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EDUCATION

A. B., *cum laude*, General Studies, **Harvard College**, Cambridge, MA, 1974.
M. S., Plant & Soil Sciences, **University of Vermont**, Burlington, VT, 1978.
Ph. D., Plant Pathology, **University of Massachusetts**, Amherst, MA, 1986.

PRESENT POSITION

Associate Professor, Department of Plant, Soil & Insect Sciences, **Adjunct** in Department of Microbiology. Responsibilities in research, teaching and Extension, in the ecology of plant-microbe interactions and ecological plant disease management, with applied focus on fruit diseases. 1997 to present.

PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Plant Pathology, Department of Microbiology University of Massachusetts, Amherst. Responsibilities in Extension, research, and teaching in plant pathology. 1991 to 1997.

Director, Agriculture and Landscape Program, UMass Extension. Responsible for administration of agricultural Extension at the University of Massachusetts Amherst. 1998-2004.

Director, Center for Agriculture, University of Massachusetts. Administration and development of university center with mission to facilitate interactions between agricultural Extension, the Agricultural Experiment Station, other University departments and agricultural service providers in the Commonwealth. 1998 – 2003.

State Extension Specialist, Department of Plant Pathology. Responsible for initiating and conducting research and education programs in disease management, including IPM programs. 1978 to 1991.

PUBLICATIONS

Refereed research articles and book chapters

- Cooley, D.R.**, D. A. Rosenberger, M. L. Gleason, G. Koehler, K. Cox, J. M. Clements, T. B. Sutton, A. Madeiras, and J. R. Hartman. 2011. Variability among forecast models for the apple sooty blotch/flyspeck disease complex. *Plant Dis.* 95: 1179-1186.
- Gleason, M. L., J. C. Batzer, G. Sun, R. Zhang, M. M. D. Arias, T. B. Sutton, P. W. Crous, M. Ivanovic, P. S. McManus, **D. R. Cooley**, U. Mayr, R. W. S. Weber, K. S. Yoder, E. M. Del Ponte, A. R. Biggs, and B. Oertel. 2011. A new view of sooty blotch and flyspeck. *Plant Dis.* 95:368-383.
- Cooley, D.R.**, Autio, W. R. 2011. Summer pruning of apple: impacts on disease management. *Adv. in Hort. Sci.* 25: 19-24. (In press).
- Cooley, D. R.**, R. F. Mullins, P. M. Bradley and R. T. Wilce. 2011. Culture of the upper littoral zone marine alga *Pseudendoclonium submarinum* induces pathogenic interaction with the fungus *Cladosporium cladosporioides*. *Phycologia* 50: 541–547. DOI: 10.2216/10-84.1.
- K.D. Cox, S. M. Villani, J.J. Raes, J. Freier, H. Faubert, **D. Cooley** and J. Clements. 2011. First reports of brown fruit rot on sweet cherry (*Prunus avium*) and plum (*Prunus domestica*), and shoot blight on apricot (*Prunus armeniaca*), Kwanzan cherry (*Prunus serrulata*) and sweet cherry (*Prunus avium*) caused by *Monilinia laxa* in New York, Rhode Island, and Massachusetts. *Plant Dis.* 95: (Accepted August 2011; available on-line <http://apsjournals.apsnet.org/doi/pdf/10.1094/PDIS-07-11-0606>)

