**2018**

Blossey, B., P. Häfliger, L. Tewksbury, A. Dávalos, R. Casagrande. 2018. Host specificity and risk assessment of *Archanara genminpuncta* and *Archanara neurica*, two biological control agents of invasive *Phragmites australis* in North America. Biological Control 125:98-112. <https://doi.org/10.1016/j.biocontrol.2018.05.019>.

Blossey, B., P. Häfliger, L. Tewksbury, A. Dávalos, R. Casagrande. 2018. Complete host specificity test plant list and associated data to assess host specificity of *Archanara geminipuncta* and *Archanara neurica*, two potential biocontrol agents for*Phragmites australis*in North America. Data in Brief 19:1755-1764. <https://doi.org/10.1016/j.dib.2018.06.068>.

Broadley, H. J. 2018. Impact of native natural enemies on populations of the invasive winter moth, (*Operophtera brumata* L) in the northeast United States. Ph.D. dissertation, University of Massachusetts Amherst, Amherst, MA.

Bourchier, R.S., N. Cappuccino, A. Rochette, J. des Rivières, S.M. Smith, L. Tewksbury, R. Casagrande. 2018. Establishment of *Hypena opulenta* (Lepidoptera: Erebidae) on Vincetoxicum rossicum in Ontario, Canada. Biocontrol Science and Technology. https://doi.org/10.1007/s10526-018-9871-y

Darr, Molly N., Rachel K. Brooks, Nathan P. Havill, E. Richard Hoebeke, and Scott M. Salom. 2018. Phenology and synchrony of *Scymnus coniferarum*(Coleoptera: Coccinellidae) with multiple adelgid species in the Puget Sound, WA.  Forests 9, 558.  13 pp.

Dunn, A.R. “[Creating habitat for beneficial insects – early summer 2018 project update](https://blogs.cornell.edu/biocontrolbytes/2018/06/18/creating-habitat-for-beneficial-insects-early-summer-2018-project-update/).” *Biocontrol Bytes*. New York State Integrated Pest Management Program, Cornell University, 18 June 2018. Accessed 25 June 2018.

Dunn, A.R., Eshenaur, B., Lamb, E. “[Creating habitat for beneficial insects: Project update at the end of the first year](https://blogs.cornell.edu/biocontrolbytes/2018/11/30/creating-habitat-for-beneficial-insects-project-update-at-the-end-of-the-first-year/)” *Biocontrol Bytes*. New York State Integrated Pest Management Program, Cornell University, 30 November 2018. Web, accessed 30 November 2018.

Dunn, A., Eshenaur, B., Lamb, E. “Demonstrating creation of habitat for beneficial insects - Year 1” New York State Integrated Pest Management Program. 2018.

Morris, E.E., Stock, S.P., Castrillo, L., Williams, D.W., Hajek, A.E. 2018. Characterisation of the dimorphic *Deladenus* *beddingi* n. sp. and its associated woodwasp and fungus. Nematology 20(10): 939-955. DOI: [10.1163/15685411-00003188](https://doi.org/10.1163/15685411-00003188)

Hajek, A.E., Eilenberg, J. 2018. *Natural Enemies: An Introduction to Biological Control, 2nd edition*. Cambridge University Press, Cambridge, UK, 439 pp. **[Book]**DOI: 10.1017/9781107280267

Hajek, A.E., Steinkraus, D.C., Castrillo, L.A. 2018. Sleeping beauties: Horizontal transmission by entomophthoralean fungi via resting spores. Insects MDPI 9(3): 102 (23 pp.). DOI: [10.3390/insects9030102](https://doi.org/10.3390/insects9030102)

Hajek, A.E., Shapiro-Ilan, D. 2018. General concepts on ecology of invertebrate diseases, pp. 3-18. In: Hajek, A.E., Shapiro-Ilan, D. (eds.), Ecology of Invertebrate Diseases. John Wiley & Sons, Hoboken, NJ. ISBN-10: 1119256070 ISBN-13: 978-1119256076

Hajek, A.E., Meyling, N.V. 2018. Ecology of Invertebrate Pathogens: Fungi, pp. 327-377.  In: Hajek, A.E., Shapiro-Ilan, D. (eds.), Ecology of Invertebrate Diseases. John Wiley & Sons, Hoboken, NJ. ISBN-10: 1119256070 ISBN-13: 978-1119256076

Hajek, A.E., Shapiro-Ilan, D. (eds.) 2018. Ecology of Invertebrate Diseases. John Wiley & Sons, Hoboken, NJ, 657 pp. ISBN-10: 1119256070 ISBN-13: 978-1119256076 [Book]

Hajek, A.E., Tobin, P.C., Kroll, S.A., Long, S.J. 2018. Symbionts mediate oviposition behavior in invasive and native woodwasps. Agric. For. Entomol. 20: 442-450. DOI: 10.1111/afe.12276

Jun-Ce, Tian, Yang Chen, Anthony M. Shelton, Xu-Song Zheng, Hong-Xing Xu, Zhong-Xian Lu. 2018. Effects of twelve sugars on the longevity and nutrient reserves of rice striped stem borer *Chilo suppressalis*and its parasitoid *Apanteles chilonis*. J. Econ. Entomol. 112 (5) 2142-2148

Pilarska, D., Georgiev, G., Dobreva, M., Takov, D., Mirchev, P., Doychev, D., Georgieva, M., Nachev, R., Dermendzhiev, P., Draganova, S., Linde, A., Hajek, A.E. 2018. Pathogens and parasitoids of forest pest insects in the region of Forest Protection Station Plovdiv (Bulgaria) during the period 1990 – 2017. Silva Balcanica 19(3): 49-59.

