

## ANDREI V. ALYOKHIN

### EDUCATION:

#### *Academic Degrees*

- 1999            **Ph.D. in Entomology**, University of Massachusetts, Amherst, MA.
- 1994            **B.S. in Education in Biology and Chemistry**, Moscow Pedagogical State University, Moscow, Russia. Graduated *Summa Cum Laude*.

#### *Other Training*

- 06/15           **Faculty Leadership and Professional Development Program**, Cornell University, Ithaca, New York.
- 1999            **Post-Doctoral Research Associate**, Kauai Agricultural Research Center, University of Hawaii, Kapaa.
- 09/92 - 05/93   **Exchange student** at Baylor University, Waco, Texas.

### EMPLOYMENT HISTORY:

#### *Academic Appointments*

- 2013-Present   **Professor**, School of Biology and Ecology, University of Maine, Orono.
- 2007-2013      **Associate Professor**, School of Biology and Ecology, University of Maine, Orono.
- 2001-2007      **Assistant Professor**, Department of Biological Sciences, University of Maine, Orono.
- 1999-2000      **Junior Entomologist**, Department of Entomology, University of Hawaii, Manoa.
- 1994-1999      **Research Assistant**, Department of Entomology, University of Massachusetts, Amherst.

#### *Administrative Assignments*

- 2014-2017      **Director**, School of Biology and Ecology, University of Maine, Orono.
- 2013-2014      **Graduate Coordinator**, School of Biology and Ecology, University of Maine, Orono.

### HONORS & AWARDS:

- Eastern Branch Distinguished Achievement Award in Extension (Entomological Society of America, 2019)

- Agriculture Award (College of Natural Sciences, Food, and Agriculture, University of Maine, 2018)
- Communication Award (National Association of County Agricultural Agents, 2017)
- Friend of Extension Award (Aroostook County Extension Association, 2014)
- Special Recognition for Outstanding Support and Contributions (National Park Service, 2012)
- Faculty Outstanding Public Service Award (College of Natural Sciences, Food, and Agriculture, University of Maine, 2011)
- Selected to present A. Randall Alford Memorial Lecture of the Friends of Dr. Edith Marion Patch, Inc. (2010)
- Long-Term Invitation Fellowship for Research in Japan (the Japan Society for Promotion of Science, 2009)
- Sustainable Agriculture Award (College of Natural Sciences, Food, and Agriculture, University of Maine, 2005)
- Harry A. Rosenfeld Award in Applied Entomology (University of Massachusetts, 1999)
- Lotta M. Crabtree Graduate Fellowship in Agriculture (Crabtree Trusts, 1996 - 1999)
- University Fellowship (University of Massachusetts, 1994-95)
- Bob Gardner Research Award (Baylor University, 1993)
- Frank G. Brooks Award for Excellence in Student Research (Tri-Beta, 1993)
- Silver Medal for Excellent Academic Performance in Secondary School (Russian Ministry of Education, 1989)

### **TEACHING EXPERIENCE:**

- Evolution (BIO 365)
- Insect Ecology (BIO 511)
- Pesticides and the Environment (INT 482)
- Biological Invasions (BIO 455/555)
- Introductory Applied Entomology (BIO 327)
- Advanced Insect Pest Ecology and Management (BIO 448/548)
- Capstone Experience in Biological Sciences (BIO 402)
- Professionalism in Biology (BIO 505)

### **SERVICE:**

- Member, State of Maine Governor's Integrated Pest Management Council (vice-chair starting January 1, 2019)
- Co-coordinator and website manager, Maine Invasive Species Network
- Subject matter expert, Science Policy Committee of the Entomological Society of America
- Member, Grant Review Panel for USDA-NIFA Pests and Beneficial Species in Agricultural Production Systems Program
- Member, Organizing Committee for the Maine Arthropod Blitzes (2003-2016)
- Member, Plant-Incorporated Protectants Technical Review Committee, Maine Board of Pesticide Control (2004-2010)
- Member, Aroostook Research Farm Advisory Committee
- Member, Eastern Branch of the Entomological Society of America Awards Committee

- Board member, Heart of Maine Resource Conservation and Development Area, Inc. (2012-14)
- Member, Maine Agricultural and Forest Experiment Station Research Committee (2011-14)
- Member, Environment and Ecology Grant Review Panel for Agriculture and Agri-Food Canada (2011)
- Member, Grant Review Panel for King Abdulaziz City for Science and Technology, Ministry of Economy and Planning of the Kingdom of Saudi Arabia (2011; administered by the American Association for the Advancement of Science)
- Reviewed manuscripts for *American Journal of Potato Research*, *Applied Entomology and Zoology*, *Biological Control*, *Biological Invasions*, *Bulletin of Entomological Research*, *The Canadian Entomologist*, *Canadian Biosystems Engineering*, *Entomologia Experimentalis et Applicata*, *Environmental Entomology*, *HortScience*, *HortTechnology*, *International Journal of Pest Management*, *International Journal of Agricultural Chemistry*, *Journal of the Acadian Entomological Society*, *Journal of Agricultural Science and Technology*, *Journal of the American Society for Horticultural Science*, *Journal of Applied Ecology*, *Journal of Applied Entomology*, *Journal of Economic Entomology*, *Journal of Insect Science*, *Journal of Insect Science and Its Application*, *Journal of Pest Science*, *Nature Biotechnology*, *Nanomaterials*, *Pan-Pacific Entomologist*, *Pest Management Science*, *Phytoparasitica*, *Plant Health Progress*, *Potato Journal*, *Potato Research*, *Psyche: A Journal of Entomology*, *Spanish Journal of Agricultural Research*, *Transactions of the American Society of Agricultural Engineers*, *Journal of Hawaii Entomological Society*, and *Maine Agricultural and Forest Experiment Station Technical Bulletin*
- Member, University of Maine Faculty Senate (2007-10)
- Reviewed proposals for the U.S. Department of Agriculture National Institute for Food and Agriculture, the U.S. Department of Agriculture National Research Initiative, the Agriculture and Agri-Food Canada Research Branch, The Netherlands Organization for Scientific Research, the Swiss Agency for Development and Cooperation Research Fellow Partnership Program, the U.S. Civilian Research and Development Foundation, the U.S. – Israel Binational Research and Development Fund, the Idaho Agricultural Experiment Station Hatch Proposals, Louisiana EPSCoR Pilot Funding for New Research Program, and Maine Agricultural and Forest Experiment Station Integrated Pest Management Mini-Grants
- State representative, North Central Regional Committee on Migration and Dispersal of Agriculturally Important Biota (2001-2008)
- Volunteer, 1<sup>st</sup> Annual Edith Patch Bugathon (2005)
- Judge, 59<sup>th</sup> Annual Maine State Science and Technology Fair (2005)
- Judge, Graduate Student Research Exposition (2005)
- President, Acadian Entomological Society (2002-03)
- Faculty advisor, Undergraduate Biology Club (2002-03)
- Moderator, Section Cd, 1998 ESA Annual Meeting, Las Vegas, NV
- President, Fernald Club (Entomology Graduate Student Organization, 1997)
- Department of Entomology Yearbook Editor (1995-96)

## **PUBLICATIONS:**

<sup>G</sup>Supervised graduate student; <sup>U</sup>supervised undergraduate student; <sup>H</sup>supervised high school student.

### ***Peer-Reviewed Journal Articles***

1. Mishra, S., J. Dee, W. Moar, J. Dufner-Beattie, J. Baum, N. P. Dias, **A. Alyokhin**, A. Buzza, S.I. Rondon, M. Clough, and S. Menasha. 2021. Selection for high levels of resistance to double-stranded RNA (dsRNA) in Colorado potato beetle (*Leptinotarsa decemlineata* Say) using non-transgenic foliar delivery. *Scientific Reports* 11 (2021): 6523. <https://doi.org/10.1038/s41598-021-85876-1>
2. Klein<sup>G</sup>, C., M. Baker, **A. Alyokhin**, and D. Mota-Sanchez. 2021. Geographic variation in dominance of spinosad resistance in Colorado potato beetles (Coleoptera: Chrysomelidae). *Journal of Economic Entomology* 114: 320-325.
3. **Alyokhin, A.** and N. Baron<sup>H,U</sup>. 2021. Increased cannibalism in Colorado potato beetles feeding on non-preferred host plants in laboratory. *Entomologia Experimentalis et Applicata* 169: 249-254. (Editor's Choice paper)
4. Jasim<sup>G</sup>, A., A. Zaeen<sup>G</sup>, L. K. Sharma, S. K. Bali, C. Wang, A. Buzza, and **A. Alyokhin**. 2020. Predicting phosphorus and potato yield using active and passive sensors. *Agriculture* 2020, 10, 564. <https://doi.org/10.3390/agriculture10110564>
5. Zaeen<sup>G</sup>, A. A., L. Sharma, A. Jasim<sup>G</sup>, S. Bali, A. Buzza, and **A. Alyokhin**. 2020. Yield and quality of three potato cultivars under series of nitrogen rates. *Agrosystems, Geosciences, and Environment* 2020;3:e20062. <https://doi.org/10.1002/agg2.20062>
6. Erbland<sup>G</sup>, P., S. Caron, M. Peterson, and **A. Alyokhin**. 2020. Design and performance of a low-cost, automated, large-scale photobioreactor for microalgae production. *Aquacultural Engineering* 90 (2020) 102103 <https://doi.org/10.1016/j.aquaeng.2020.102103>.
7. Jasim<sup>G</sup>, A., L. K. Sharma, A. Zaeen<sup>G</sup>, S. K. Bali, A. Buzza, and **A. Alyokhin**. 2020. Potato phosphorus response in soils with high value of phosphorus. *Agriculture* 2020, 10, 264; doi:10.3390/agriculture10070264.
8. Erbland<sup>G</sup>, P. **A. Alyokhin**, L. B. Perkins, and M. Peterson. 2020. Dose-dependent retention of omega-3 fatty acids by black soldier fly larvae (Diptera: Stratiomyidae). *Journal of Economic Entomology* 113: 1221-1226.
9. **Alyokhin, A.**, B. Nault, and B. Brown. 2020. Soil conservation practices for insect pest management in highly disturbed agroecosystems – a review. *Entomologia Experimentalis et Applicata* 168: 7-27. (Invited review article for a special journal issue).