- Piñero, J. C., A. M. Agnello, A. Tuttle, T. C. Leskey, H. Faubert, G. Koehler, L. Los, G. Morin, K. Leahy, **D. R. Cooley** and R. J. Prokopy. 2011. Effectiveness of odor-baited trap trees for plum curculio (Coleoptera: Curculionidae) monitoring in commercial apple orchards in the Northeast. J. Econ. Entomol. 104(5): 1613-1621.
- Biggs, A.R., **D. R. Cooley**, D. A. Rosenberger and K. S. Yoder. 2010. Relative susceptibility of selected apple cultivars to sooty blotch and flyspeck. Plant Health Progress (on-line) doi:10.1094/PHP-2010-0726-01-RS.
- Biggs, A. R., D. A. Rosenberger, K. S. Yoder, R. K. Kiyomoto, **D. R. Cooley**, and T. B. Sutton. 2009. Relative susceptibility of selected apple cultivars to cedar apple rust and quince rust. Plant Health Progress doi:10.1094/PHP-2009-1014-01-RS.
- Diaz, M., J. C. Batzer, A. A. Wong, S. C. Bost, **D. R. Cooley**, M. A. Ellis, J. R. Hartman, D. A. Rosenberger, G. W. Sundin, T. B. Sutton, J. W. Travis, M. J. Wheeler, K. S. Yoder, M. L. Gleason. 2009. Diversity and biogeography of sooty blotch and flyspeck fungi on apple in the eastern and midwestern United States. Phytopathology 100 (4): 345-355.
- Cooley, D. R.** 2009. Biorational approaches to disease management in apples. In: T. Leskey, M. Aluja and C. Vincent, eds. Biorational Tree Fruit Pest Management, pp. 214-252. Commonwealth Agricultural Bureau International, Oxfordshire, UK.
- Cooley, D. R.** and W. M. Coli. 2009. Implementation of apple IPM: the Massachusetts experience.” In: T. Leskey, M. Aluja and C. Vincent, eds. Biorational Tree Fruit Pest Management, pp. 145-170. Commonwealth Agricultural Bureau International, Oxfordshire, UK.
- Cooley, D. R.**, S. M. Lerner and A. F. Tuttle. 2007. Maturation of thyriothecia of *Schizothyrium pomi* on the reservoir host *Rubus allegheniensis*. Plant Dis. 91: 136-141.
- Cooley, D. R.**, W. A. Autio and J. Krupa. 2007. Calcium salts and alternatives to conventional fungicides for management of the apple summer disease complex, 2006. Plant Disease Mgmt. Reports (online) Report 1:PF051. DOI: 10.1094/PDMR01.
- Cooley, D. R.** and J. Krupa. 2006. Treatments for managing blossom infections of fire blight, 2005. Fungicide and Nematicide Tests 61, PF028.
- Cooley, D. R.** and W. M. Coli. 2005. Bringing scholarship to the orchard: Integrated pest management in Massachusetts. pp. 157-196. In: Engaging Campus and Community: The Practice Of Public Scholarship In The State And Land-Grant University System. S. J. Peters, N. R. Jordan, M. Adamek and T. R. Alter, eds. Kettering Institute, Dayton, OH. 499 pp.
- Manning, W. J., **D. R. Cooley**, A. F. Tuttle, M.A. Frenkel and C.J. Bergweiler. 2004. Assessing plant response to ambient ozone: growth of young apple trees in open-top chambers and corresponding ambient air plots. Environ. Pollut. 132: 503-508.
- Cooley, D. R.** 1998. An overview of integrated pest management in strawberries. In Mass, J. L., ed. Compendium of Strawberry Diseases 2nd ed., APS Press, St. Paul, MN. 128 pp.
- Handley, D., J. Dill, **D. R. Cooley**, and S. G. Schloemann. 1998. Insect, mite, mollusc and vertebrate scouting and management. In Pritts, M., D. Handley and C. Walker, eds. Strawberry Production Guide for the Northeast, Midwest and Eastern Canada. Northeast Regional Agricultural Engineering Service, Cornell Univ., Ithaca, NY. 162 pp.
- Handley, D., J. Dill, **D. R. Cooley**, and S. G. Schloemann. 1998. Disease management and physiological disorders In Pritts, M., D. Handley and C. Walker, eds. Strawberry Production Guide for the Northeast, Midwest and Eastern Canada. Northeast Regional Agricultural Engineering Service, Cornell Univ., Ithaca, NY. 162 pp.
- Harrison, R.E., Luby, J.J., Furnier, G.R., Hancock, J.F. and **Cooley, D. R.** 1998. Variation for susceptibility to crown rot and powdery mildew in wild strawberry from North America. Acta Hort. 484:43-48 http://www.actahort.org/books/484/484_3.htm