Shapiro-Ilan, D., Hajek, A.E. 2018. Conclusions, pp. 627-636. In: Hajek, A.E., Shapiro-Ilan, D. (eds.), Ecology of Invertebrate Diseases. John Wiley & Sons, Hoboken, NJ. ISBN-10: 1119256070 ISBN-13: 978-1119256076

Tian, J-C., XP Wang, Y. Chen, J. Romeis, S.E. Naranjo, R.H, Hellmich, P. Wang and A. M. Shelton. 2018. Bt cotton producing Cry2Ab does not harm two parasitoids, *Cotesia marginiventris* and *Copidosoma floridanum*. Scientific Reports. 8:307. doi:10.1038/ s41598-017-18620-3

Sumpter, Kenton, Tom McAvoy, Carlyle Brewster, Albert Mayfield III, and Scott Salom. 2018. Assessing an integrated biological and chemical control strategy for managing hemlock woolly adelgid in southern Appalachian forests.  Forest Ecology and Management.  411: 12-19.

Toland, Ashley, Carlyle Brewster, Kaitlin Mooneyham, and Scott Salom.  2018. First report of establishment of *Laricobius osakensis* (Coleoptera: Derodontidae), a biological control agent for hemlock woolly adelgid, *Adelges tsugae* (Hemiptera: Adelgidae) and recovery of other *Laricobius* spp. in the eastern U.S. Forests.  9, 496. 13 pp.

Willden, S., and Loeb, G. 2018. Efficacy of two predatory mites (*Neoseiulus fallacis* and *Phytoseiulus persimilis*in controlling two-spotted spider mites (*Tetranychus urticae*) on strawberry grown under low tunnels in New York.  Contributed talk at the annual meeting of ESA in Vancouver, Canada (oral presentation at conference)

Willden, S., Loeb, G. 2018. Efficacy of two predatory mites (*Neoseiulus fallacis* and *Phytoseiulus persimils*) in controlling two-spotted spider mites (*Tetranychus urticae*) on low tunnel grown strawberry in New York. Great Lakes Fruit Workers meeting held in Ithaca, NY 8 November 2018.  Graduate student presented 15 minute talk.  Approximately 35 researchers and extension educators and industry representatives in audience.  Contact hours = 8.75. (oral extension presentation).

Zúbrik, M., Pilarska, D., Kulfan, J., Barta, M., Hajek, A.E., Bittner, T.D., Zach, P., Takov, D., Kunca, A., Rell, S., Hirka, A., Csóka, G. 2018. Phytophagous larvae occurring in Central and Southeastern European oak forests as a potential host of *Entomophaga maimaiga* (Entomophthorales: Entomophthoraceae) – A field study. J. Invertebr. Pathol. 155: 52-54. [doi.org/10.1016/j.jip.2018.05.003](https://doi.org/10.1016/j.jip.2018.05.003)

Zúbrik,M., Špilda, I., Pilarska, D., Hajek, A.E., Takov, D., Nikolov, C., Kunca, A., Pajtík, J., Lukášová, J. and Holuša, J. 2018. Distribution of the entomopathogenic fungus *Entomophaga maimaiga* (Entomophthorales: Entomophthoraceae) at the northern edge of its range in Europe. Ann. Appl. Biol. 173: 35-41. DOI: 10.1111/aab.12431

**2019**

Bittner, T.D., Havill, N., Caetano, I.A.L., Hajek, A.E. 2019. Efficacy of Kamona strain*Deladenus siricidicola* nematodes for biological control of *Sirex noctilio* in North America and hybridization with wild-type conspecifics. Neobiota 44: 39-55. DOI:  10.3897/neobiota.44.30402

Bittner, T.D., Havill, N., Caetano, I.A.L., Hajek, A.E. 2019. Efficacy of Kamona strain *Deladenus siricidicola*nematodes for biological control of *Sirex noctilio*in North America and hybridization with wild-type conspecifics. Neobiota 44: 39-55. DOI:  10.3897/neobiota.44.30402

Blossey, B., S.B. Endriss, R. Casagrande, P.Häfliger, H. Hinz, A. Dávalos, C. Brown-Lima, L. Tewksbury, R. S. Bourchier. 2019. When misconceptions impede best practices: evidence supports biological control of *Phragmites*.  Biol. Invasions. <https://doi.org/10.1007/s10530-019-02166-8>

Bourchier R.S, N. Cappuccino, A. Rochette, J. des Rivieres, S.M. Smith, L. Tewksbury, R. Casagrande. 2019. Establishment of *Hypena opulenta* (Lepidoptera:Erebidae) on   Vincetoxicum rossicum in Ontario, Canada. Biocontrol Science and Technology. 29(9):917-923.

Broadley H, Kula RR, Boettner GH, Andersen JC, Griffin BP, Elkinton JS. 2019. Recruitment of native parasitic wasps to populations of the invasive winter moth in the Northeastern United States. *Biological Invasions*. 9:2871–2890. https://doi.org/10.1007/s10530-019-02019-4

Casagrande, R.A., P. Häfliger, H.L.Hinz, L. Tewksbury, B. Blossey. 2019. Grasses as appropriate targets in weed biocontrol: is the common reed, *Phragmites australis*, an anomaly? Biocontrol. 63(3):391-403. https://doi.org/10.1007/s10526-018-9871-y

Clifton, E.H., Castrillo, L.A., Gryganskyi, A., Hajek, A.E. 2019. A pair of native fungal pathogens drives decline of a new invasive herbivore. Proc. Natl. Acad. Sci. USA 116 (19): 9178-9180. <https://doi.org/10.1073/pnas.1903579116>. (+ cover).

Clifton, E.H., Castrillo, L.A., Gryganskyi, A., Hajek, A.E. 2019. A pair of native fungal pathogens drives decline of a new invasive herbivore. Proc. Natl. Acad. Sci. USA 116 (19): 9178-9180. <https://doi.org/10.1073/pnas.1903579116>. (+ cover).

Clifton, E.H., Cortell, J., Ye, L., Rachman, T.W., Hajek, A.E. 2019. Impacts of *Metarhizium* *brunneum* F52 infection on the flight performance of Asian longhorned beetles, *Anoplophora glabripennis*. PLoS ONE 14(9): e0221997. <https://doi.org/10.1371/journal.pone.0221997>

Clifton, E.H., Gardescu, S., Behle, R.W., Hajek, A.E. 2019. Asian longhorned beetle bioassays to evaluate formulation and dose response effects of *Metarhizium*microsclerotia. J. Invertebr. Pathol. 163: 64-66.