10. Zaeen<sup>G</sup>, A. A., L. Sharma, A. Jasim<sup>G</sup>, S. Bali, A. Buzza, and **A. Alyokhin**. 2020. In-season potato yield prediction with active optical sensors. *Agrosystems, Geosciences, and Environment* 2020;3:e20024. <https://doi.org/10.1002/agg2.20024>
11. Bernard, E., J. Villazana<sup>G</sup>, **A. Alyokhin**, and J. Rose<sup>U</sup>. 2020. Colonization of finfish substrate inhabited by black soldier fly larvae by blow flies, bacteria, and fungi. *Journal of Insects as Food and Feed* 6: 291-304.
12. Galimberti<sup>G</sup>, A., **A. Alyokhin**, H. Qu, and J. Rose<sup>U</sup>. 2020. Simulation modelling of *Potato virus Y* spread in relation to initial inoculum and vector activity. *Journal of Integrative Agriculture* 19: 376-388. (Invited original research article for a special journal issue).
13. Popov, S. Ya. and **A. Alyokhin**. 2019. Gender-specific acaricidal properties and sexual transmission of spirotetramat in two-spotted spider mite (Tetranychidae: Acariformes). *Journal of Economic Entomology* 112: 2186-2192.
14. Villazana<sup>G</sup>, J. and **A. Alyokhin**. 2019. Development of black soldier fly larvae (Diptera: Stratiomyidae) on seafood wastes. *Journal of Insects as Food and Feed* 5: 313-319.
15. Villazana<sup>G</sup>, J. and **A. Alyokhin**. 2019. Tolerance of immature black soldier flies (Diptera: Stratiomyidae) to cold temperatures above and below freezing point. *Journal of Economic Entomology* 112: 2632-2637.
16. **Alyokhin, A.**, A. Buzza, and J. Beaulieu<sup>H</sup>. 2019. Effects of food substrates and moxidectin on development of black soldier fly, *Hermetia illucens*. *Journal of Applied Entomology* 143: 137-143.
17. Galimberti<sup>G</sup>, A. and **A. Alyokhin**. 2018. Lethal and sublethal effects of mineral oil on potato pests. *Journal of Economic Entomology* 111: 1261–1267.
18. **Alyokhin, A.** and Y. H. Chen. 2017. Adaptation to toxic hosts as a factor in the evolution of insecticide resistance. *Current Opinion in Insect Science* 21: 33-38. (Invited review article).
19. Alpuerto<sup>G</sup>, J. B., A. Mukherjee<sup>G</sup>, A. Kitazumi<sup>G</sup>, **A. Alyokhin**, D. De Koeyer, and B. G. de los Reyes. 2017. Impaired expression of the beta and delta isoforms of vacuolar processing enzymes compromise the basal defenses of *Arabidopsis thaliana* against the phloem-feeding insect *Myzus persicae*. *Acta Physiologiae Plantarum* 39: 233. <https://doi.org/10.1007/s11738-017-2529-z>.
20. Lamb, R.J., P.A. MacKay, and **A. Alyokhin**. 2017. Estimating population variability of aphids (Hemiptera: Aphididae): how many years are required? *Canadian Entomologist* 149: 48-55.
21. Booth<sup>G</sup>, E., **A. Alyokhin**, and S. Pinatti<sup>U</sup>. 2017. Adult cannibalism in an oligophagous herbivore, the Colorado potato beetle. *Insect Science* 24: 295-302.

22. Booth<sup>G</sup>, E. and **A. Alyokhin**. 2016. Colorado potato beetle response to potato plants infected with *Potato Virus Y* and *Potato Leafroll Virus*. *American Journal of Potato Research* 93: 213–223.
23. Chen<sup>G</sup>, J., A. Kitazumi<sup>G</sup>, J. Alpuerto<sup>G</sup>, **A. Alyokhin**, and B. de los Reyes. 2016. Heat-induced mortality and expression of heat shock proteins in Colorado potato beetles treated with imidacloprid. *Insect Science* 23: 548–554.
24. **Alyokhin, A.** and L. Miller<sup>U</sup>. 2015. Propensity for flying and walking by the Colorado potato beetles treated with imidacloprid. *American Journal of Potato Research* 92: 138-142.
25. **Alyokhin, A.**, D. Mota-Sanchez, M. Baker, W. E. Snyder, S. Menasha, M. Whalon, G. Dively, and W. F. Moarsi. 2015. Red Queen on a potato field: IPM vs. chemical dependency in Colorado potato beetle control. *Pest Management Science* 71: 343-356. (*Invited review article*).
26. Patterson<sup>G</sup>, M. and **A. Alyokhin**. 2014. Survival and development of Colorado potato beetles on potatoes treated with phosphite. *Crop Protection* 61: 38-42.
27. Huseeth, A.S., R. L. Groves , S. A. Chapman, **A. Alyokhin**, T. P. Kuhar, I. V. Macrae, Z. Szendrei, and B. A. Nault. 2014. Managing Colorado potato beetle insecticide resistance: new tools and strategies for the next decade of pest control in potato. *Journal of Integrated Pest Management* 5 (4): A1-A8 DOI: <http://dx.doi.org/10.1603/IPM14009>.
28. Chen<sup>G</sup>, J., **A. Alyokhin**, D. Mota-Sanchez, M. Baker and M. Whalon. 2014. Variation in fitness among geographically isolated Colorado potato beetle (Coleoptera: Chrysomelidae) populations. *Annals of the Entomological Society of America* 107: 128-135.
29. Baker, M., K. Hossain, K. Zabierek, K. Collie, **A. Alyokhin**, D. Mota-Sanchez, and M. Whalon. 2014. Geographic variation in cannibalism in Colorado potato beetle populations. *Environmental Entomology* 43: 102-109.
30. Bernard, E., R. P. Larkin, S. Tavantzis, M. S. Erich, **A. Alyokhin**, and S. D. Gross<sup>G</sup>. 2014. Rapeseed rotation, compost and biocontrol amendments reduce soilborne diseases and increase tuber yield in organic and conventional potato production systems. *Plant and Soil* 374: 611–627.
31. Lamb, R. J., P. A. MacKay, and **A. Alyokhin**. 2013. Seasonal dynamics of three coexisting aphid species: implications for estimating population variability. *Canadian Entomologist* 145: 283–291.
32. Leppanen<sup>G</sup>, C., **A. Alyokhin**, and S. Gross<sup>U</sup>. 2012. Competition for aphid prey between different lady beetle species in a laboratory arena. *Psyche: A Journal of Entomology* 2012: Article ID 890327, 9 pp. <doi:10.1155/2012/890327>

33. Bernard, E., R. P. Larkin, S. Tavantzis, M. S. Erich, **A. Alyokhin**, G. Sewell, A. Lannan, and S. D. Gross<sup>G</sup>. 2012. Compost, rapeseed rotation, and biocontrol agents significantly impact soil microbial communities in organic and conventional potato production systems. *Applied Soil Ecology* 52: 29–41.
34. **Alyokhin, A.** 2011. Scant evidence supports EPA's pyramided Bt corn refuge size of 5%. *Nature Biotechnology* 29: 577–578.
35. **Alyokhin, A.**, F. A. Drummond, G. Sewell, and R. H. Storch. 2011. Differential effects of weather and natural enemies on coexisting aphid populations. *Environmental Entomology* 40: 570-580.
36. Lamb, R. J., P. A. MacKay, and **A. Alyokhin**. 2011. Population variability and persistence of three aphid pests of potatoes over 60 years. *Canadian Entomologist* 143: 91–101.
37. **Alyokhin, A.** and R. Choban. 2010. Maturity-dependent mortality of Colorado potato beetle eggs treated with novaluron. *American Journal of Potato Research* 87: 557–560.
38. Finlayson<sup>G</sup>, C., **A. Alyokhin**, S. Gross<sup>U</sup>, and E. Porter<sup>U</sup>. 2010. Differential consumption of four aphid species by four lady beetle species. 10pp. *Journal of Insect Science* 10:31, available online: [insectscience.org/10.31](http://insectscience.org/10.31).
39. **Alyokhin, A.**, J. Makatiani, and K. Takasu. 2010. Insecticide odour interference with food-searching behaviour of *Microplitis croceipes* (Hymenoptera: Braconidae) in a laboratory arena. *Biocontrol Science and Technology* 20: 317-329.
40. **Alyokhin, A.**, R. Guillemette<sup>U</sup>, and R. Choban. 2009. Stimulatory and suppressive effects of novaluron on the Colorado potato beetle reproduction. *Journal of Economic Entomology* 102: 2078-2083.
41. Finlayson<sup>G</sup>, C. J., **A. V. Alyokhin**, and E. W. Porter<sup>U</sup>. 2009. Interactions of native and non-native lady beetle species (Coleoptera: Coccinellidae) with aphid-tending ants in laboratory arenas. *Environmental Entomology* 38: 846-855.
42. **Alyokhin, A.** 2009. Colorado potato beetle management on potatoes: current challenges and future prospects. In: Tennant P, Benkeblia N (Eds) Potato II. Fruit, Vegetable and Cereal Science and Biotechnology 3 (Special Issue 1): 10-19. (*Invited review article*).
43. Finlayson<sup>G</sup>, C. J., K. M. Landry<sup>U</sup>, and **A. V. Alyokhin**. 2008. Abundance of native and non-native lady beetles (Coleoptera: Coccinellidae) in different habitats in Maine. *Annals of the Entomological Society of America* 101: 1078-1087.
44. **Alyokhin, A.**, M. Baker, D. Mota-Sanchez, G. Dively, and E. Grafius. 2008. Colorado potato beetle resistance to insecticides. *American Journal of Potato Research* 85: 395–413. (*Invited review article*).

45. **Alyokhin, A.**, G. Sewell, and R. Choban. 2008. Reduced viability of Colorado potato beetle, *Leptinotarsa decemlineata*, eggs exposed to novaluron. *Pest Management Science* 64: 94-99.
46. Baker, M. B., **A. Alyokhin**, A. H. Porter, D. N. Ferro, S. R. Dastur, and N. Galal. 2007. Persistence and inheritance of costs of resistance to imidacloprid in Colorado potato beetle. *Journal of Economic Entomology* 100: 1871-1879.
47. Andreson, M.W., M. Teisl, G. Criner, S. Tisher, S. Smith, M. Hunter, S. Norton, J. Jellison, **A. Alyokhin**, E. Gallandt, S. Haggard, and E. Bicknell. 2007. Attitude changes of undergraduate university students in general education courses. *The Journal of General Education* 56: 149-168.
48. **Alyokhin, A.**, G. Dively, M. Patterson<sup>U</sup>, C. Castaldo, D. Rogers, M. Mahoney, and J. Wollam. 2007. Resistance and cross-resistance to imidacloprid and thiamethoxam in the Colorado potato beetle. *Pest Management Science* 63: 32-41.
49. **Alyokhin, A.**, G. Dively, M. Patterson<sup>U</sup>, D. Rogers, M. Mahoney, and J. Wollam. 2006. Susceptibility of imidacloprid-resistant Colorado potato beetles to non-neonicotinoid insecticides in the laboratory and field trials. *American Journal of Potato Research* 83: 485-494.
50. Narayandas<sup>G</sup>, G. and **A. Alyokhin**. 2006. Diurnal patterns in host finding by potato aphids, *Macrosiphum euphorbiae* (Homoptera: Aphididae). *Journal of Insect Behavior* 19: 347-356.
51. Narayandas<sup>G</sup>, G. **A. Alyokhin**, R. Alford, D. Weber, and J. C. Dickens. 2006. Response of potato aphid (Homoptera: Aphididae) to synthetic potato-derived Colorado potato beetle attractant and natural potato odor. *Journal of Economic Entomology* 99: 1203-1208.
52. Narayandas<sup>G</sup>, G. and **A. Alyokhin**. 2006. Interplant movement of potato aphid (Homoptera: Aphididae) in response to environmental stimuli. *Environmental Entomology* 35: 733-739.
53. Baker, M. B., **A. Alyokhin**, S. R. Dastur, A. H. Porter, and D. N. Ferro. 2005. Sperm precedence in the overwintered Colorado potato beetles (Coleoptera: Chrysomelidae) and its implications for insecticide resistance management. *Annals of the Entomological Society of America* 98: 989-995.
54. **Alyokhin, A.**, F. A. Drummond, and G. Sewell. 2005. Density-dependent regulation in populations of potato-colonizing aphids. *Population Ecology* 47: 257-266.
55. **Alyokhin, A.** and R. Atlihan. 2005. Reduced fitness of the Colorado potato beetle (Coleoptera: Chrysomelidae) on potato plants grown in manure-amended soil. *Environmental Entomology* 34: 963-968.