- Cooley, D. R.** and W. R. Autio. 1997. Disease-management components of advanced integrated pest management in apple orchards. Agric. Ecosyst. & Env. 66: 31-40.
- Cooley, D. R.**, Gamble, J. W., and Autio, W. R. 1997. Summer pruning as a method for reducing flyspeck disease on apple fruit. Plant Dis. 81:1123-1126.
- Cooley, D. R.**, W. F. Wilcox, J. Kovach and S. G. Schloemann. 1996. Integrated pest management programs for strawberries in the northeastern U. S. Plant Dis. 80: 228-237.
- Cooley, D. R.** and A. Tuttle. 1995. Evaluation of antagonists and fungicides for control of gray mold, 1994. Biol. & Cult. Tests 10:58.
- Cooley, D. R.**, V. Mohr and A. Tuttle. 1995. Fungicide and formulated bicarbonate effects on apple scab, flyspeck and mite incidence, 1994. Fungicide and Nematicide Tests 50: 4.
- Cooley, D. R.** and W. J. Manning. 1995. Estimating the risks and benefits of pesticides: considering the agroecosystem and integrated pest management in the use of EBDC fungicides on apples. Environ. Pollut. 88: 315-320.
- Prokopy, R. J., **D. R. Cooley**, W. R. Autio, and W. M. Coli. 1994. Second-level integrated pest management in commercial apple orchards. Amer. J. Alternative Agric. 9: 148-156.
- Cooley, D. R.** and R. Elliott. 1994. Fungicide effects on apple scab, flyspeck and sooty blotch incidence, 1993. Fungicide and Nematicide Tests 49: 3.
- Merwin, I. A., S. K. Brown, D. A. Rosenberger, **D. R. Cooley**, and L. P. Berkett. 1994. Scab-resistant apples for the Northeastern USA: New prospects and old problems. Plant Disease 78: 4-10.
- Cooley, D. R.**, S. G. Schloemann, and A. F. Tuttle. 1993. Development and implementation of integrated pest management for strawberries. (Invited Feature Article). Advances in Strawberry Research 12: 1-11.
- Cooley, D. R.** 1993. Symposium introduction: Food and the environment: IPM meets the 21st century." Plant Dis. 77: 296. 1993.
- Cooley, D. R.**, J. W. Gamble and K. Hickey. 1993. Fungicide application schedule effects on apple scab and flyspeck incidence, 1992 Fungicide and Nematicide Tests 48: 4.
- Cooley, D. R.**, T. A. Tattar and J. T. Schieffer. 1992. Treatment of X-disease using oxytetracycline microinjection capsules. HortScience 27: 235-237.
- Autio, W. A., D. W. Greene, **D. R. Cooley** and J. R. Schupp. 1991. Improving the growth of newly-planted apple trees. HortScience 26: 840-843.
- Cooley, D. R.**, B. Konieczny and J. Gamble. 1990. Effect of fungicides on primary season apple scab incidence: prolonged intervals and low rates, 1989. Fungicide and Nematicide Tests 45: 5.
- Cooley, D. R.**, T. Gruber, P. Cohen and M. Henrion. 1988. Expert systems vs. decision analysis: comparison in an agricultural domain. Proc. 2nd International Conference on Computers in Extension Programs, Orlando, Fla. Feb., 1988.
- Cooley, D. R.**, K. Ward, T. Gruber and P. Cohen. 1988. Development of a microcomputer-based expert system for apple scab management. Proc. 2nd International Conference on Computers in Extension Programs, Orlando, Fla. Feb., 1988.
- Autio, W. R., K. M. Carroll, W. M. Coli, K. P. Leahy and **D. R. Cooley**. 1988. The use of an inexpensive microcomputer-based bulletin board system in Massachusetts Extension programs. HortScience 23:623-624.
- Cooley, D. R.** 1988. Expert systems: Computer technology highly relevant to plant pathologists. Editorial, Plant Dis. 72:279.
- Schieffer, J. T. and **D. R. Cooley**. 1988. Peach X-disease: chemotherapeutic injection. pp.703-706. In N. Childers and W. Sherman, eds. *The Peach, 2nd edition*. Horticultural Publications, Gainseville, FL.

- Henrion, M. and **D. R. Cooley**. 1987. An experimental comparison of knowledge engineering for expert systems and for decision analysis. Proceedings of AAAI: Sixth National Conference on Artificial Intelligence, Seattle, WA. AAAI, Los Altos, CA.
- Cooley, D. R.** and W. J. Manning. 1987. Growth analysis of ozone-stressed alfalfa, *Medicago sativa* L. Environ. Pollution 49:19-36.
- Cooley, D. R.** and W. J. Manning. 1987. The impact of ozone on assimilate partitioning in plants: a review. Environ. Pollution 47:95-113.
- Cooley, D. R.** and K. Keane. 1987. Evaluation of ergosterol inhibiting fungicides for control of apple diseases, 1986. Fungicide and Nematicide Tests, 42: 15-16
- Cooley, D. R.** and W. J. Manning. 1986. Effects of ozone on the dynamics of growth and assimilate partitioning in alfalfa. Proc. of International Clean Air Congress, 1986.
- Green, D. W., W. J. Manning and **D. R. Cooley**. 1982. Effect of the ectomycorrhizal fungus *Pisolithus tinctorius* and auxin rooting formulations on growth of 'Delicious' apple trees. HortScience 17: 655-656.
- Damicone, J. P., **D. R. Cooley** and W. J. Manning. 1981. Benomyl in acetone eradicates *Fusarium moniliforme* and *Fusarium oxysporum* from asparagus seed. Plant Disease 65: 892-893.
- Cooley, D. R.** and D. R. Evert. 1979. Normalized electrical impedance evaluates cold injury to sections of 'Delicious' apple. J. Amer. Soc. Hort. Sci. 104: 561-563.
- Evert, D. R. and **D. R. Cooley**. 1979. Relationship between cold hardiness and normalized electrical impedance in unfrozen 'Delicious' apple shoots. HortScience 14: 708-709.