Clifton, E.H., Gardescu, S., Behle, R.W., Hajek, A.E. 2019. Evaluating *Metarhizium brunneum*F52 microsclerotia with hydrogel humectant under forest conditions and dose-response by Asian longhorned beetles. J. Invertebr. Pathol. 163: 64-66.

Drummond, F.A., J. Collins, and E. Ballman. 2019*.*Population dynamics of spotted wing drosophila (*Drosophila suzukii*(Matsumura)) in Maine wild blueberry. Insects 10(7): 205-229. https://doi.org/10.3390/insects10070205

Drummond, F.A. 2019.Common St. John’s wort: An invasive plant in Maine wild blueberry production and its potential for indirectly supporting ecosystem services. Environ Entomol.

Drummond, F.A., Groden, E. 2019. Have given several talks to wild blueberry growers in Maine on the importance of natural enemy conservation and tactics for conservation. <https://ecommons.cornell.edu/handle/1813/64551>. Web, accessed 12 Nov 2019

Duan, JJ., Van Driesche, RG., Crandall, RS., Schmude, JM., Rutledge, CE., Slager, BH., Gould, JR. Elkinton, JS., 2019. Establishment and Early Impact of *Spathius galinae* (Hymenoptera: Braconidae) on Emerald Ash Borer (Coleoptera: Buprestidae) in the Northeastern United States. *Journal of Economic Entomology*.  112: 2121-2130.

Elkinton, J.S., Bittner, T.D., Pasquarella, V.J., Boettner, G.H., Liebhold, A.M., Gould, J.R., Faubert, H., Tewksbury, L., Broadley, H.J., Havill, N.P., Hajek, A.E. 2019. Relating aerial deposition of *Entomophaga maimaiga* conidia to mortality of gypsy moth (Lepidoptera: Erebidae) larvae and nearby defoliation. Environ. Entomol. 48: 1214-1222.

Elkinton, J.S, T.D. Bittner, V.J. Pasquarella, G.H. Boettner, A.M. Liebhold, J.R. Gould, H. Faubert, L. Tewksbury, H.J. Broadley, N.P. Havill, A.E. Hajek. 2019. Relating aerial deposition of *Entomophaga maimaiga* to mortality of gypsy moth (Lepidoptera: Erebidae) larvae and nearby defoliation.  48(5):1214-1222 <https://doi.org/10.1016/j.dib.2018.06.068>.

Foley, J. R., McAvoy, T. J., Dorman, S., Bekelja, K., Kring, T. J., & Salom, S. M. 2019. Establishment and distribution of *Laricobius* spp.(Coleoptera: Derodontidae), a predator of hemlock woolly adelgid, within the urban environment in two localities in southwest Virginia. Journal of Integrated Pest Management, *10*(1), 30.

Girod, P and G.C. Hamilton. 2019. Risques et bénéfices de la redistribution mondiale de *Trissolcus japonicus* agent de biocontrôle contre *Halyomorpha halys*. 41ème journée des Entomophagistes. Antibes, France, May 27-29, 2019 (paper presented at a conference).

Girod, P., and G.C. Hamilton. 2019. *Halyomorpha halys* and *Trissolcus japonicus* in New Jersey - What’s next? Entomological Society of America annual meeting. November 17-20. (paper presented at a conference)

Hurst, M.R., S. A. Joes, A. Beattie, C. Van, A. M. Shelton, H. L. Collins, M. Brownbridge. 2019. Assessment of *Yersinia entomophaga* as a control agent of the diamondback moth *Plutella xylostella*. Journal of Invertebrate Pathology 162: 19-25.

Preston, C.E., Agnello, A.M., Vermeylen, F., Hajek, A.E.  2019.  Impact of *Nosema maddoxi* on the survival, development, and female fecundity of *Halyomorpha halys*.  J. Invert. Pathol. 169 <https://doi.org/10.1016/j.jip.2019.107303>

Preston, C. 2019. The prevalence, distribution and impact of *Nosema maddoxi* infecting the invasive brown marmorated stink bug. M.S. Dissertation, Cornell University.

Romeis, J., Naranjo, S.E., Meissle, M., Shelton, A.M., 2019. Genetically engineered crops help support conservation biological control, Biological Control 130: 136-154, doi: https://doi.org/10.1016/j.biocontrol. 2018.10.001

Rowen, E., Tooker, J.F. and Blubaugh, C.K., 2019. Managing fertility with animal waste to promote arthropod pest suppression. Biological Control, 134, pp.130-140.

Wantuch, Holly, Nathan Havill, Edward Hoebeke, Thomas Kuhar, and Scott Salom.  2019. Predators associated with the pine bark adelgid (Hemiptera: Adelgidae), a native insect in Appalachian forests, United States of America, in its southern range.  Canadian Entomologist. 151: 73-84.

BMSB: High Adult Trap Catches Continue This Week. September 19th, 2019 (https://blogs.cornell.edu/jentsch/2019/09/19/bmsb-high-adult-trap-catches-continue-this-week-september-19th-2019/)

BMSB: 2nd Gen. Thresholds in 3 NYS Counties. August 30th, 2019 (https://blogs.cornell.edu/jentsch/2019/08/30/bmsb-2nd-gen-thresholds-in-3-nys-counties-august-30th-2019/)

Section 18 EPA Approval for Bifenthrin in 2019. BMSB populations on the rise in Hudson Valley Orchards. July 29th, 2019 (https://blogs.cornell.edu/jentsch/2019/07/29/section-18-epa-approval-for-bifenthrin-in-2019-bmsb-populations-on-the-rise-in-hudson-valley-orchards-july-29th-2019/)