56. **Alyokhin, A.**, G. Porter, E. Groden, and F. Drummond. 2005. Colorado potato beetle response to soil amendments: a case in support of the mineral balance hypothesis? *Agriculture, Ecosystems, and Environment* 109: 234-244.
57. **Alyokhin, A.** and G. Sewell. 2004. Changes in a lady beetle community following the establishment of three alien species. *Biological Invasions* 6: 463-471.
58. **Alyokhin, A. V.**, P. Yang, and R. H. Messing. 2004. Oviposition of the invasive two-spotted leafhopper on an endemic tree: Effects of an alien weed, foliar pubescence, and habitat humidity. 7pp. *Journal of Insect Science*, 4:13, Available online: [insectscience.org/4.13](http://insectscience.org/4.13).
59. **Alyokhin, A.** and G. Sewell. 2003. On-soil movement and plant colonization by walking wingless morphs of three aphid species (Homoptera: Aphididae) in greenhouse arenas. *Environmental Entomology* 32: 1393-1398.
60. Kuhar, T., J. Speese III, J. Whalen, J. Alvarez, **A. Alyokhin**, G. Ghidui, and M. Spellman. 2003. Current status of insecticidal control of wireworms in potatoes. *Pesticide Outlook* 14: 265-267.
61. Boiteau, G., **A. Alyokhin**, and D. N. Ferro. 2003. The Colorado potato beetle in movement. *Canadian Entomologist* 135: 1-22. (Invited review article).
62. **Alyokhin, A. V.** and R.H. Messing. 2003. Parasitism of Hawaiian non-frugivorous fruit flies (Diptera: Tephritidae) by an exotic parasitoid *Eurytoma tephritidis* Fullaway (Hymenoptera: Eurytomidae). *Proceedings of the Hawaiian Entomological Society* 36: 29-37.
63. Messing, R., **A. Alyokhin**, L. Quan, C. Yiqun, and F. Xiongxi. 2003. Parasitoids of *Sophonia* leafhoppers in Southern China. *Proceedings of the Hawaiian Entomological Society* 36: 111-114.
64. **Alyokhin, A. V.**, R. H. Messing, and J. J. Duan. 2002. Infestation of *Elephantopus mollis* (Asteraceae) flowerheads by *Tetreuaresta obscuriventris* (Diptera: Tephritidae) on Kauai, Hawaiian Islands. *Entomological News* 113: 247-252.
65. **Alyokhin, A.**, G. Sewell, and E. Groden. 2002. Aphid abundance and potato virus Y transmission in imidacloprid-treated potatoes. *American Journal of Potato Research* 79: 255-262.
66. Yang, P., D. Foote, **A. Alyokhin**, L. Lenz, and R. Messing. 2002. Distribution and abundance of mymarid parasitoids (Hymenoptera: Mymaridae) of the two-spotted leafhopper (Homoptera: Cicadellidae) in Hawaii. *Biological Control* 23: 237-244.

67. Yang, P., **A. V. Alyokhin**, and R. H. Messing. 2001. Patterns of oviposition and parasitism of eggs of *Kallitaxila granulata* (Homoptera: Tropiduchidae), a newly invasive planthopper in Hawaii. *Proceedings of the Hawaiian Entomological Society* 35: 77-83.
68. **Alyokhin, A. V.** and R. H. Messing. 2001. Association of *Trupanea dubautiae* (Diptera: Tephritidae) with *Dubautia laxa* (Asteraceae) in Mt. Kaala National Area Reserve on Oahu. *Proceedings of the Hawaiian Entomological Society* 35: 137-139.
69. **Alyokhin, A. V.**, P. Yang, and R. H. Messing. 2001. Distribution and parasitism of *Sophonia rufofascia* eggs (Homoptera: Cicadellidae) in Hawaii. *Annals of the Entomological Society of America* 94: 664-669.
70. **Alyokhin, A. V.**, R. H. Messing, and J. J. Duan. 2001. Utilization of the exotic weed *Pluchea odorata* (Asteraceae) and related plants by the introduced biological control agent *Acinia picturata* (Diptera: Tephritidae) in Hawaii. *Biocontrol Science and Technology* 11: 703-710.
71. **Alyokhin, A. V.**, R. H. Messing, and J. J. Duan. 2001. Abundance and mating behavior of Oriental fruit flies (Diptera: Tephritidae) in the vicinity of methyleugenol-baited traps. *Pan-Pacific Entomologist* 77: 161-167.
72. **Alyokhin, 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 Behavior* 14: 57-67.
73. **Alyokhin, A. V.**, R. H. Messing, and J. J. Duan. 2000. Visual and olfactory stimuli and fruit maturity affect trap captures of Oriental fruit flies (Diptera: Tephritidae). *Journal of Economic Entomology* 93: 644-649.
74. **Alyokhin, A. V.**, D. N. Ferro, C. W. Hoy, and G. Head. 1999. Laboratory assessment of flight activity displayed by the Colorado potato beetles (Coleoptera: Chrysomelidae) fed on transgenic and Cry3A toxin-treated potato foliage. *Journal of Economic Entomology* 92: 115-120.
75. **Alyokhin, A. V.** and D. N. Ferro. 1999. Electrophoretic confirmation of sperm mixing in mated Colorado potato beetles (Coleoptera: Chrysomelidae). *Annals of the Entomological Society of America* 92: 230-235.
76. **Alyokhin, A. V.** and D. N. Ferro. 1999. Modifications in flight and oviposition of Bt-resistant and Bt-susceptible Colorado potato beetles as a result of exposure to *Bacillus thuringiensis* subsp. *tenebrionis* Cry3A toxin. *Entomologia Experimentalis et Applicata* 90: 93-101.
77. **Alyokhin, A. V.** and D. N. Ferro. 1999. Reproduction and dispersal of summer-generation Colorado potato beetle (Coleoptera: Chrysomelidae). *Environmental Entomology* 28: 425-430.

78. **Alyokhin, A. V.** and D. N. Ferro. 1999. Relative fitness of Colorado potato beetle (Coleoptera: Chrysomelidae) resistant and susceptible to the *Bacillus thuringiensis* Cry3A toxin. *Journal of Economic Entomology* 92: 510-515.
79. **Alyokhin, A. V.** and D. N. Ferro. 1999. Mating ability of Colorado potato beetle (Coleoptera: Chrysomelidae) males fed transgenic potato foliage. *Canadian Entomologist* 131: 539-540.
80. Ferro, D. N., **A. V. Alyokhin**, and D. B. Tobin<sup>U</sup>. 1999. Reproductive status and flight activity of the overwintered Colorado potato beetle. *Entomologia Experimentalis et Applicata* 91: 443-448.

### **Books**

1. Abramovitz, M. and **A. Alyokhin** [content consultant]. 2019. A Toad that Explodes and Other Cool Animal Facts. Bright Idea Books Series, Capstone Press, North Mankato, Minnesota, USA.
2. Giordanengo, P., C. Vincent, and **A. Alyokhin** [editors]. 2013. Insect Pests of Potato: Global Perspectives on Biology and Management. Academic Press, Oxford, UK. 598 pp.

### **Book Chapters**

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3. Vincent, C., **A. Alyokhin**, and P. Giordanengo. 2013. Potatoes and their pests – setting the stage. In: Giordanengo, P., C. Vincent, and A. Alyokhin [editors]. Insect Pests of Potato: Global Perspectives on Biology and Management. Academic Press, Oxford, UK. Pp. 3-8.
4. **Alyokhin, A.**, M. Udalov, and G. Benkovskaya. 2013. The Colorado potato beetle. In: Giordanengo, P., C. Vincent, and A. Alyokhin [editors]. Insect Pests of Potato: Global Perspectives on Biology and Management. Academic Press, Oxford, UK. Pp. 11-29.
5. **Alyokhin, A.** and S. Gross<sup>G</sup>. 2013. Interactions among organic soil amendments, plants, and insect herbivores. In: Giordanengo, P., C. Vincent, and A. Alyokhin [editors]. Insect Pests of Potato: Global Perspectives on Biology and Management. Academic Press, Oxford, UK. Pp. 291-309.
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### ***Teaching Materials***

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2. **Alyokhin, A.** and C. Finlayson<sup>G</sup>. 2007. Biological Invasions: Presentation and Notes. Network of Conservation Educators and Practitioners, American Museum of Natural History. Available at: <http://ncep.amnh.org/>.
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### ***Opinion and Commentary***

1. **Alyokhin, A.** 2019. Response to “Common statistical mistakes in entomology: pseudoreplication.” *American Entomologist* 65: 212-213.
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4. **Alyokhin, A.** 2011. Response to the article *Gene code promises crops for all seasons* by Raja Murthy. Letter to the Editor, published by Asia Times Online on September 13, 2011.

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2. **Alyokhin, A.** 2021. How does RNA interference work in insect pest management? *CropLife*, January 19, 2021. <https://www.croplife.com/crop-inputs/insecticides/how-does-rna-interference-work-in-insect-pest-management/>
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6. **Alyokhin, A.** 2014. Breaking down resistance: Insecticide resistance in Colorado potato beetles. *Potato Grower* 43(5): 38-39.
7. Buzza, A. **Alyokhin, J.** Dwyer, and M. Dwyer. 2014. Aphid tower collection studies. *Spudlines* 52(1): 2-4.
8. **Alyokhin, A.** 2013. Biological invasions class at UMO lists Maine's "Dirty Dozen" invasives. *Maine Invasive Species Network Blog*, <http://umaine.edu/invasivespecies/2013/07/19/bioinvasions/>.
9. **Alyokhin, A.** 2013. Potato virus Y epidemic: Common misconceptions and possible solutions. *Spudlines* 51(2): 2-3.
10. **Alyokhin, A., J. Dwyer, and G. Sewell.** 2011. Potato virus Y epidemiology: Looking beyond a potato field. *Spudlines* 49(3): 1-2.
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16. **Alyokhin, A.** 2010. Current condition of the University of Maine Insect Collection. *The Maine Entomologist* 14(2): 2-3.
17. **Alyokhin, A.** 2009. Impact of warming on Maine insects. *The Maine Entomologist* 13(2): 3.
18. **Alyokhin, A.** 2009. Colorado potato beetle: What's been done and what may come. *Potato Grower* 38(3): 24-28.
19. **Alyokhin, A., J. Dwyer, and A. Plant.** 2008. Insecticide resistance in Colorado potato beetles. The University of Maine Cooperative Extension Bulletin #2424, Orono, Maine.
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27. **Alyokhin, A.** 2004. The two-spotted leafhopper, *Sophonia rufofascia*. CABI Crop Protection Compendium (Invasive Species). Wallingford, U.K.
28. **Alyokhin, A.** 2003. Alien invasion: *Harmonia axyridis* in Maine and beyond. *The Maine Entomologist* 7(3): 1-3.
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### **Multimedia**

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2. **Alyokhin, A.** 2015. Insecticide Resistance. Webinar presented for the Northeast Sustainable Agriculture Research and Education online course “Unifying Resistance Management Education for Vegetable & Fruit Production,” available at <http://moodle.cce.cornell.edu/course/view.php?id=137>
3. **Alyokhin, A.** 2015. Preventing the Spread of Potato Viruses: What Insecticides Can and Cannot Do. Webinar presented for the Pest Management Network, available at <http://www.plantmanagementnetwork.org/edcenter/seminars/potato/PotatoViruses/>
4. **Alyokhin, A.** 2008. [www.potato beetle.org](http://www.potato beetle.org).