Oral presentations and posters at professional meetings

- Cooley, D. R.** 2011. Present understanding of the epidemiology of the sooty blotch/flyspeck disease complex. 9th International IOBC/WPRS Workshop on Pome Fruit Diseases. Aug. 29 – Sep. 2 2011. Hasselt, Belgium. (*Invited*). Proceedings in preparation.
- Cooley, D. R.**, J. Clements and K.D. Cox. 2010. Delaying the first scab fungicide using PAD. 73rd Annual New England, New York, Canadian Fruit Pest Management Workshop, Burlington, VT, October 19-20, 2010. Unpublished.
- Cooley, D. R.** and J. Clements. 2010. Inconsistencies in sooty blotch and flyspeck models. 73rd Annual New England, New York, Canadian Fruit Pest Management Workshop, Burlington, VT, October 19-20, 2010. Unpublished.
- Cooley, D.R.** 2010. String theories, fuzzy logic and forecasting: inconsistencies applying empirical plant disease models". Annual Workshop of the North Central Regional IPM Working Group, Aug. 5, 2010, Charlotte, NC. (*Invited*). Unpublished.
- Cooley, D. R.** and A. Tuttle. 2009. Using potential ascospore dose to reduce fungicide use in apples in the Northeast. 72nd Annual New England, New York, Canadian Fruit Pest Management Workshop, Burlington, VT, October 20-21, 2009. Unpublished.
- Cooley, D. R.**, A. Tuttle, W.H. Reissig, A. Agnello, J. Carroll, M. Rozyne and T. Green. 2008. Development of an eco-label program in support of IPM for apples in the Northeast. 2008 Northeastern Division Meeting APS. Oct. 2008. Abstr. on-line:
<http://apsjournals.apsnet.org/doi/pdf/10.1094/PHYTO.2009.99.6.S191>
- Cooley, D. R.** 2009. Working group to multi-region proposals: developing research and Extension collaborations among regional IPM centers. Annual Meeting of the Northeast Regional IPM Center, Simsbury, CT, Nov. 4, 2009. (*Invited*). Unpublished.
- Cooley, D. R.**, R. F. Mullins, and R. T. Wilce. 2008. A fungal marine pathogen and an alga: lichen or not. (2007 Northeastern Division Meeting APS. Oct. 2007. Abstr.; on-line).
<http://www.apsnet.org/meetings/div/ne06abs.asp>

