

Publications

The names of the students under supervision are underlined.

* These authors contributed equally to the study.

• Publications in international peer-reviewed journals

[28] Garinie T, Pelletier C, Pincebourde S, **Foray V**, Lelièvre Y, Nusillard W, Thiéry D, Moreau J. (2026) Fungicide and climate warming drive bioenergetic reconfiguration across the life cycle of the European grapevine moth *Lobesia botrana*. *Journal of Insect Physiology*, 173. <https://doi.org/10.1016/j.jinsphys.2026.105034>

[27] Deconninck G*, Raynaud-Berton B*, Boulembert M, Chabrerie O, Couty A, Dedeine F, Eslin P, **Foray V**, Georges R, Gibert P, Mouton L, Pincebourde S, Renault D, Suppo C, Colinet H. (2026) A roadmap to key traits of invasive Drosophilidae. *Biological Reviews*, 101: 1805-1829. <https://doi.org/10.1002/brv.70148>

[26] Destierdt W*, Deconninck G*, Crespo JE, Moyer E, **Foray V**, Chabrerie O, Pincebourde S. (2026) Temperature overrides nutritional cues for optimal oviposition decision in a polyphagous invasive insect. *Journal of Experimental Biology*, 229 (3): jeb251743. <https://doi.org/10.1242/jeb.251743>

[25] Larges J*, Deconninck G*, Ulmer R, **Foray V**, Le Bris N, Chorin M, Colinet H, Chabrerie O, Eslin P, Couty A. (2026) Winter fruit contribution to the performance of the invasive fruit fly *Drosophila suzukii* under different thermal regimes. *Insect Science*, 33: 377-395. <https://doi.org/10.1111/1744-7917.13494>

[24] Deconninck G, Boulembert M, Eslin P, Couty A, Bonis A, Borowiec N, Buch I, Colinet H, Delbac L, Dubois F, **Foray V**, Gallet-Moron E, Lemauviel-Lavenant S, Ilopis S, Odoux JF, Pincebourde S, Thaon M, Till-Bottraud I, Chabrerie O. (2024) Environmental factors driving infestations of a keystone winter fruit by an invasive and a native fruit fly. *Arthropod-Plant Interactions*, 18(5): 867-880. <https://doi.org/10.1007/s11829-024-10073-6>

[23] Deconninck G, Larges J, Henri H, Beaugeard L, **Foray V**, Pincebourde S. (2024) *Wolbachia* improves the performance of an invasive fly after a diet shift. *Journal of Pest Science*, 97(4): 2087-2099. <https://doi.org/10.1007/s10340-023-01739-w>

[22] Clavé C, Sugio A, Morlière S, Pincebourde S, Simon JC, **Foray V**. (2022) Physiological costs of facultative endosymbionts in aphids assessed from energy metabolism. *Functional Ecology*, 36(10): 2580-2592. <https://doi.org/10.1111/1365-2435.14157>

[21] Attia S, Renoz F, Pons I, Louâpre P, **Foray V**, Piedra JM, Sanané I, Le Goff G, Lognay G, Hance T. (2022) The aphid facultative symbiont *Serratia symbiotica* influences the foraging behaviors and the life-history traits of the parasitoid *Aphidius ervi*. *Entomologia Generalis*, 42(1): 21-33. <https://doi.org/10.1127/entomologia/2021/1274>

[20] Iltis C, Tougeron K, Hance T, Louâpre P, **Foray V**. (2022) A perspective on insect-microbe holobionts facing thermal fluctuations in a climate-change context. *Environmental Microbiology*, 24(1): 18-29. <https://doi.org/10.1111/1462-2920.15826>

[19] Jerbi-Elayed M, **Foray V**, Tougeron K, Lebdi-Grissa K, Hance T. (2021) Developmental Temperature Affects Life-History Traits and Heat Tolerance in the Aphid Parasitoid *Aphidius colemani*. *Insects*, 12(10): 852. <https://doi.org/10.3390/insects12100852>

[18] Renoz F, **Foray V**, Amboise J, Baa-Puyoulet P, Bearzatto B, Mendez GL, Grigorescu AS, Mahillon J, Mardulyn P, Gala JL, Calevro F, Hance T. (2021) At the Gate of Mutualism: Identification of Genomic Traits Predisposing to Insect-Bacterial Symbiosis in Pathogenic

Strains of the Aphid Symbiont *Serratia symbiotica*. *Frontiers in cellular and infection microbiology*, 11: 588. <https://doi.org/10.3389/fcimb.2021.660007>

[17] Cheignon G, **Foray V**, Pérez-Jiménez MM, Libro S, Chung M, Foster JM, Landmann F. (2021) Dual RNAseq analyses at soma and germline levels reveal evolutionary innovations in the elephantiasis-agent *Brugia malayi*, and adaptation of its *Wolbachia* endosymbionts. *PLoS Neglected Tropical Diseases*, 15: e0008935. <https://doi.org/10.1371/journal.pntd.0008935>

[16] Renoz F, Pons I, Noël C, Lebdi-Grissa K, **Foray V**, Hance T. (2020) Facultative symbionts associated with aphid populations in citrus orchards in northern Tunisia. *European Journal of Entomology*, 117: 149-156. <https://doi.org/10.14411/eje.2020.017>

[15] Renoz F, Pons I, Vanderpoorten A, Bataille G, Noël C, **Foray V**, Pierson V, Hance T. (2019) Evidence for Gut-Associated *Serratia symbiotica* in Wild Aphids and Ants Provides New Perspectives on the Evolution of Bacterial Mutualism in Insects. *Microbial Ecology*, 78 (1): 159-169. <https://doi.org/10.1007/s00248-018-1265-2>