Factors Contributing To The 2019 Hudson Valley Insect Pest Management Anomalies, October 21, 2010 (https://blogs.cornell.edu/jentsch/2019/10/21/factors-contributing-to-the-2019-hudson-valley-insect-pest-management-anomalies/)

http://blogs.cornell.edu/jentsch/a-national-march-madness-citizen-science-project-to-find-the-brown-marmorated-stink-bug-2017/

http://blogs.cornell.edu/jentsch/biological-control-of-the-brown-marmorated-stink-bug-in-new-york-state/

https://blogs.cornell.edu/jentsch/2019/03/13/join-in-hvrl-efforts-for-redistribution-of-samurai-wasp-in-nys-in-2019/

Girod, P and G.C. Hamilton. 2019. Risques et bénéfices de la redistribution mondiale de Trissolcus japonicus agent de biocontrôle contre Halyomorpha halys. 41ème journée des Entomophagistes. Antibes, France, May 27-29, 2019

Girod P., and G.C. Hamilton. 2019. Halyomorpha halys and Trissolcus japonicus in New Jersey - What’s next?. Entomological Society of America annual meeting. November 17-20.

**2020**

Brooks, R. K., A. L. Snyder, E. Bush, S. M. Salom, and A. Baudoin.  2020.  First report of Verticillium wilt caused by *Verticillium dahliae* impacting *Ailanthus altissima* (tree of heaven) in Virginia, US.  Plant Disease.  104 (5): 1558.  <https://doi.org/10.1094/PDIS-10-19-2064-PDN>

Brooks, Rachel, Kristen Wickert, Antonius Baudoin, Matthew Kasson, and Scott Salom.  2020. Field-inoculated *Ailanthus altissima* stands reveal the biological control potential of *Verticillium nonalfalfae* in the Mid-Atlantic region of the United States. Biological Control. 148: 104298  <https://doi.org/10.1016/j.biocontrol.2020.104298>

Blossey, B., Endriss, S.B., Casagrande, R., Häfliger, P., Hinz, H., Dávalos, A., Brown-Lima, C., Tewksbury, L. and Bourchier, R.S., 2020. When misconceptions impede best practices: Evidence supports biological control of invasive Phragmites. Biological Invasions, 22, pp.873-883.

Chandler, JL, Elkinton, JS, Duan, JJ, 2020. Cold hardiness in *Spathius galinae* (Hymenoptera: Braconidae), a larval parasitoid introduced for biocontrol of emerald ash borer in North America. *Biological* *Control*. <https://doi.org/10.1016/j.biocontrol.2020.104343>.

Clifton, E., Hajek, A.E., Jenkins, N.E., Roush, R.T., Rost, J.P., Biddinger, D.J.  2020. Applications of *Beauveria bassiana* (Hypocreales: Cordycipitaceae) to control populations of spotted lanternfly, *Lycorma delicatula* (Hemiptera: Fulgoridae), in semi-natural landscapes and on grapevines. Environ. Entomol. (in press).

Clifton, E.H., Jaronski, S.T., Hajek, A.E. 2020. Virulence of commercialized fungal entomopathogens against Asian longhorned beetle, *Anoplophora glabripennis*. J. Ins. Sci. 20(2): (online).

Crandall, Ryan S., Carrie S. Jubb, Albert E. Mayfield III, Biff Thompson, Thomas J. McAvoy, Scott M. Salom, and Joseph S. Elkinton. 2020. Rebound of *Adelges tsugae* spring generation following predation on overwintering generation ovisacs by the introduced predator *Laricobius nigrinus* in the eastern United States**.**Biological Control.  145:   104264.  <https://doi.org/10.1016/j.biocontrol.2020.104264>

Duan, JJ, Bauer, LS, Van Driesche, R, Schmude, JM, Petrice, T, Chandler, JL, Elkinton, J, 2020. Effects of extreme low winter temperatures on the overwintering survival of the introduced larval parasitoids *Spathius galinae* and *Tetrastichus planipennisi*: implications for biological control of emerald ash borer in North America. *Journal of Economic Entomology*, 113: 1145–1151.

EB LaDouceur, E. and Hajek, A.E., 2021. Histologic lesions of experimental infection with Lymantria dispar multicapsid nucleopolyhedrovirus and Lymantria dispar cytoplasmic polyhedrosis virus in European gypsy moth caterpillars (Lymantria dispar dispar). *Veterinary Pathology*, *58*(6), pp.1152-1157.

Hajek, A.E. 2020. *Beneficial Insects* by David V. Alford (book review). Quarterly Review of Biology 95: 69-70.

Hajek, A.E. and Morris, E.E., 2021. Natural enemies: biology of parasitic nematodes attacking Sirex noctilio and history of their use for biological control in the southern hemisphere. Biology and ecology of Sirex noctilio in North America. Morgantown, West Virginia: USDA, Forest Service, pp.49-58.

Hajek, A.E. and Castrillo, L.A., 2021. Obligate mutualism of Sirex noctilio with fungi. *Biology and Ecology of Sirex noctilio. USDA Forest Service FHAAST-2019-01*, pp.30-37.

Jubb, Carrie S.  Ariel Heminger, Albert E. Mayfield III, Joseph Elkinton, Gregory J. Wiggins, Jerome F. Grant, Jeff Lombardo, Thomas McAvoy, Ryan Crandall and Scott Salom.  2020.. Impact of the biological control agent, *Laricobius nigrinus*, on hemlock woolly adelgid sistens generation and their ovisacs in the eastern United States. Biological Control. 143: 104180.  <https://doi.org/10.1016/j.biocontrol.2019.104180>

Kereselidze, M., Pilarska, D., Linde, A., Sanscrainte, N.D., Hajek, A.E. 2020. *Nosema maddoxi* infecting the brown marmorated stink bug, *Halyomorpha halys*(Stål) (Hemiptera: Pentatomidae), in the Republic of Georgia. Biocontr. Sci. Technol.

Kreitman, D., Keena, M.A., Nielsen, A.L. and Hamilton, G., 2021. Effects of temperature on development and survival of nymphal Lycorma delicatula (Hemiptera: Fulgoridae). *Environmental Entomology*, *50*(1), pp.183-191.