### **Pesticide Efficacy Reports**

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2. Buzza, A.M. and **A. Alyokhin**. 2018. Control of aphids on potato, 2017. *Arthropod Management Tests* 43 (1): tsy067, <https://doi.org/10.1093/amt/tsy067>.
3. Buzza, A.M. and **A. Alyokhin**. 2018. Effects of different application rates of cyantraniliprole on control of Colorado potato beetle on potato, 2017. *Arthropod Management Tests* 43 (1): tsy076, <https://doi.org/10.1093/amt/tsy076>.
4. Buzza, A.M. and **A. Alyokhin**. 2018. Control of Colorado potato beetle on potato using premixed formulations of cyantraniliprole and other insecticides, 2017. *Arthropod Management Tests* 43 (1): tsy077, <https://doi.org/10.1093/amt/tsy077>.
5. Buzza, A.M. and **A. Alyokhin**. 2018. Control of Colorado potato beetle on potato with tolfenpyrad, 2017. *Arthropod Management Tests* 43 (1): tsy078, <https://doi.org/10.1093/amt/tsy078>.
6. Buzza, A.M. and **A. Alyokhin**. 2018. Control of Colorado potato beetle on potato with cyantraniliprole, 2017. *Arthropod Management Tests* 43 (1): tsy079, <https://doi.org/10.1093/amt/tsy079>.
7. Buzza, A.M. and **A. Alyokhin**. 2017. Control of aphids on potato, 2016. *Arthropod Management Tests* 42 (1): tsx117, <https://doi.org/10.1093/amt/tsx117>.
8. Buzza, A.M. and **A. Alyokhin**. 2017. Control of insects on potato, 2016. *Arthropod Management Tests* 42 (1): tsx011, <https://doi.org/10.1093/amt/tsx011>.

9. Buzza, A.M. and **A. Alyokhin**. 2016. Control of aphids on potato, 2015. *Arthropod Management Tests* 41 (1): tsw084 doi: 10.1093/amt/tsv084.
10. Buzza, A.M. and **A. Alyokhin**. 2016. Control of Colorado potato beetle on potato, 2015. *Arthropod Management Tests* 41 (1): tsw085 doi: 10.1093/amt/tsv085.
11. Buzza, A.M. and **A. Alyokhin**. 2015. Control of aphids on potato, 2014. *Arthropod Management Tests* 40: E2 <http://dx.doi.org/10.1093/amt/tsv058>.
12. Buzza, A.M. and **A. Alyokhin**. 2015. Control of insects on potato, 2014. *Arthropod Management Tests* 40: E3 doi: 10.1093/amt/tsv059.
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14. Buzza, A.M. and **A. Alyokhin**. 2014. Control of insects on potato, 2013. *Arthropod Management Tests* 39 (1): E3 doi: 10.4182/amt.2014.E3.
15. Buzza, A.M. and **A. Alyokhin**. 2013. Control of aphids on potato, 2012. *Arthropod Management Tests* 38: E47.
16. Buzza, A.M. and **A. Alyokhin**. 2013. Control of insects on potato, 2012. *Arthropod Management Tests* 38: E48.
17. Sewell, G.H. and **A. Alyokhin**. 2012. Control of insects on potato, 2011. *Arthropod Management Tests* 37: E55.
18. Sewell, G.H. and **A. Alyokhin**. 2011. Control of aphids on Irish potato, 2010. *Arthropod Management Tests* 36: E62.
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23. Sewell, G.H. and **A. Alyokhin**. 2009. Control of Colorado potato beetle on potato, 2008. *Arthropod Management Tests* 34: E52.



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25. Sewell, G.H. and **A. Alyokhin**. 2008. Control of Colorado potato beetle on Rimon-treated potatoes, 2007. *Arthropod Management Tests* 33: E44.
26. Sewell, G.H. and **A. Alyokhin**. 2007. Control of aphids on Irish potato, 2006. *Arthropod Management Tests* 32: E40.
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29. Sewell, G.H. and **A. Alyokhin**. 2006. Control of aphids on Irish potato, 2005. *Arthropod Management Tests* 31: E59.
30. Sewell, G.H. and **A. Alyokhin**. 2006. Control of Colorado potato beetle on potato, 2005. *Arthropod Management Tests* 31: E60.
31. Sewell, G.H. and **A. Alyokhin**. 2006. Control of European corn borer on potato, 2005. *Arthropod Management Tests* 31: E61.
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33. Sewell, G.H. and **A. Alyokhin**. 2005. Control of aphids on Irish potato, 2004. *Arthropod Management Tests* 30: E66.
34. Sewell, G.H. and **A. Alyokhin**. 2005. Control of Colorado potato beetle on potato, 2004. *Arthropod Management Tests* 30: E67.
35. Sewell, G.H. and **A. Alyokhin**. 2005. Control of wireworm on potato, 2004. *Arthropod Management Tests* 30: E68.
36. Sewell, G.H. and **A. Alyokhin**. 2004. Control of aphids on Irish potato, 2003. *Arthropod Management Tests* 29: E67.
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39. Sewell, G.H. and **A. Alyokhin**. 2003. Control of aphids on Irish potato, 2002. *Arthropod Management Tests* 28: E62.
40. Sewell, G.H. and **A. Alyokhin**. 2003. Control of Colorado potato beetle on potato, 2002. *Arthropod Management Tests* 28: E63.
41. Sewell, G.H., E. Groden, and **A. Alyokhin**. 2003. Control of European corn borer on potato, 2002. *Arthropod Management Tests* 28: E64.
42. Sewell, G.H. and **A. Alyokhin**. 2003. Control of wireworm on potato, 2003. *Arthropod Management Tests* 28: E65.
43. Sewell, G.H. and **A. Alyokhin**. 2002. Control of aphids on Irish potato, 2001. *Arthropod Management Tests* 27: E76.
44. Sewell, G.H. and **A. Alyokhin**. 2002. Control of Colorado potato beetle on potato, 2001. *Arthropod Management Tests* 27: E77.
45. Sewell, G.H. and **A. Alyokhin**. 2002. Control of wireworm on potato, 2001. *Arthropod Management Tests* 27: E78.

#### **INVITED PRESENTATIONS:**

1. **Alyokhin, A.** 2021. Insect issues in Maine. Syngenta Northeastern Invitation to Innovation Knowledge Exchange, Allentown, PA. Remotely via Zoom.
2. **Alyokhin, A.** 2021. Colorado potato beetle control: from Paris Green to RNAi. GreenLight Biosciences seminar, Research Triangle, NC. Remotely via Zoom.
3. **Alyokhin, A.** 2020. Of mites and men: spirotetramat, Lysenko, and Frida Kahlo. School of Biology and Ecology seminar, University of Maine, Orono, ME.
4. **Alyokhin, A.** 2020. Epidemiology and management of Potato Virus Y. College of Arts and Sciences seminar, University of Maine in Presque Isle, Presque Isle, ME.
5. **Alyokhin, A.** 2019. Theoretical foundation for integrated management of Potato Virus Y. Chinese Academy of Agricultural Sciences seminar, Beijing, China.
6. **Alyokhin, A.** 2019. Developing an ecologically and evolutionarily sound foundation for integrated pest management in potatoes. College of Life Science and Technology seminar, Xinjiang University, Urumqi, China.
7. **Alyokhin, A.** 2019. Publishing a scientific paper in a reputable international outlet. College of Life Science and Technology seminar and workshop, Xinjiang University, Urumqi, China.

8. **Alyokhin, A.** 2019. Educational opportunities at the university of Maine for Xinjiang students. College of Life Science and Technology seminar, Xinjiang University, Urumqi, China.
9. **Alyokhin, A.** 2019. Successes and challenges in managing insecticide resistance in Colorado potato beetle in North America. Fourth Russian Plant Protection Congress with International Participation, St Petersburg, Russian Federation.
10. **Alyokhin, A.** 2019. Scaling up: what can aphids and viruses in Maine potato fields tell about global change? Interdepartmental Ecology, Evolution, and Conservation Biology seminar, University of Hawaii, Manoa.
11. **Alyokhin, A.** 2018. A new look on vector-pathogen-host interactions in Potato Virus Y epidemics. Department of Plant and Soil Science seminar, Texas Tech University, Lubbock, TX.
12. **Alyokhin, A.** 2018. Insect issues in Maine potatoes. Syngenta Northeastern Invitation to Innovation Knowledge Exchange, Allentown, PA.
13. **Alyokhin, A.** 2018. Research and education in crop protection in the U.S. system of higher education. Department of Plant Protection seminar, Moscow Timiryazev Agricultural Academy, Moscow, Russia.
14. **Alyokhin, A.** 2017. Insect farming for production of sustainable feeds for aquaculture. Symposium “Food Science in the 21st Century,” co-sponsored by Harvard University and the Japan Society for Promotion of Science.
15. **Alyokhin, A.** 2017. Effects of feeding on different waste products and exposure to moxidectin on development of black soldier fly larvae. Symposium “Insects – That’s What for Dinner.” Annual Meeting of the Entomological Society of America, Denver, CO.
16. **Alyokhin, A.** 2017. Insect management. Syngenta Potato Summit, Orlando, Florida.
17. **Alyokhin, A.** 2017. Epidemiology of potato-infecting viruses transmitted by aphids. School of Biology and Ecology Faculty Research Showcase, University of Maine, Orono, ME.
18. **Alyokhin, A.** 2016. Evolutionary trade-offs and insecticide resistance. Symposium “Rapid Evolution of Insect Pests within Agroecosystems.” XXV International Congress of Entomology, Orlando, Florida.
19. Wenninger, E., **A. Alyokhin**, J. Dill, J. Dwyer, K. Frost, R. Groves, S. Rondon, and C. Benedict. 2016. Seasonal aphid captures in potato and implications for virus spread. Potato Expo, Las Vegas, Nevada.
20. **Alyokhin, A.** 2015. Managing non-persistently transmitted aphid-borne viruses: Perceptions and reality. Symposium “Beyond Corn and Soybeans...Challenges to Integrated Pest

Management in Specialty Crops.” Annual Meeting of the Entomological Society of America, Minneapolis, MN.