[14] Pirotte J, Lorenzi A, **Foray V**, Hance T. (2018) Impact of differences in nutritional quality of wingless and winged aphids on parasitoid fitness. *Journal of Experimental Biology*, 221: jeb185645. <https://doi.org/10.1242/jeb.185645>

[13] **Foray V***, Pérez-Jiménez MM*, Fattouh N, Landmann F. (2018) *Wolbachia* control stem cell behavior and stimulate germline proliferation in filarial nematodes. *Developmental Cell*, 45: 198-211. <https://doi.org/10.1016/j.devcel.2018.03.017>

[12] Fakour S, Ambroise J, Renoz F, **Foray V**, Gala JL, Hance T. (2018) A large-scale field study of bacterial communities in cereal aphid populations across Morocco. *FEMS Microbiology Ecology*, 94: fiy003. <https://doi.org/10.1093/femsec/fiy003>

[11] Grigorescu AS, Renoz F, Sabri A, **Foray V**, Hance T & Thonart P. (2017) Accessing the hidden microbial diversity of aphids: an illustration of how culture dependent methods can be used to decipher the insect microbiota. *Microbial Ecology*, 45: 1035-1048. <https://doi.org/10.1007/s00248-017-1092-x>

[10] Renoz F, Champagne A, Degand H, Faber AM, Morsomme P & **Foray V**, Hance T. (2017) Toward a better understanding of the mechanisms of symbiosis: a comprehensive proteome map of a nascent insect symbiont. *PeerJ*, 5: e3291. <https://doi.org/10.7717/peerj.3291>

[9] Renoz F, Noël C, Errachid A, **Foray V** & Hance T. (2015) Infection Dynamic of Symbiotic Bacteria in the Pea Aphid *Acyrtosiphon pisum* Gut and Host Immune Response at the Early Steps in the Infection Process. *PlosOne*, 10: e0122099. <https://doi.org/10.1371/journal.pone.0122099>

[8] Jerbi-Elayed M, Lebdi-Grissa K, **Foray V**, Muratori F & Hance T. (2015) Multiple trait estimation of heat shock effect on the fitness of *Aphidius colemani* Viereck (Hymenoptera: Aphidiinae). *Entomologia Experimentalis et Applicata*, 155: 18-27. <https://doi.org/10.1111/eea.12273>

[7] **Foray V**, Grigorescu A, Sabri A, Haubruge E, Lognay G, Francis F, Fauconnier ML, Thonart P & Hance T. (2014) Whole-genome sequence of *Serratia symbiotica* strain CWBI2.3, a free-living symbiont of the Black Bean Aphid *Aphis fabae*. *Genome Announcements*, 2: e00767-14. <https://doi.org/10.1128/genomea.00767-14>

[6] **Foray V**, Desouhant E & Gibert P. (2014) The impact of thermal fluctuations on reaction norms in specialist and generalist parasitic wasps. *Functional Ecology*, 28: 411-423. <https://doi.org/10.1111/1365-2435.12171>

[5] **Foray V**, Desouhant E, Voituron Y, Larvor V, Renault D, Colinet H & Gibert P. (2013) Does cold tolerance plasticity correlate with the thermal environment and metabolic profiles of a parasitoid wasp? *Comparative Biochemistry & Physiology Part A: Molecular & Integrative Biology*, 164: 77-83. <https://doi.org/10.1016/j.cbpa.2012.10.018>

[4] **Foray V**, Henri H, Martinez S, Gibert P & Desouhant E. (2013) Occurrence of arrhenotoky and thelytoky in a parasitic wasp: effect of endosymbionts or existence of two distinct reproductive modes? *European Journal of Entomology*, 110: 103-107. <http://www.eje.cz/pdfs/110/1/103>

[3] Amat I, Besnard S, **Foray V**, Pelosse P, Bernstein C & Desouhant E. (2012) Fuelling flight in a parasitic wasp: which energetic substrate to use? *Ecological Entomology*, 37: 480-489. <https://doi.org/10.1111/j.1365-2311.2012.01388.x>

[2] **Foray V***, Péliesson PF*, Bel-Venner MC, Desouhant E, Venner S, Menu F, Giron D & Rey B. (2012) A handbook for uncovering the complete energetic budget in insects: the van Handel's methods (1985a, b) revisited. *Physiological Entomology*, 37: 295-302. <https://doi.org/10.1111/j.1365-3032.2012.00831.x>

[1] **Foray V**, Gibert P & Desouhant E. (2011) Differential thermal performance curves in response to different habitats in the parasitoid *Venturia canescens*. *Naturwissenschaften*, 98: 683-691. <https://doi.org/10.1007/s00114-011-0818-8>

- **Published proceedings of international conferences**

[2] Bressac C, Goubault M, **Foray V**, Drezen JM, Beukeboom LW. (2026) From Fundamental Laboratory to Applied Field Research: Entomophagous Insects as Models of Interest to a Broad Scientific Community. *Entomologia Experimentalis et applicata*, 174(8): 797–800. <https://doi.org/10.1111/eea.70149>.

[1] Chardonnet F, Delava E, **Foray V**, Multeau C, Vigneron A, Mondy N. (2011) The French touch in entomological biology: synthesis of the “16th Colloque Biologie de l’Insecte”. *Annales de la Société Entomologique de France*, 47: 524-527.

- **Public outreach publications**

[1] **Foray V**, Deconninck G, Leclerc M, Pincebourde S. (2022) Comment les insectes gèrent à leur échelle le changement climatique. *The Conversation*