Krivak-Tetley, F. and Hajek, A.E., 2021. Host range and life history of Sirex noctilio in North America. *Biology and ecology of Sirex noctilio in North America. Morgantown, West Virginia: USDA Forest Service*, pp.10-21.

Lake, E.C., L. Tewksbury, M.C. Smith, F.A. Dray, Jr., A. Russell, P.T. Madeira, M.B. Rayamajhi, and R.A. Casagrande. 2020. Potential for negative interactions between successful arthropod and weed biological control programs: a case study with *Lilioceris* species. Biological Control. 144: <https://doi.org/10.1016/j.biocontrol.2020.104218>

Liebhold, A.M. and Hajek, A.E., 2021. Global biogeography of Sirex noctilio with emphasis on North America. Biology and ecology of Sirex noctilio in North America. Morgantown, West Virginia: USDA Forest Service, pp.1-9.

Ludwick D., Morrison III, W.R., Acebes-Doria, A.L., Agnello A.M., Bergh, J.C., Buffington, M.L., Hamilton, G.C., Harper, J.K., Hoelmer, K.A., Krawczyk, G., Kuhar, T.P., Pfeiffer, D.G., Nielsen, A.L., Rice, K.B., Rodriguez-Saona, C., Shearer, P.W., Shrewsbury P.M., Talamas E.J., Walgenbach, J.F., Wiman, N.G., and Leskey T.C.  2020.  Invasion of the brown marmorated stink bug (Hemiptera: Pentatomidae) into the USA: Developing a national response to an invasive species crisis through collaborative research and outreach efforts.  2020.  J. Integ. Pest Manag. 11(1): 1–16. doi: 10.1093/jipm/pmaa001

Morris, E.E., O’Grady, P., Csóka, G., Hajek, A.E. 2020. Genetic variability among native and introduced strains of the parasitic nematode *Deladenus siricidicola*. J. Invertebr. Pathol. 173: 107385. <https://doi.org/10.1016/j.jip.2020.107385>

Preston, C.E., Agnello, A.M., Hajek, A.E.  2020.  *Nosema maddoxi* (Microsporidia: Nosematidae) in brown marmorated stink bug, *Halyomorpha halys*(Hemiptera: Pentatomidae), populations in the United States.  Biol. Control. 144: 104213

Preston, C.E., Agnello, A.M., Hajek, A.E. 2020. *Nosema maddoxi*(Microsporidia: Nosematidae) in brown marmorated stink bug (Hemiptera: Pentatomidae) populations in the US. Biol. Control 144: 104213.

Preston, C.E., Agnello, A.M., Vermeylen, F.M., Hajek, A.E. 2020. Impact of *Nosema maddoxi* on the survival, development, and female fecundity of *Halyomorpha halys*. J. Invertebr. Pathol. 169: 107303.

Rowen, E.K., Regan, K.H., Barbercheck, M.E. and Tooker, J.F., 2020. Is tillage beneficial or detrimental for insect and slug management? A meta-analysis. Agriculture, Ecosystems & Environment, 294, p.106849.

Wang, X., Aparicio, EM., Murphy, TC., Duan, JJ., Elkinton, JS. Gould, JR., 2019. Assessing the host range of the North American parasitoid *Ontsira mellipes:*potential for biological control of Asian longhorned beetle. *Biological Control*, p.104028.

Wu, S., Kostromytska, O.S., Goble, T.A., Hajek, A.E., Koppenhӧfer, A.M. 2020. Compatibility of a microsclerotial granular formulation of the entomopathogenic fungus *Metarhizium brunneum* with fungicides. BioControl 5: 113-123. DOI : 10.1007/s10526-019-09983-9

Dunn, A.R. 2020. [Creating habitat for beneficial insects: Time, money, and weeds.](https://blogs.cornell.edu/biocontrolbytes/2020/02/27/creating-habitat-for-beneficial-insects-time-money-and-weeds/) Biocontrol Bytes blog. Cornell University, 27 February 2020. Web, accessed 3 April 2020.

Carrie E. Preston & Ann E. Hajek. Northeastern IPM Center, IPM Insights. Newly described pathogen may help control brown marmorated stink bug. https://www.northeastipm.org/about-us/publications/ipm-insights/newly-described-pathogen-may-help-control-brown-marmorated-stink-bug/

Citizen Science Efforts for Redistribution of Samurai Wasp in NYS, March 13, 2019 (https://blogs.cornell.edu/jentsch/2019/03/13/join-in-hvrl-efforts-for-redistribution-of-samurai-wasp-in-nys-in-2019/ )

**2021**

Andersen JC, Van Driesche RG, Crandall RS, Griffin BP, Elkinton JS, Soper AS. 2021. Successful biological control of the ambermarked birch leafminer, *Profenusa thomsoni* (Hymenoptera: Tenthredinidae), in Anchorage, Alaska: status 15 years after release of*Lathrolestes thomsoni*(Hymenoptera: Ichneumonidae). *Biological Control.*

Blossey, B., Nuzzo, V., Dávalos, A., Mayer, M., Dunbar, R., Landis, D.A., Evans, J.A. and Minter, B., 2021. Residence time determines invasiveness and performance of garlic mustard (Alliaria petiolata) in North America. Ecology Letters, 24(2), pp.327-336.

Broadley, H.J., Gould, J.R., Sullivan, L.T., Wang, X.Y., Hoelmer, K.A., Hickin, M.L. and Elkinton, J.S., 2021. Life history and rearing of Anastatus orientalis (Hymenoptera: Eupelmidae), an egg parasitoid of the spotted lanternfly (Hemiptera: Fulgoridae). *Environmental Entomology*, *50*(1), pp.28-35.

Brooks, R.K., Barney, J.N. and Salom, S.M., 2021. The invasive tree, Ailanthus altissima, impacts understory nativity, not seedbank nativity. Forest Ecology and Management, 489, p.119025.