21. **Alyokhin, A.**, R. Groves, S.I. Rondon, E. Wenninger, A. Murphy, A. Buzza, S. Mondal, and R. Cating. 2015. Landscape effects on the epidemiology of Potato Virus Y. Potato Expo, Orlando, Florida.
22. **Alyokhin, A.** 2013. Impact of pesticide resistance on IPM practices. Symposium “Current Issues in Insecticide Resistance Management.” Annual Meeting of the Eastern Branch of the Entomological Society of America, Lancaster, PA.
23. **Alyokhin, A.** 2012. Colorado potato beetle: Why is it such a pain in the neck? Symposium “Growing Potatoes: A Tale of Emerging and Old Pests.” XXIV International Congress of Entomology, Daegu, South Korea.
24. **Alyokhin, A.**, J. Dwyer, and G. Sewell. 2012. Vegetation surrounding potato fields as a reservoir for Potato Virus Y. Potato Expo, Orlando, Florida.
25. **Alyokhin, A.** 2011. Global change on local scale: aphids on potatoes in Northern Maine. School of Biology and Ecology Seminar, University of Maine, Orono.
26. **Alyokhin, A.** 2010. Why can't they just get along: population trends and interactions in aphids and lady beetles. A. Randall Alford Memorial Lecture of the Friends of Dr. Edith Marion Patch, Inc.
27. **Alyokhin, A.** 2010. Plant-mediated effects of soil management on insect herbivores. Joint Seminar by the South Dakota State University Department of Plant Science and the US Department of Agriculture North Central Agricultural Research Laboratory, Brookings.
28. **Alyokhin, A.** 2010. Biological control, volcanoes, and live squid for dinner: my Pacific sabbatical. School of Biology and Ecology Seminar, University of Maine, Orono.
29. **Alyokhin, A.** 2010. Refuse, treasure, and tree-hugging: response of insect herbivores to soil amendments. Department of Entomology Seminar, Michigan State University, East Lansing.
30. **Alyokhin, A.** 2009. Reduced Colorado potato beetle densities on manure-amended plots of the long-term Potato Ecosystem Project. Member Symposium “The Colorado Potato Beetle (*Leptinotarsa decemlineata*) Past, Present, and Future: Integrating Management and Reality” at the Entomological Society of America Annual Meeting, Indianapolis, IN.
31. **Alyokhin, A.** 2008. Imidacloprid resistance in the Colorado potato beetle in Maine. Syngenta Crop Protection Technical Training Session, Las Vegas, NV.
32. **Alyokhin, A.** 2006. Colorado potato beetle control and philosophy of transcendental evil. Department of Biological Sciences Seminar, University of Maine, Orono.

33. **Alyokhin, A.** 2006. Imidacloprid resistance in Maine populations of the Colorado potato beetle. Resistance Management Potato Symposium, San Antonio, Texas.
34. **Alyokhin, A.** 2006. It's all natural, man: explaining a few unexpected declines in pest populations. Department of Entomology Seminar, University of Maryland, College Park.
35. **Alyokhin, A.** 2006. Natural regulation in unnatural systems: ecological view on a potato field (and beyond). Biology Department Seminar, Queens College, City University of New York, New York.
36. **Alyokhin, A.** 2006. Colorado potato beetle control and harsh lessons in applied evolutionary biology. Ohio Agricultural Research and Development Center and Department of Entomology Joint Seminar, The Ohio State University, Wooster.
37. **Alyokhin, A.** 2005. Long-term trends and regulation of aphid populations. Department of Biological Sciences Seminar, University of Maine, Orono.
38. **Alyokhin, A.** and F. Drummond. 2004. Density dependence in the regulation of populations of potato-colonizing aphids. Insect Population Dynamics Symposium, Joint Annual Meeting of the Acadian Entomological Society and the Entomological Society of Canada, Charlottetown, PEI, October 15-18.
39. **Alyokhin, A.V.** 2003. Being an invader in alien-dominated ecosystems: establishment of the two-spotted leafhopper in Hawaii. Department of Wildlife Ecology Seminar, University of Maine, Orono.
40. **Alyokhin, A.V.** 2002. Potato insect pest research in Maine: current status and future directions. Agriculture Canada Potato Research Centre Seminar, Fredericton, New Brunswick.
41. **Alyokhin, A.V.** 2002. Biotic facilitation and biotic resistance in the invasion of island ecosystems: a story of two trees, one leafhopper, and a whole bunch of wasps in Hawaii. Department of Entomology Seminar, University of Massachusetts, Amherst.
42. **Alyokhin, A.V.** 2000. The great chess game: predicting effects of pest management practices. Department of Biological Sciences Seminar, University of Maine, Orono.
43. **Alyokhin, A.V.** 1999. Preventing insect adaptation to transgenic plants: an example of the Colorado potato beetle. Department of Entomology Seminar, University of Hawaii, Manoa.
44. **Alyokhin, A.V.** 1998. Predicting gene flow between Bt-resistant and Bt-susceptible Colorado potato beetle populations: implications for resistance management. Department of Entomology Seminar, University of Massachusetts, Amherst.

**SUBMITTED PRESENTATIONS:**

1. **Alyokhin, A. 2021.** Transmission of *Dickeya* by insects. WERA-89 Potato Virus and Virus-Like Disease Management Multistate Research Coordinating Committee and Information Exchange Group Annual Meeting, Moscow, ID. Remotely via Zoom.
2. **Alyokhin, A. 2021.** Aphid response to potatoes infected with *Dickeya*. NE2001 Chemical Ecology Multistate Project Meeting, remotely via Zoom.
3. **Alyokhin, A.** and J. Villazana. 2019. Growth curve for black soldier fly larvae under constant temperature. Annual Meeting of the Entomological Society of America, St Louis, MO.
4. **Alyokhin, A.,** J. Villazana, and E. Bernard. 2019. Antibiotic and antixenotic properties of substrates inhabited by black soldier fly larvae. Annual Meeting of the Entomological Society of America, St Louis, MO.
5. Villazana, J., D. Cunningham, and **A. Alyokhin.** 2017. Development of black soldier fly, *Hermetia illucens* (Diptera: Stratiomyidae), on marine waste. Annual Meeting of the Entomological Society of America, Denver, CO.
6. Insinga, J., **A. Alyokhin,** N. Marangoni, and J. Hao. 2017. Evaluation of insects as potential vectors of *Dickeya dianthicola* in potato agrosystems. Annual Meeting of the Entomological Society of America, Denver, CO.
7. Popov, S. and **A. Alyokhin.** 2017. Age and gender-dependent mortality of common spider mite, *Tetranychus urticae*, treated by spirotetramat (Movento Energy SC). Annual Meeting of the Entomological Society of America, Denver, CO.
8. Jurat-Fuentes, J.L., J. Dee, W. Moar, P. Moore, J.A. Baum, J. Beattie, **A. Alyokhin,** M. Clough, G. Felton, R. Groves, S.R. Menasha, K. Ostlie, and S. Rondon. 2017. Selection of resistance to insecticidal RNAi in Colorado potato beetle (*Leptinotarsa decemlineata*). Annual Meeting of the Entomological Society of America, Denver, CO.
9. Villazana, J., D. Cunningham, and **A. Alyokhin.** 2017. Effect of moisture on migration and mortality of black soldier fly, *Hermetia illucens* (Diptera: Stratiomyidae), larvae. Annual Meeting of the Entomological Society of America, Denver, CO.
10. Insinga, J. and **A. Alyokhin.** 2017. Behavioral responses of two common insect pests to volatile metabolites of *Dickeya dianthicola*. Annual Meeting of the Entomological Society of America, Denver, CO.
11. Galimberti, A., **A. Alyokhin,** and H.C. Qu. 2017. Relative importance of initial inoculum and transmission efficiency by aphid vectors in spread of *Potato Virus Y*. Annual Meeting of the Entomological Society of America, Denver, CO.

12. **Alyokhin, A.**, S. Bag, J. Dill, J. Dwyer, K.E. Frost, R. Groves, S. Rondon, E. Wenninger, D. Lagos-Kutz, and C. Benedict. 2017. Multistate effort to understand aphid diversity and PVY spread in potatoes in the United States. Annual Meeting of the Entomological Society of America, Denver, CO.
13. Baker, M., K. Schnaars-Uvino, C. Klein, D. Mota-Sanchez, and **A. Alyokhin**. 2016. Evolution of spinosad resistance in Colorado potato beetle, *Leptinotarsa decemlineata*, in the eastern US: Variation, dominance, and cross-resistance. XXV International Congress of Entomology, Orlando, Florida.
14. Galimberti, A.K. and **A. Alyokhin**. 2016. Behavioral and developmental effects of mineral oil on potato pests. Northeastern Plant, Pest, and Soils Conference, Philadelphia, PA. XXV International Congress of Entomology, Orlando, Florida.
15. **Alyokhin, A.** and A. Buzza. 2016. Epidemiology of Potato Virus Y in Northern Maine. Northeastern Plant, Pest, and Soils Conference, Philadelphia, PA.
16. Galimberti, A.K. and **A. Alyokhin**. 2016. Antifeedant effects of mineral oil on Colorado potato beetle. Northeastern Plant, Pest, and Soils Conference, Philadelphia, PA.
17. **Alyokhin, A.** 2015. Con- and heterospecific influences on potato colonization by three species of aphids. Annual Meeting of the Entomological Society of America, Minneapolis, MN.
18. Chen, J., **A. Alyokhin**, A. Kitazumi, J. Alpuerto, and B. de los Reyes. 2014. Heat-induced mortality and expression of heat shock proteins in Colorado potato beetles treated with imidacloprid. Entomological Society of America Annual Meeting, Portland, OR.
19. **Alyokhin, A.** 2014. Red queen on a treadmill: Insecticide resistance as a co-evolutionary phenomenon. Entomological Society of America Annual Meeting, Portland, OR.
20. Booth, E. and **A. Alyokhin**. 2014. Adult cannibalism in the Colorado potato beetle (*Leptinotarsa decemlineata*). Entomological Society of America Annual Meeting, Portland, OR.
21. Booth, E. and **A. Alyokhin**. 2014. Colorado potato beetle (*Leptinotarsa decemlineata*) effects on the epidemiology of *Potato virus Y* and *Potato leafroll virus*. Entomological Society of America Annual Meeting, Portland, OR.
22. Patterson, M. and **A. Alyokhin**. 2014. Phosphite toxicity to the Colorado potato beetle: Direct vs. plant-mediated effects. Entomological Society of America Annual Meeting, Portland, OR.
23. **Alyokhin, A.** 2014. Ecological consequences of introducing non-native lady beetles. 5th Multidisciplinary Science Forum, US-JSPS Alumni Association, Gainesville, FL.

