-124.
- [32] Proffit, M., Khallaf, M. A., Carrasco, D., Larsson, M. C., & Anderson, P. (2015). 'Do you remember the first time?' Host plant preference in a moth is modulated by experiences during larval feeding and adult mating. *Ecology Letters*, 18(4), 365-374.
- [33] Stanczyk, N. M., Brookfield, J. F., Ignell, R., Logan, J. G., & Field, L. M. (2010). Behavioral insensitivity to DEET in *Aedes aegypti* is a genetically determined trait residing in changes in sensillum function. *Proceedings of the National Academy of Sciences*, 107(19), 8575-8580.
- [34] Mengoni, S. L., & Alzogaray, R. A. (2018). Deltamethrin-resistant German cockroaches are less sensitive to the insect repellents DEET and IR3535 than non-resistant individuals. *Journal of economic entomology*, 111(2), 836-843.
- [35] Deletre, E., Schatz, B., Bourguet, D., Chandre, F., Williams, L., Ratnadass, A., & Martin, T. (2016). Prospects for repellent in pest control: current developments and future challenges. *Chemoecology*, 26(4), 127-142.
- [36] Vassena, C. V., Cáceres, M., & Santo-Orihuela, P. L. (2019). Pyrethroid resistance associated with a decreased DEET repellency in the common bed bug (Hemiptera: Cimicidae). *Journal of economic entomology*, 112(2), 997-1000.
- [37] Valiente Moro, C., Fravallo, P., Amelot, M., Chauve, C., Zenner, L., & Salvat, G. (2007). Colonization and organ invasion in chicks experimentally infected with *Dermanyssus gallinae* contaminated by *Salmonella Enteritidis*. *Avian Pathology*, 36(4), 307-311.
- [38] Valiente Moro, C. V., De Luna, C. J., Tod, A., Guy, J. H., Sparagano, O. A., & Zenner, L. (2009). The poultry red mite (*Dermanyssus gallinae*): a potential vector of pathogenic agents. In *Control of Poultry Mites (Dermanyssus)* (pp. 93-104). Springer, Dordrecht.

- [39] Sparagano, O. A. E., George, D. R., Harrington, D. W. J., & Giangaspero, A. (2014). Significance and control of the poultry red mite, *Dermanyssus gallinae*. *Annual review of entomology*, 59, 447-466.
- [40] Decru, E., Mul, M., Nisbet, A., Vargas Navarro, A. H., Chiron, G., Walton, J., ... & Sleenckx, N. (2020). Possibilities for IPM strategies in European laying hen farms for improved control of the poultry red mite (*Dermanyssus gallinae*): details and state of affairs. *Frontiers in Veterinary Science*, 7, 874.
- [41] Zriki, G., Blatrix, R., Dadu, L., Soulié, A. S., Dijoux, J., Degueldre, D., ... & Roy, L. (2021). No deleterious effect of inundative releases of biological agents on native arthropod assemblages in poultry farms: A mesocosm experiment. *Biological Control*, 156, 104560.
- [42] Zriki, G., Blatrix R., Bicot D.J., Gimenez O., Soulié A.-S, Dadu L., Degueldre D., Chiron G., Sleenckx N., Roy L. (accepted, 2021) Population-level impact of native arthropod predators on the Poultry Red Mite *Dermanyssus gallinae*. *Journal of Experimental Zoology – Part A*. (accepted)
- [43] Conchou, L., Lucas, P., Meslin, C., Proffit, M., Staudt, M., & Renou, M. (2019). Insect odorscapes: from plant volatiles to natural olfactory scenes. *Frontiers in physiology*, 10, 972.
- [44] Bhowmick, B., Tang, Y., Lin, F., Øines, Ø., Zhao, J., Liao, C., ... & Han, Q. (2020). Comparative morphological and transcriptomic analyses reveal chemosensory genes in the poultry red mite, *Dermanyssus gallinae*. *Scientific reports*, 10(1), 1-12.
- [45] Burgess, S. T., Bartley, K., Nunn, F., Wright, H. W., Hughes, M., Gemmell, M., ... & Nisbet, A. J. (2018). Draft genome assembly of the poultry red mite, *Dermanyssus gallinae*. *Microbiology resource announcements*, 7(18).
- [46] de Villemereuil, P., & Gaggiotti, O. E. (2015). A new FST-based method to uncover local adaptation using environmental variables. *Methods in Ecology and Evolution*, 6(11), 1248-1258.
- [47] Arribas, P., Andújar, C., Moraza, M. L., Linard, B., Emerson, B. C., & Vogler, A. P. (2020). Mitochondrial metagenomics reveals the ancient origin and phylodiversity of soil mites and provides a phylogeny of the Acari. *Molecular biology and evolution*, 37(3), 683-694.
- [48] Rubin, C. J., Zody, M. C., Eriksson, J., Meadows, J. R., Sherwood, E., Webster, M. T., ... & Andersson, L. (2010). Whole-genome resequencing reveals loci under selection during chicken domestication. *Nature*, 464(7288), 587-591.
- [49] Miao, Y. W., Peng, M. S., Wu, G. S., Ouyang, Y. N., Yang, Z. Y., Yu, N., ... & Zhang, Y. P. (2013). Chicken domestication: an updated perspective based on mitochondrial genomes. *Heredity*, 110(3), 277-282.
- [50] Hata, A., Nunome, M., Suwanasopee, T., Duengkae, P., Chaiwatana, S., Chamchumroon, W., ... & Srikulnath, K. (2021). Origin and evolutionary history of domestic chickens inferred from a large population study of Thai red junglefowl and indigenous chickens. *Scientific reports*, 11(1), 1-15.
- [51] Huber, K., Zenner, L., & Bicot, D. J. (2011). Modelling population dynamics and response to management options in the poultry red mite *Dermanyssus gallinae* (Acari: Dermanyssidae). *Veterinary parasitology*, 176(1), 65-73.
- [52] Roy, L., Giangaspero, A., Sleenckx, N., Øines, Ø. (accepted) Who is *Dermanyssus gallinae*? Genetic structure of populations and critical synthesis of the current knowledge. *Frontiers in*

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