Casagrande, R.A., Tewksbury, L. and Cappuccino, N., Successful Biological Control of the Lily Leaf Beetle, Lilioceris lilii. *CLASSICAL BIOLOGICAL CONTROL*, p.161.

Clifton, E.H., Castrillo, L.A. and Hajek, A.E., 2021. Discovery of two hypocrealean fungi infecting spotted lanternflies, Lycorma delicatula: Metarhizium pemphigi and a novel species, Ophiocordyceps delicatula. *Journal of Invertebrate Pathology*, *186*, p.107689.

Clifton, E.H., Castrillo, L., Jaronski, S.T. and Hajek, A.E., 2023. Cryptic diversity and virulence of Beauveria bassiana recovered from Lycorma delicatula (spotted lanternfly) in eastern Pennsylvania. Frontiers in Insect Science, 3, p.25.

Dietschler, N.J., Bittner, T.D., Trotter III, R.T., Fahey, T.J. and Whitmore, M.C., 2021. Biological control of hemlock woolly adelgid: implications of adult emergence patterns of two Leucopis spp.(Diptera: Chamaemyiidae) and Laricobius nigrinus (Coleoptera: Derodontidae) larval drop. *Environmental entomology*, *50*(4), pp.803-813.

Duan, J.J., Van Driesche, R.G., Schmude, J.M., Quinn, N.F., Petrice, T.R., Rutledge, C.E., Poland, T.M., Bauer, L.S. and Elkinton, J.S., 2021. Niche partitioning and coexistence of parasitoids of the same feeding guild introduced for biological control of an invasive forest pest. *Biological Control*, *160*, p.104698.

Elkinton, J.S., Boettner, G.H. and Broadley, H.J., 2021. Successful biological control of winter moth, Operophtera brumata, in the northeastern United States. *Ecological Applications*, *31*(5), p.e02326.

Faal, H., Cha, D.H., Hajek, A.E. and Teale, S.A., 2021. A double-edged sword: Amylostereum areolatum odors attract both Sirex noctilio (Hymenoptera: Siricidae) and its parasitoid, Ibalia leucospoides. *Fungal Ecology*, *54*, p.101108.

Gorchov, D.L., Blossey, B., Averill, K.M., Dávalos, A., Heberling, J.M., Jenkins, M.A., Kalisz, S., McShea, W.J., Morrison, J.A., Nuzzo, V. and Webster, C.R., 2021. Differential and interacting impacts of invasive plants and white-tailed deer in eastern US forests. *Biological Invasions*, *23*(9), pp.2711-2727.

Hajek, A.E., Diss-Torrance, A.L., Siegert, N.W. and Liebhold, A.M., 2021. Inoculative releases and natural spread of the fungal pathogen Entomophaga maimaiga (Entomophthorales: Entomophthoraceae) into US populations of gypsy moth, Lymantria dispar (Lepidoptera: Erebidae). *Environmental Entomology*, *50*(5), pp.1007-1015.

Hajek, A.E., Gardescu, S. and Delalibera, I., 2021. Summary of classical biological control introductions of entomopathogens and nematodes for insect control. *BioControl*, *66*, pp.167-180.

Holuša, J., Zúbrik, M., Resnerová, K., Vanická, H., Liška, J., Mertelík, J., Takov, D., Trombik, J., Hajek, A.E. and Pilarska, D., 2021. Further spread of the gypsy moth fungal pathogen, Entomophaga maimaiga, to the west and north in Central Europe. *Journal of Plant Diseases and Protection*, *128*, pp.323-331.

Jubb, C.S., McAvoy, T.J., Stanley, K.E., Heminger, A.R. and Salom, S.M., 2021. Establishment of the predator Laricobius nigrinus, introduced as a biological control agent for hemlock woolly adelgid in Virginia, USA. *BioControl*, *66*(3), pp.367-379

Lambert, A.M., Tewksbury, L.A. and Casagrande, R.A., 2021. Performance of a Native Butterfly and Introduced Moth on Native and Introduced Lineages of Phragmites australis. Insects, 12(12), p.1102.

Leuenberger, W., Cohen, J.B., Rustad, L., Wallin, K.F. and Parry, D., 2021. Short-term increase in abundance of foliage-gleaning insectivorous birds following experimental ice storms in a northern hardwood forest. *Frontiers in Forests and Global Change*, *3*, p.566376.

Ragozzino, M., Duan, J.J. and Salom, S., 2021. Responses of two introduced larval parasitoids to the invasive emerald ash borer (Coleoptera: Buprestidae) infesting a novel host plant, white fringe tree: Implication for biological control. *Biological Control*, *160*, p.104672.

Rowen, E.K. and Tooker, J.F., 2021. Ground predator activity-density and predation rates are weakly supported by dry-stack cow manure and wheat cover crops in no-till maize. Environmental entomology, 50(1), pp.46-57.

Tait, G., Mermer, S., Stockton, D., Lee, J., Avosani, S., Abrieux, A., Anfora, G., Beers, E., Biondi, A., Burrack, H. and Cha, D., 2021. Drosophila suzukii (Diptera: Drosophilidae): a decade of research towards a sustainable integrated pest management program. *Journal of Economic Entomology*, *114*(5), pp.1950-1974.

Ugine, T.A., Gill, H.K., Hernandez, N., Grebenok, R.J., Behmer, S.T. and Losey, J.E., 2021. Predator performance and fitness is dictated by herbivore prey type plus indirect effects of their host plant. *Journal of Chemical Ecology*, pp.1-12.

Wang, D., Lv, W., Yuan, Y., Zhang, T., Teng, H., Losey, J.E. and Chang, X., 2021. Assessing the risk of insecticides to Actinopterygii in the combination of ecological planting and rearing. *Environmental Pollution*, *276*, p.116702.

Weber, D., Hajek, A.E., Hoelmer, K.A., Schaffner, U., Mason, P.G., Stouthamer, R., Talamas, E.J., Buffington, M., Hoddle, M.L. and Haye, T., 2021. Unintentional biological control. *Biological control: global impacts, challenges and future directions of pest management. Edited by PG Mason. CSIRO Publishing, Collingwood, Victoria, Australia*, pp.110-140.