24. **Alyokhin, A.** 2014. Reduced damage by herbivorous insect pests on organically amended soils. 4th Multidisciplinary Science Forum, US-JSPS Alumni Association, Washington, DC.
25. Buzza, A. and **A. Alyokhin.** 2013. Dandelion as a host of *Potato Virus Y* in Northern Maine. 97<sup>th</sup> Annual Meeting of the Potato Association of America, Québec City, Québec, Canada.
26. **Alyokhin, A.,** M. Patterson, and G. Sewell. 2013. Insecticidal properties of phosphorous acid against the Colorado potato beetle. 97<sup>th</sup> Annual Meeting of the Potato Association of America, Québec City, Québec, Canada.
27. **Alyokhin, A.** 2012. Insect resistance to Bt plants: Five elephants in the room. Entomological Society of America Annual Meeting, Knoxville, TN.
28. **Alyokhin, A.** and L. Miller. 2012. Movement of adult Colorado potato beetles following exposure to imidacloprid. Entomological Society of America Annual Meeting, Knoxville, TN.
29. Chen, J., **Alyokhin, A.,** D. Mota-Sanchez, M. Baker, and M. Whalon. 2012. Interactions between thermal stress and insecticide resistance in geographically isolated Colorado potato beetle strains. Entomological Society of America Annual Meeting, Knoxville, TN.
30. **Alyokhin, A.** and C. Leppanen. 2012. Ecological interactions between non-native and native lady beetles in Maine, the United States. XXIV International Congress of Entomology, Daegu, South Korea.
31. **Alyokhin, A.,** D. Mota-Sanchez, M. Baker, J. Chen, and M. Whalon. 2012. Geographic variation among Colorado potato beetle populations and its implications for managing insecticide resistance. XXIV International Congress of Entomology, Daegu, South Korea.
32. **Alyokhin, A.** 2012. Insect resistance to Bt plants: Time to start paying attention? XXIV International Congress of Entomology, Daegu, South Korea.
33. Chen, J., **A. Alyokhin, D.** Mota-Sanchez, M. Baker, and M.E. Whalon. 2012. Geographic variation in growth potential of Colorado potato beetle populations. Annual Meeting of the Potato Association of America, Denver, CO.
34. **Alyokhin, A.,** J. Dwyer, and G. Sewell. 2012. Non-crop hosts of *Potato Virus Y* in the vicinity of potato fields in Northern Maine. Annual Meeting of the Potato Association of America, Denver, CO.
35. **Alyokhin, A.** 2011. Where is scientific evidence in support of refuge size reduction for pyramided Bt crops? Entomological Society of America Annual Meeting, Reno, NV.
36. **Alyokhin, A.** and G. Sewell. 2011. Competitive interactions and host sharing by three species of aphids. Entomological Society of America Annual Meeting, Reno, NV.



37. Chen, J., **A. Alyokhin, D. Mota-Sanchez**, M. Baker, and M.E. Whalon. 2011. Variation in life history parameters in geographically isolated populations of the Colorado potato beetle. Entomological Society of America Annual Meeting, Reno, NV.
38. Mota-Sanchez, D., M.E Whalon, **A. Alyokhin**, M. Baker, and R.M. Hollingworth. 2011. Geographic variation in the Colorado potato beetle resistance to imidacloprid. Entomological Society of America Annual Meeting, Reno, NV.
39. **Alyokhin, A.**, M. Patterson, G. Dively, and D. Rogers. 2011. Managing Colorado potato beetle resistance to imidacloprid: From theory to practice. Northeast Potato Technology Forum, Fredericton, New Brunswick, Canada.
40. **Alyokhin, A.**, G. Dively, and D. Rogers. 2010. Performance of an insecticide resistance management plan on a commercial potato farm. Entomological Society of America Annual Meeting, San Diego, CA.
41. **Alyokhin, A.** 2009. Novaluron increases fecundity and reduces fertility of Colorado potato beetles. Entomological Society of America Annual Meeting, Indianapolis, IN.
42. Gross, S., **A. Alyokhin**, R. Larkin, S. Erich, E. Bernard and S. Tavantzis. 2009. Soil amendment effects on survivorship and development time of Colorado potato beetles. Entomological Society of America Annual Meeting, Indianapolis, IN.
43. **Alyokhin, A.** and C. Finlayson. 2009. History and current distribution of native and non-native lady beetles in Maine. 13<sup>th</sup> Pacific Entomology Conference, Honolulu, HI.
44. Gross, S., **A. Alyokhin**, R. Larkin, S. Erich and S. Tavantzis. 2008. Reduced pest insect densities following compost application in organic and conventional potato systems. Northeast Potato Technology Forum, Bangor, Maine.
45. Gross, S., **A. Alyokhin**, R. Larkin, S. Erich and S. Tavantzis. 2008. Reducing pest insect densities in potato systems using compost applications. The Annual Earth Day Celebration of the Life and Legacy of Dr. Edith Marion Patch, University of Maine at Orono.
46. Gross, S., **A. Alyokhin**, R. Larkin, S. Erich and S. Tavantzis. 2008. Reduced pest insect densities following compost application in potato systems. Entomological Society of America Annual Meeting, Reno, NV.
47. **Alyokhin, A.** and G. Dively. 2008. Stability of imidacloprid resistance in Maine population of the Colorado potato beetle. Northeast Potato Technology Forum, Fredericton, New Brunswick, Canada.
48. Erich, M.S., S. Tavantzis, R. Larkin, **A. Alyokhin**, and S. Gross. 2008. Compost and biological amendments in potato systems: Effects on soil properties and fertility. Northeast Potato Technology Forum, Fredericton, New Brunswick, Canada.

49. Bernard, E., R. Larkin, S. Tavantzis, S. Erich, **A. Alyokhin**, and S. Gross. 2008. Compost and biological amendments in potato systems: Effects on soil microbial communities. Northeast Potato Technology Forum, Fredericton, New Brunswick, Canada.
50. Tavantzis, S., R. Larkin, **A. Alyokhin**, S. Erich, E. Bernard and S. Gross. 2008. Compost and biological amendments in potato systems: Effects on soil-borne diseases and yield. Northeast Potato Technology Forum, Fredericton, New Brunswick, Canada.
51. Gross, S., **A. Alyokhin**, R. Larkin, S. Erich and S. Tavantzis. 2008. Reduced pest insect densities following compost application in organic and conventional systems. Northeast Potato Technology Forum, Fredericton, New Brunswick, Canada.
52. Finlayson, C., S. Gross, and **A. Alyokhin**. 2007. Interactions with aphid-tending ants differ among lady beetle species. Entomological Society of America Annual Meeting, San Diego, CA.
53. **Alyokhin, A.** and G. Sewell. 2007. Competition among three species of potato-colonizing aphids. Acadian Entomological Society Annual Meeting, Halifax, NS, Canada.
54. Finlayson, C. and **A. Alyokhin**. 2007. Occurrence of native and non-native lady beetles (Coleoptera: Coccinellidae): Do numbers in anthropogenic and ancestral habitats differ? Acadian Entomological Society Annual Meeting, Halifax, NS, Canada.
55. **Alyokhin, A.** and G. Dively. 2007. Resistance to imidacloprid and thiamethoxam in Maine populations of the Colorado potato beetle. Northeast Potato Technology Forum, Charlottetown, Prince Edward Island, Canada.
56. **Alyokhin, A.**, G. Sewell, and R. Choban. 2006. Reduced reproductive success of Colorado potato beetles exposed to novaluron. Entomological Society of America Annual Meeting, Indianapolis, IN.
57. Finlayson, C, and **A. Alyokhin**. 2006. Comparing native and non-native lady beetle populations in different habitats: testing the habitat compression hypothesis. Neobiota, 4th European Conference on Biological Invasions, Vienna, Austria.
58. Baker, M.B., **A. Alyokhin**, and A.H. Porter. 2006. Persistent yet modified costs of resistance to insecticides in a leaf beetle, *Leptinotarsa decemlineata*. Evolution 2006. Joint meeting of the American Society of Naturalists, Society for the Study of Evolution, and the Society of Systematic Biologists. Stony Brook, NY.
59. **Alyokhin, A.**, G. Dively, and M Baker. 2006. A new look at spatial and temporal refuges for managing imidacloprid resistance in the Colorado potato beetle. Northeast Potato Technology Forum, Bangor, Maine.

60. **Alyokhin, A.**, G. Dively, M. Mahoney, D. Rogers, and J. Wollam. 2005. Susceptibility of imidacloprid-resistant Colorado potato beetles to alternative insecticides. Entomological Society of America Annual Meeting, Fort Lauderdale, FL.
61. Finlayson, C., K. Landry, and **A. Alyokhin**. 2005. Relative abundance of native and non-native coccinellids in Maine. Entomological Society of America Annual Meeting, Fort Lauderdale, FL.
62. Narayandas, G. and **A. Alyokhin**. 2005. Diurnal patterns in host finding by potato aphids. Entomological Society of America Annual Meeting, Fort Lauderdale, FL.
63. Alford, R., **A. Alyokhin**, D. Weber, and J. Dickens. 2005. Towards developing Colorado potato beetle attracticide: importance of inert ingredients. Entomological Society of America Annual Meeting, Fort Lauderdale, FL.
64. **Alyokhin, A.**, R. Atlihan, G. Porter, E. Groden, and F. Drummond. 2005. Plant-mediated effects of soil amendments on the Colorado potato beetle. Acadian Entomological Society Annual Meeting, Fredericton, NB, Canada.
65. Narayandas, G. and **A. Alyokhin**. 2005. Response of potato aphid to natural potato foliage odor, synthetic potato-derived Colorado potato beetle attractant, and its blank inert carrier. Acadian Entomological Society Annual Meeting, Fredericton, NB, Canada.
66. Narayandas, G. and **A. Alyokhin**. 2005. Locomotory response of potato aphid to environmental stimuli. Eastern Branch Entomological Society of America Annual Meeting, Harrisburg, PA.
67. **Alyokhin, A.**, D. Weber, R. Alford, and J. Dickens. 2004. Effect of the synthetic kairomone blend on Colorado potato beetle populations in insecticide-treated plots. Entomological Society of America Annual Meeting, Salt Lake City, UT.
68. **Alyokhin, A.**, G. Porter, E. Groden, and F. Drummond. 2004. Decrease in the Colorado potato beetle densities on manure-amended soils: another proof of the mineral balance hypothesis? XXII International Congress of Entomology, Brisbane, Australia.
69. **Alyokhin, A.** 2003. On-soil movement and plant colonization by walking wingless morphs of potato aphid, green peach aphid, and buckthorn aphid. North Central Regional Committee on Migration and Dispersal of Biota Annual Meeting, Cincinnati, OH.
70. **Alyokhin, A.** and G. Sewell. 2002. Changes in lady beetle community following the establishment of three alien species in Northern Maine. Entomological Society of America Annual Meeting, Fort Lauderdale, FL.