**2022**

Blossey, B. and Hare, D., 2022. Myths, Wishful Thinking, and Accountability in Predator Conservation and Management in the United States. *Frontiers in Conservation Science*, *3*.

Endriss, S.B., Nuzzo, V. and Blossey, B. 2022. Success Takes Time: History and Current Status of Biological Control of Purple Loosestrife in the United States. *CLASSICAL BIOLOGICAL CONTROL*, p.312.

Celis, S.L., Dietschler, N.J., Bittner, T.D., Havill, N.P., Gates, M.W., Buffington, M.L. and Whitmore, M.C., 2022. Hymenopteran Parasitoids of Leucotaraxis argenticollis (Diptera: Chamaemyiidae) and Leucotaraxis piniperda: Implications for Biological Control of Hemlock Woolly Adelgid (Hemiptera: Adelgidae). *Environmental Entomology*, *51*(5), pp.901-909.

Clifton, E.H. and Hajek, A.E., 2022. Efficacy of Beauveria bassiana and Cordyceps javanica mycoinsecticides against spotted lanternflies, Lycorma delicatula, in laboratory bioassays. *Biocontrol Science and Technology*, *32*(7), pp.824-836.

Czarnecki, C., Manderino, R. and Parry, D., 2022. Reduced avian predation on an ultraviolet-fluorescing caterpillar model. *The Canadian Entomologist*, *154*(1), p.e10

Duan, J.J., Van Driesche, R.G., Schmude, J., Crandall, R., Rutlege, C., Quinn, N., Slager, B.H., Gould, J.R. and Elkinton, J.S., 2022. Significant suppression of invasive emerald ash borer by introduced parasitoids: potential for North American ash recovery. *Journal of Pest Science*, *95*(3), pp.1081-1090.

Foley IV, J.R., McAvoy, T.J., Grubb, C., Mayfield III, A.E., Strahm, B. and Salom, S.M., 2022. Subterranean survivorship and seasonal emergence of Laricobius spp.(Coleoptera: Derodontidae), biological control agents for the hemlock woolly Adelgid. *Environmental Entomology*, *51*(1), pp.63-70.

Foley IV, J.R., McAvoy, T.J., Saint-Amant, R., Régnière, J., Biggs, A., Wright, E., Mayfield III, A.E., Brewster, C. and Salom, S.M., 2022. Temperature-dependent Development, Survival, and Oviposition of Laricobius osakensis (Coleoptera: Derodontidae): A Specialist Predator of Adelges tsugae (Hemiptera: Adelgidae). *Environmental Entomology*, *51*(4), pp.688-699.

Gryganskyi, A.P., Golan, J. and Hajek, A.E., 2022. Season-long infection of diverse hosts by the entomopathogenic fungus Batkoa major. *Plos one*, *17*(5), p.e0261912.

Haelewaters, D., Losey, J. and Soares, A.O. eds., 2022. Ladybirds: Conservation, ecology and interactions with other organisms.

Hajek, A.E., Clifton, E.H., Stefanik, S.E. and Harris, D.C., 2022. Batkoa major infecting the invasive planthopper Lycorma delicatula. *Journal of Invertebrate Pathology*, *194*, p.107821.

Jahant‐Miller, C., Miller, R. and Parry, D., 2022. Size‐dependent flight capacity and propensity in a range‐expanding invasive insect. *Insect science*, *29*(3), pp.879-888.

Kirtane, A., Dietschler, N.J., Bittner, T.D., Lefebvre, M.B., Celis, S., O'Connor, K., Havill, N. and Whitmore, M.C., 2022. Sensitive environmental DNA (eDNA) methods to detect hemlock woolly adelgid and its biological control predators Leucotaraxis silver flies and a Laricobius beetle. *Environmental DNA*, *4*(5), pp.1136-1149.

Liebhold, A.M., Hajek, A.E., Walter, J.A., Haynes, K.J., Elkinton, J. and Muzika, R.M., 2022. Historical change in the outbreak dynamics of an invading forest insect. *Biological Invasions*, *24*(3), pp.879-889.

Limbu, S., Keena, M.A., Dietschler, N., O’Connor, K. and Whitmore, M.C., 2022. Estivation and Postestivation Development of Hemlock Woolly Adelgid (Adelges tsugae)(Hemiptera: Adelgidae) at Different Temperatures. *Environmental Entomology*, *51*(6), pp.1210-1217.

Losey, J., Allee, L., Gill, H., Morris, S., Smyth, R., Wolleman, D., Westbrook, A. and DiTommaso, A., 2022. Predicting plant attractiveness to coccinellids with plant trait profiling, citizen science, and common garden surveys. *Biological Control*, *176*, p.105063.

Quinn, N.F., Gould, J.S., Rutledge, C.E., Fassler, A., Elkinton, J.S. and Duan, J.J., 2022. Spread and phenology of Spathius galinae and Tetrastichus planipennisi, recently introduced for biocontrol of emerald ash borer (Coleoptera: Buprestidae) in the northeastern United States. *Biological Control*, *165*, p.104794.

Quinn, N.F., Duan, J.J. and Elkinton, J., 2022. Monitoring the impact of introduced emerald ash borer parasitoids: factors affecting Oobius agrili dispersal and parasitization of sentinel host eggs. *BioControl*, *67*(4), pp.387-394.

Rosser, E., Willden, S.A. and Loeb, G.M., 2022. Effects of SmartWater, a fluorescent mark, on the dispersal, behavior, and biocontrol efficacy of Phytoseiulus persimilis. *Experimental and Applied Acarology*, *87*(2-3), pp.163-174.

Rowen, E.K., Pearsons, K.A., Smith, R.G., Wickings, K. and Tooker, J.F., 2022. Early‐season plant cover supports more effective pest control than insecticide applications. Ecological Applications, 32(5), p.e2598.