71. **Alyokhin, A.V.**, R.H. Messing, and P. Yang. 2001. Double invasion: a noxious weed aids leafhopper incursion into Hawaiian forests. Entomological Society of America Annual Meeting, San Diego, CA.
72. **Alyokhin, A.**, G. Sewell, and E. Groden. 2001. Movement of potato-colonizing aphids as a factor in optimizing imidacloprid use in potato crops. North Central Regional Committee on Migration and Dispersal of Biota Annual Meeting, Kansas City, MO.
73. **Alyokhin, A.V.**, R.H. Messing, and J. J. Duan. 1999. Does the presence of methyleugenol-baited traps facilitate mating of Oriental fruit flies? Entomological Society of America Annual Meeting, Atlanta, GA.
74. **Alyokhin, A.V.** and D.N. Ferro. 1998. Dispersal and reproduction of Bt-resistant and Bt-susceptible Colorado potato beetles exposed to *Bacillus thuringiensis* Cry3A toxin. Entomological Society of America Annual Meeting, Las Vegas, NV.
75. **Alyokhin, A.V.** and D.N. Ferro. 1997. Relative fitness of Bt-resistant and Bt-susceptible Colorado potato beetles (Coleoptera: Chrysomelidae). Entomological Society of America Annual Meeting, Nashville, TN.
76. **Alyokhin, A.V.**, D. N. Ferro, and C.W. Hoy. 1996. Influence of *Bacillus thuringiensis* subsp. *tenebrionis* delta-endotoxin on Colorado potato beetle (Coleoptera: Chrysomelidae) flight behavior. Entomological Society of America Annual Meeting, Louisville, KY.
77. **Alyokhin, A.V.**, D.N. Ferro, and D.B. Tobin. 1996. Reproduction and dispersal by flight of post-diapause Colorado potato beetle (Coleoptera: Chrysomelidae). Eastern Branch Entomological Society of America 67th Annual Meeting, Williamsburg, VA.

#### **EXTENSION PRESENTATIONS:**

1. **Alyokhin, A.** 2021. Colorado potato beetle: still here, still a problem. University of Maine Cooperative Extension Grower Meeting, remotely via Zoom.
2. **Alyokhin, A.** 2021. Pest of the year: Colorado potato beetle. Southern New England Vegetable Growers Meeting, remotely via Zoom.
3. **Alyokhin, A.** 2020. Insect pest control and *Dickeya* transmission. 35<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
4. **Alyokhin, A.** 2019. Agricultural pest update. Maine Invasive Species Network Annual Meeting, Rockland, ME.
5. **Alyokhin, A.** 2019. The use of mineral oils and reducing PVY inoculum. 34<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.

6. **Alyokhin, A.** 2018. Polyphagous pests in potatoes and rotation crops. Soil and Agronomy Workshop, Presque Isle, ME.
7. **Alyokhin, A.** 2018. Managing insecticide resistance. Montana Seed Potato Seminar, Missoula, MT.
8. **Alyokhin, A.** 2017. Ecological pest management for potatoes. New England Vegetable & Fruit Conference and Trade Show, Manchester, NH.
9. **Alyokhin, A.** 2017. A complex solution to a complex problem: integrated pest management for the Colorado potato beetle. 2017 Potato Pest Management Conference, Presque Isle, ME.
10. **Alyokhin, A.** 2017. PVY research results. 32<sup>nd</sup> Annual Maine Potato Conference, Caribou, ME.
11. **Alyokhin, A.** 2016. Managing resistance issues. 2016 Potato Pest Management Conference, Presque Isle, ME.
12. **Alyokhin, A.** 2016. Avoiding insecticide resistance. Farmer to Farmer Conference, Northport, ME.
13. **Alyokhin, A.** 2016. Aphids and PVY Management. 31<sup>st</sup> Annual Maine Potato Conference, Caribou, ME.
14. **Alyokhin, A.** 2015. Insect resistance management in organic agriculture. Pacific Northwest Vegetable Association Annual Meeting, Kennewick, WA.
15. **Alyokhin, A.** 2015. Insect resistance management. Pacific Northwest Vegetable Association Annual Meeting, Kennewick, WA.
16. **Alyokhin, A.** 2015. Additional considerations in PVY management. 2015 Potato Pest Management Conference, Presque Isle, ME.
17. Buzza, A. and **A. Alyokhin.** 2015. Insect control studies. 2015 Potato Pest Management Conference, Presque Isle, ME.
18. **Alyokhin, A.** and F. Drummond. 2015. Agricultural pest update. Maine Invasive Species Network Annual Meeting, Augusta, ME.
19. **Alyokhin, A.** 2015. Potato Virus Y management: Challenges and options. 30<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
20. Buzza, A. and **A. Alyokhin.** 2014. Insect control studies. 2014 Potato Pest Management Conference, Presque Isle, ME.
21. **Alyokhin, A.** 2014. Compatibility issues in chemical control of aphids on potato. 2014 Potato Pest Management Conference, Presque Isle, ME.

22. **Alyokhin, A.** 2014. Managing insecticide resistance in potato production. Washington-Oregon Potato Conference, Kennewick, WA.
23. **Alyokhin, A.** 2014. When spraying works no more: Causes and consequences of insecticide resistance. Washington-Oregon Potato Conference, Kennewick, WA.
24. **Alyokhin, A.** 2014. The use of oils and neonicotinoid residual activity. 29<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
25. **Alyokhin, A.** 2014. Terror underground: Why wireworms are so hard to control. New England Vegetable & Fruit Conference and Trade Show, Manchester, NH.
26. **Buzza, A and A. Alyokhin.** 2013. Insecticide trials – residual efficiency of neonics and use of stylet oils for virus management. 2013 Potato Pest Management Conference, Presque Isle, ME.
27. **Alyokhin, A.** 2013. Aphids as virus vectors in Maine potatoes and control strategies. 2013 Potato Pest Management Conference, Presque Isle, ME.
28. **Alyokhin, A.** 2013. Agricultural pest update. Maine Invasive Species Network Annual Meeting, Portland, ME.
29. **Alyokhin, A.** 2013. Dirty Dozen: Species of concern according to the University of Maine students. Maine Invasive Species Network Annual Meeting, Portland, ME.
30. **Alyokhin, A.** 2013. Management of potato viruses. 28<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
31. **Alyokhin, A.** 2012. Management strategies for potato virus diseases. 2012 Potato Pest Management Conference, Presque Isle, ME.
32. **Alyokhin, A.** 2012. Environmental implications of insecticide resistance. Heart of Maine's 10th Annual Soils Quality Conference, Bangor, ME.
33. **Alyokhin, A.** 2012. Insecticide resistance and sustainability of chemical control. In-Service Training for Agricultural Service Providers, Portsmouth, NH.
34. **Alyokhin, A.** 2012. Insect herbivore feeding: Influence of soil fertility. In-Service Training for Agricultural Service Providers, Portsmouth, NH.
35. **Alyokhin, A.** 2012. Aphids: the new face of an old enemy. 27<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
36. **Alyokhin, A.** 2011. What can be done about Potato Virus Y? 2011 Potato Pest Management Conference, Presque Isle, ME.
37. **Alyokhin, A.** 2011. Life beyond neonicotinoids. 26<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.

38. **Alyokhin, A.** 2011. Why Colorado potato beetle is so hard to control: a lesson in resistance. 70<sup>th</sup> Maine Agricultural Trades Show, Augusta, Maine.
39. **Alyokhin, A.** 2010. Is there life beyond neonicotinoids? 2010 Potato Pest Management Conference, Presque Isle, ME.
40. **Alyokhin, A.** and B. Caldwell. 2010. Getting the most out of organic pesticides. Farmer to Farmer Conference, Northport, ME.
41. **Alyokhin, A.** 2010. Manure and compost in a potato cropping system – entomology. Agriculture Integration Conference, March 2, 2010, Presque Isle, ME.
42. **Alyokhin, A.** 2010. Lessons and observations from a sabbatical leave in Japan. 25<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
43. **Alyokhin, A.** 2010. A systems approach to organic crop production: effects on insect pests. 69<sup>th</sup> Maine Agricultural Trades Show, Augusta, Maine.
44. **Alyokhin, A.** 2009. Compost effects on insect pests of potatoes. 2009 Potato Pest Management Conference, Presque Isle, ME.
45. Gross, S., **A. Alyokhin**, R. Larkin, S. Erich, and S. Tavantzis. 2009. Effect of soil amendments on pest insects in potatoes. 68<sup>th</sup> Maine Agricultural Trades Show, Augusta, Maine.
46. **Alyokhin, A.** and G. Sewell. 2009. Aphid management with imidacloprid. 24<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
47. **Alyokhin, A.**, S. Gross, S. Tavantzis, R. Larkin, and S. Erich. 2008. The effect of soil management on Colorado potato beetle populations. 2008 Potato Pest Management Conference, Presque Isle, ME.
48. **Alyokhin, A.** 2008. New strategies for managing Colorado potato beetle. 23<sup>d</sup> Annual Maine Potato Conference, Caribou, ME.
49. **Alyokhin, A.** and S. Gross. 2008. Compost effects on insect pests of potato. 67<sup>th</sup> Annual Maine Agricultural Trades Show, Augusta, ME.
50. **Alyokhin, A.** 2007. Update on imidacloprid resistance status in Maine. 2007 Potato Pest Management Conference, Presque Isle, ME.

51. **Alyokhin, A.** and G. Sewell. 2007. Trends and changes in the populations of potato colonizing aphids in Maine. 22<sup>nd</sup> Annual Maine Potato Conference, Caribou, ME.
52. **Alyokhin, A.** 2006. Controlling Colorado potato beetles with novaluron. 2006 Potato Pest Management Conference, Presque Isle, ME.
53. **Alyokhin, A.** and J. Dwyer. 2006. Update on Colorado potato beetle resistance studies. 2006 Potato Pest Management Conference, Presque Isle, ME.
54. Finlayson, C, and **A. Alyokhin.** 2006. Comparing native and non-native lady beetle (Coleoptera: Coccinellidae) populations in different habitats. 2006 Orono Land Trust Annual Meeting, Orono, ME.
55. **Alyokhin, A.** 2006. Insecticide rotations for resistance management. 21<sup>st</sup> Annual Maine Potato Conference, Caribou, ME.
56. **Alyokhin, A.** and J. Dwyer. 2005. Status of Colorado potato beetle resistance testing. 2005 Potato Pest Management Conference, Presque Isle, ME.
57. **Alyokhin, A. V.** 2005. Colorado potato beetle resistance management. 2005 New Brunswick Potato Conference and Trade Show, Grand Falls, NB, Canada.
58. **Alyokhin, A. V.,** G. Porter, E. Groden, and F. Drummond. 2005. Effect of manure soil amendment on the Colorado potato beetle. 20<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
59. **Alyokhin, A. V.** 2005. Pesticide resistance. 64<sup>th</sup> Annual Maine Agricultural Trades Show, Augusta, ME.
60. **Alyokhin, A. V.** 2004. Colorado potato beetle resistance studies in Maine and Northeast. 2004 Potato Pest Management Conference, Presque Isle, ME.
61. **Alyokhin, A. V.** and G. Sewell. 2004. Resistance to imidacloprid in Colorado potato beetle. 19<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
62. **Alyokhin, A. V.** 2003. Colorado potato beetle resistance status in Maine. 2003 Potato Pest Management Conference, Presque Isle, ME.
63. **Alyokhin, A. V.** and G. Sewell. 2003. Perimeter spray as a deployment strategy for systemic imidacloprid in potatoes. 18<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
64. **Alyokhin, A. V.** and G. Sewell. 2003. Wireworm damage in potato: problems and solutions. 18<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.
65. **Alyokhin, A. V.** and G. Sewell. 2002. Wireworm control studies from the University of Maine. 2002 Potato Pest Management Conference, Presque Isle, ME



66. Sewell, G. and **A. V. Alyokhin**. 2002. Current status of wireworm in Aroostook county. 17<sup>th</sup> Annual Maine Potato Conference, Caribou, ME.