Schneider, S.A., Broadley, H.J., Andersen, J.C., Elkinton, J.S., Hwang, S.Y., Liu, C., Noriyuki, S., Park, J.S., Dao, H.T., Lewis, M.L. and Gould, J.R., 2022. An invasive population of Roseau Cane Scale in the Mississippi River Delta, USA originated from northeastern China. *Biological Invasions*, *24*(9), pp.2735-2755.

Walter, J.A., Thompson, L.M., Powers, S.D., Parry, D., Agosta, S.J. and Grayson, K.L., 2022. Growth and development of an invasive forest insect under current and future projected temperature regimes. *Ecology and Evolution*, *12*(6), p.e9017.

Willden, S.A., Pritts, M.P. and Loeb, G.M., 2022. The effect of plastic low tunnels on natural enemies and pollinators in New York strawberry. *Crop Protection*, *151*, p.105820.

Willden, S.A., Sanderson, J., Nyrop, J., Wentworth, K. and Loeb, G.M., 2022. Comparison of two popular biocontrol agents (Neoseiulus [= Amblyseius] fallacis and Phytoseiulus persimilis [phytoseiidae]) for management of two spotted spider mite on low tunnel strawberry in New York. *Ecology and Management of Pests on Low Tunnel Strawberry*, p.149.

**2023**

Blossey, B. and Simmons, W., Host Plant Phylogeny Does Not Fully Explain Host Choice and Feeding Preferences of Galerucella Birmanica, a Promising Biological Control Herbivore of Trapa Natans. *Available at SSRN 4329366*.

Broadley, H.J., Sipolski, S.J., Pitt, D.B., Hoelmer, K.A., Wang, X.Y., Cao, L.M., Tewksbury, L.A., Hagerty, T.J., Bartlett, C.R., Russell, A.D. and Wu, Y., 2023. Assessing the host range of Anastatus orientalis, an egg parasitoid of spotted lanternfly (Lycorma delicatula) using Eastern US non-target species. Frontiers in Insect Science, 3, p.21.

Carroll, J.E., Marshall, P.M., Mattoon, N.E., Weber, C.A. and Loeb, G.M., 2023. The predation impact of ruby-throated hummingbird, Archilochus colubris, on spotted-wing drosophila, Drosophila suzukii, in raspberry, Rubus idaeus. *Crop Protection*, *163*, p.106116.

Duan, J.J., Crandall, R.S., Grosman, D.M., Schmude, J.M., Quinn, N., Chandler, J.L. and Elkinton, J.S., 2023. Effects of emamectin benzoate trunk injections on protection of neighboring ash trees against emerald ash borer (Coleoptera: Buprestidae) and on established biological control agents. *Journal of Economic Entomology*, p.toad074.

Duan, J.J., Van Driesche, R.G., Schmude, J.M., Quinn, N.F., Petrice, T.R., Rutledge, C.E., Poland, T.M., Bauer, L.S. and Elkinton, J.S., 2021. Niche partitioning and coexistence of parasitoids of the same feeding guild introduced for biological control of an invasive forest pest. *Biological Control*, *160*, p.104698.

Foley, J.R., Jubb, C.S., Cole, D.A., Mausel, D., Galloway, A.L., Brooks, R. and Salom, S.M., 2021. Historic assessment and analysis of the mass production of Laricobius spp.(Coleoptera: Derodontidae), biological control agents for the hemlock woolly adelgid, at Virginia Tech. *Journal of Insect Science*, *21*(1), p.12.

Hajek, A.E., Brandt, S.N., González, J.B. and Bergh, J.C., 2023. Entomopathogens infecting brown marmorated stink bugs before, during, and after overwintering. *Journal of Insect Science*, *23*(3), p.iead033.

Havill, N.P., Bittner, T.D., Andersen, J.C., Dietschler, N.J., Elkinton, J.S., Gaimari, S.D., Griffin, B.P., Zembrzuski, D. and Whitmore, M.C., 2023. Prey-associated genetic differentiation in two species of silver fly (Diptera: Chamaemyiidae), Leucotaraxis argenticollis and L. piniperda. *Insect Systematics and Diversity*, *7*(3), p.ixad007.

González, J.B., Lambert, C.A., Foley, A.M. and Hajek, A.E., 2023. First report of Colletotrichum fioriniae infections in brown marmorated stink bugs, Halyomorpha halys. *Journal of Invertebrate Pathology*, p.107939.

Mayne, S.J., King, D.I., Andersen, J.C. and Elkinton, J.S., 2023. Crop-specific effectiveness of birds as agents of pest control. *Agriculture, Ecosystems & Environment*, *348*, p.108395.

Mayne, S.J., King, D.I., Andersen, J.C. and Elkinton, J.S., 2023. Pest control services on farms vary among bird species on diversified, low-intensity farms. *Global Ecology and Conservation*, *43*, p.e02447.

Preston, C.E., Arneson, A., Seiler, J.R. and Salom, S.M., 2023. The Impact of Predation of Laricobius nigrinus (Coleoptera: Derodontidae) on Adelges tsugae (Hemiptera: Adelgidae) and Tsuga canadensis (Pinales: Pinaceae) Tree Health. *Forests*, *14*(4), p.698.

Simmons, W. and Blossey, B., 2023. Host plant phylogeny does not fully explain host choice and feeding preferences of Galerucella birmanica, a promising biological control herbivore of Trapa natans. *Biological Control*, *180*, p.105201.

Soares, A.O., Haelewaters, D., Ameixa, O.M., Borges, I., Brown, P.M., Cardoso, P., De Groot, M.D., Evans, E.W., Grez, A.A., Hochkirch, A. and Holecová, M., 2023. A roadmap for ladybird conservation and recovery. *Conservation Biology*, *37*(1), p.e13965.

Van Nouhuys, S., Harris, D.C. and Hajek, A.E., 2023. ﻿ Population level interactions between an invasive woodwasp, an invasive nematode and a community of native parasitoids. *NeoBiota*, *82*, pp.67-88.