67. **Alyokhin, A. V.** and G. Sewell. 2001. Managing Colorado potato beetle resistance to imidacloprid. 2001 Potato Pest Management Conference, Presque Isle, ME.

## **FUNDED GRANT PROPOSALS**

**Additional \$926,966.25 secured in the form of gifts and contracts with private industry**

Principal Investigator(s)	Sponsoring Agency	Total Amount	Project Duration	Project Title
Teisl, M., A. Lichtenwalner, A. Alyokhin	NSF-NRT	\$2,998,066	9/1/2019 – 8/31/2024	One Health and the Environment
Buzza, A. and A. Alyokhin	Maine Potato Board	\$5,933	5/1/19 – 1/30/20	Effect of late-season applications of stilet oil on PVY spread and marketable yield
Tan, H. and A. Alyokhin	Maine Potato Board	\$5,000	5/1/18 – 4/31/19	Deciphering insect resistance in potato dihaploids with Phureja chromosome fragments
Porter, G. et al.	USDA Special Potato Breeding Grant	\$776,000 (\$388,000 to UMaine)	9/1/17 – 8/31/19	Potato breeding and variety development for improved quality and pest resistance in the eastern United States
Jansky, S. et al.	USDA-ARS	\$89,000	6/29/17 – 6/1/18	Identification and knock-down of pesticide resistance genes in Colorado potato beetle
Alyokhin, A.	NSF-SBIR Phase II via Acadia Harvest, Inc.	\$44,024	2/3/17 – 7/31/17	Developing alternate aquafeeds by using sustainable methods of bio-remediation of seafood residuals
<b>Alyokhin, A., A. Buzza, and J. Hao</b>	Maine Potato Board	\$5,000	5/1/16 – 10/31/17	Insects as vectors of <i>Dickeya</i> spp. in potatoes
Porter, G. et al.	USDA Special Potato Breeding Grant	\$400,000 (\$129,042 to UMaine)	9/1/16 – 8/31/17	Potato breeding and variety development for improved quality and pest resistance in the eastern United States
<b>Alyokhin, A., T. Pryor, M. Peterson, and E. Bernard</b>	University of Maine Research Reinvestment Fund	\$92,487	11/1/15 – 5/31/17	Sustainable bioconversion technology for aquafeed production and waste management
<b>Alyokhin, A. and A. Buzza</b>	Maine Potato Board	\$5,000	5/1/15 – 4/30/16	Compatibility of insecticides with crop oils for aphid control
Porter, G. et al.	USDA Special	\$250,500	9/1/15 –	Potato breeding and variety

	Potato Breeding Grant	(\$120,451 to UMaine)	8/31/16	development for improved quality and pest resistance in the eastern United States
Buzza, A., J. Dwyer, and A. Alyokhin	Maine Potato Board	\$5,000	5/1/15 – 12/31/15	Evaluating the risk of late-season <i>Potato Virus Y</i> transmission
DeJong, W. et al.	USDA-NIFA-SCRI	\$8.4 Million (\$257,029 to UMaine)	10/1/14-9/30/19	Biological and economic impacts of emerging potato tuber necrotic viruses and the development of comprehensive and sustainable management practices.
Porter, G. et al.	USDA Special Potato Breeding Grant	\$282,330	9/1/14 – 8/31/15	Potato breeding and variety development for improved quality and pest resistance in the eastern United States
Alyokhin, A., J. Dwyer, and A. Buzza	Maine Potato Board	\$22,650	05/01/13 – 04/30/15	Understanding factors interfering with successful suppression of <i>Potato Virus Y</i>
Dwyer, J., A. Alyokhin, and R. Groves	Maine Potato Board	\$5,000	05/01/14 – 04/30/15	Aphid predictive model? Optimizing on-farm aphid management
Buzza, A., A. Alyokhin, and J. Dwyer	Maine Potato Board	\$5,000	05/01/14 – 12/01/15	Correlating weather patterns with aphid flight and <i>Potato Virus Y</i> transmission
Porter, G. et al.	USDA Special Potato Breeding Grant	\$240,000	9/1/13 – 8/31/14	Potato breeding and variety development for improved quality and pest resistance in the eastern United States
Alyokhin, A. and J. Dwyer	Maine Potato Board	\$8,950	05/01/12 – 02/15/13	Vegetation surrounding potato fields as reservoir of <i>Potato Virus Y</i>
Porter, G. et al.	USDA Special Potato Breeding Grant	\$249,600	9/1/12 – 8/31/13	Potato breeding and variety development for improved quality and pest resistance in the eastern United States
Alyokhin, A., G. Sewell, and J. Dwyer	Maine Agricultural Center	\$3,484	05/01/11 – 01/31/12	Non-potato sources of PVY inoculum
Alyokhin, A., G. Sewell, and J. Dwyer	Maine Potato Board	\$11,000	05/01/11 – 04/30/12	Efficiency of stylet oils and new biorational insecticides in suppressing PVY transmission in potato
Porter, G. et al.	USDA Special Potato Breeding	\$254,609	9/1/11 – 8/31/12	Potato breeding and variety development for improved quality and pest resistance in the eastern

	Grant			United States
Porter, G. et al.	USDA Special Potato Breeding Grant	\$260,624	9/1/10 – 8/31/11	Potato breeding and variety development for improved quality and pest resistance in the eastern United States
<b>Alyokhin, A. D.</b> Mota-Sanchez, M. Baker, and M. Whalon	USDA-CSREES-AFRI	\$409,619	06/01/09 – 05/31/11	Geographic variation in the Colorado potato beetle resistance to imidacloprid.
Porter, G. et al.	USDA Special Potato Breeding Grant	\$186,953	8/1/09 – 7/31/10	Integrated potato breeding and variety development to enhance pest resistance and marketing opportunities in the Eastern United States
De los Reyes, B. and <b>A. Alyokhin</b>	Maine Potato Board	\$11,000	04/01/08 – 03/31/09	Genetic and molecular dissection of aphid resistance mechanisms in <i>Solanum bulbocastanum</i> .
Porter, G. et al.	USDA Special Potato Breeding Grant	\$200,000	8/1/08 – 7/31/09	Integrated potato breeding and variety development
De los Reyes, B. and <b>A. Alyokhin</b>	Maine Potato Board	\$9,000	04/01/07 – 03/31/08	Genetic evaluation of aphid resistance in recurrent backcross progenies of <i>S. tuberosum</i> x <i>S. bulbocastanum</i> somatic hybrids
Tavantzis, S., R. Larkin, J. Jemison, S. Erich, and <b>A. Alyokhin</b>	USDA-CSREES-NRI	\$297,100	07/01/07 - 06/30/10	A systems approach to optimize organic crop production: enhancing soil functionality and plant health to suppress plant diseases and pests
Tavantzis, S., R. Larkin, S. Erich, and <b>A. Alyokhin</b>	USDA-CREES-IPM	\$59,911	04/14/07 - 09/30/09	An integrated approach for enhanced soil fertility, improved plant health and suppression of plant diseases and pests
<b>Alyokhin, A., R.</b> Alford, and G. Sewell	Maine Potato Board	\$3,500	05/01/06 – 12/20/06	Soybean aphid as a potential vector of <i>Potato Virus Y</i> in Maine potatoes
De los Reyes, B. and <b>A. Alyokhin</b>	Maine Potato Board	\$8,700	04/01/06 – 03/31/07	R-genes and aphid resistance in <i>Solanum</i> species
<b>Alyokhin, A., G.</b> Dively, J. Dwyer,	EPA-PESP	\$46,745	05/01/06 – 04/30/08	Improving sustainability of neonicotinoid use in potato

and A. Plant				production
<b>Alyokhin, A.</b>	University of Maine	\$4,700	N/A	Environmental chambers for teaching BIO 326, BIO 327, and BIO 448/548
<b>Alyokhin, A. and G. Sewell</b>	Maine Potato Board	\$ 9,000	05/30/05 – 12/20/05	Field performance of the resistance management plan for the Colorado potato beetle
<b>Alyokhin, A.</b>	Maine Agricultural Center	\$ 5,000	05/30/04 – 06/30/05	Imidacloprid resistance in the Colorado potato beetle: addressing the problem before it gets out of control
<b>Alyokhin, A., and G. Sewell</b>	Maine Potato Board	\$ 6,000	05/01/04 - 12/20/04	Controlling imidacloprid-resistant Colorado potato beetles
<b>Alyokhin, A., A.R. Alford, D. Weber, and J. Dickens</b>	USDA-CREES-IPM	\$140,000	05/01/03 – 04/30/06	Integrating behavioral control with reduced area treatment approach for managing Colorado potato beetle and other insect pests of potato
Porter, A., M. Baker, <b>A. Alyokhin</b> , and D. Ferro	USDA-CSREES-NRI	\$185,000	10/01/02 - 09/30/04	Evolution and spread of insecticide resistance in the Colorado potato beetle
Porter, A., M. Baker, D. Ferro, and <b>A. Alyokhin</b>	NSF	\$212,000	04/15/03 – 04/14/05	Creating clines to study dispersal and adaptation
<b>Alyokhin, A., and G. Sewell</b>	Maine Potato Board	\$ 6,000	03/09/02 - 12/20/02	Perimeter spray as a deployment strategy for systemic imidacloprid in potatoes
Alford, A.R., <b>A. Alyokhin</b> , E. Groden, M. Erich, E. Gallandt, D. Lambert, L. Osher, G. Porter, T. Dalton, S. Smith	Maine Potato Board	\$7,000	04/01/02 - 03/31/03	Integration of crop rotations using barley, soybean, and forage rotation crops into potato production systems
<b>Alyokhin, A., and G. Sewell</b>	Maine Potato Board	\$ 10,000	03/09/01 - 02/28/02	Addressing emerging insect pest problems in Maine
<b>Alyokhin, A., and G. Sewell</b>	Maine Agricultural Center	\$ 5,000	05/01/01 – 11/30/01	The development of trapping techniques to detect wireworm infestation in Maine potato fields

Groden, E. <b>A. Alyokhin</b> , and G. Sewell	Maine Potato Board	\$ 7,900	04/01/01 – 03/31/02	Evaluation of pheromone traps for predicting damage by the European corn borer
Alford, A.R., <b>A. Alyokhin</b> , E. Groden, M. Erich, E. Gallandt, D. Lambert, L. Osher, G. Porter, T. Dalton, S. Smith	Maine Potato Board	\$ 12,000	04/01/01 – 03/31/02	Integration of soybean and forage rotation crops and pest management using fewer pesticides into potato production systems