- Cooley, D. R.** 2008. Biointensive apple IPM in New England. National Sustainable Agriculture Research & Education Conf., Mar. 25-27, Kansas City, MO.
<http://www.sare.org/2008Conference/speakers/Cooley.pdf>
- Cooley, D. R.** and A. F. Tuttle. 2007. Timing and movement of conidia relative to flyspeck incidence in commercial apple orchards. (Abstr.; on-line). 2006 Northeastern Division Meeting, Nov. 2006.
<http://www.apsnet.org/meetings/div/ne06abs.asp>
- Cooley, D. R.** 2006. An apple a day: public perceptions and scientific reality in producing the all-American fruit. Joint Meeting of the Agriculture, Food, and Human Values Society and the Association for the Study of Food and Society, June, 2006, Boston, MA. Abstr: <http://food-culture.org/docs/2006%20Boston%20w%20Logo.pdf> p. 15.
- Cooley, D. R.** and W. M. Coli. 2005. The Massachusetts apple IPM story. Invited talk, Symposium: Bridging the gap between basic behavioral research and crop protection applications for tree fruit agroecosystems: Honoring the life and work of Ronald J. Prokopy. Annual Meeting of the Entomological Society of America, Ft. Lauderdale, FL. (*Invited*).
- Cooley, D. R.** and D. A. Rosenberger. 2005. Management of flyspeck disease of apple based on maturation of the causal agent (*Schizothyrium pomi*), wetting hours and fungicide properties. Amer. Soc. Phytopathol. Annual Meeting. Phytopathology 95: S21. Abstr.; on-line:
<http://apsjournals.apsnet.org/doi/pdf/10.1094/PHYTO.2005.95.6.S1>
- Cooley, D. R.** 2004. Orchard ecosystem research. 2004. Northeast SARE Annual Conference. Setting the Table: Tools and Techniques for a Sustainable Food System. October, 2004, Burlington, VT. Unpublished.
- Cooley, D. R.,** A. F. Tuttle. 2004. Ascospore maturation of *Schizothyrium pomi*, causal agent of apple flyspeck. 2004 Northeastern Division Meeting APS, Oct. 2004. (Abstr.) Phytopathology 95: S168.
- Lerner, S. and **D. R. Cooley**. 1995. Effects of temperature and relative humidity on maturation on ascospores of *Schizothyrium pomi*, flyspeck of apple. (Abstr.) Phytopathology 85: 1557.
- Cooley, D. R.,** W. F. Wilcox and W. J. Janisewicz. 1995. Alternative strategies for small fruit production: a summary of a Northeast SARE project. Amer. Soc. Phytopathol. Annual Meeting. (Abstr.) Phytopathology 85: 1194.
- Cooley, D. R.** An Overview of the Development of the Massachusetts Strawberry IPM Program . National IPM Meetings, Las Vegas. April 20, 1994. Unpublished.
- Cooley, D. R.** and S. Lerner. 1994. Summer pruning increases pesticide coverage in apple canopies. (Abstr.) Phytopathology 84: 1370.
- Schloemann, S. G., **D. R. Cooley**, A. V. Barker and A. F. Tuttle. 1994. Effects of compost on plant growth and disease incidence in apples, blueberries and strawberries. The Composting Council, 5th Annual Conference, Wash., D. C., Nov. pp. 15 - 17.
- Cooley, D. R.** 1993. Managing Flyspeck in Northeastern Apple Orchards. American Phytopathological Society Deciduous Tree Fruit Workers. Nashville, TN. November 6, 1993. Unpublished.
- Cooley, D. R.** 1993. The Role of Advanced IPM in Disease Resistant Apple Production: Introduction. SARE Workshop on Disease Resistant Apple Cultivars. Hersey, PA, Jan. 23-25, 1993. Unpublished.
- Cooley, D. R.,** C. Telgheder, W. A. Autio and J. Gamble. 1992. Using summer pruning to reduce flyspeck and sooty blotch of apple in the Northeast. (Abstr.) Phytopathology 82: 1075.
- Stack, J. P., T. S. Wright, S. N. Jeffers, **D. R. Cooley** and W. Bramlage. 1992. Biocontrol of blue mold of apples under common and controlled atmosphere storage. (Abstr.) Phytopathology 82: 1063.
- Cooley, D. R.** 1992. Alternative management of summer diseases of apple. American Phytopathological Society Deciduous Tree Fruit Workers. Portland, OR, August 9, 1992. Unpublished.

- Cooley, D. R.** and W. J. Manning. 1992. Considering whole systems when evaluating the health risks and benefits of pesticides: a case study of the EBDCs in apple. Proc. of the Air and Waste Management Assoc.
- Cooley, D. R.**, and S. G. Schloemann. 1990. Integrated pest management program for strawberries. (Abstr.) Phytopathology 79: 118.
- Berkett, L. P., **D. R. Cooley**, D. F. Polk, D. A. Rosenberger, T. Schettini. 1990. Development of a low-input apple production system for the Northeast. National Sustainable Agriculture & Natural Resources Conference, Lincoln, Nebraska, August, 1990. Unpublished.
- Herbert, S. J., M. Dempsey, **D. R. Cooley**, and G. V. Litchfield. 1989. Autumn management of lucerne. Proc. of the XVI International Grasslands Conf., pp. 593-594.
- Cooley, D. R.** 1988. Expert systems, decision support and IPM. Pp. 25 -27. In Innovations in Pest Management: Proceedings from an International Forum on Integrated Pest Management, Biological Controls, and other New Approaches to Controlling Pests in Our Environment, March 7-8, 1988. S. Englestad, W. M. Coli and J. L. Carlson, eds. Mass. Coop. Ext., Univ. of Mass., Amherst, MA.
- Cooley, D. R.**, P. Cohen and T. Gruber. 1988. Development of an expert system to diagnose and advise treatment for apple root disorders. (Abstr.). Phytopathology 77: 1614.
- Schieffer, J., T. A. Tattar, and **D. R. Cooley**. 1988. Application of oxytetracycline in peach orchards using Mauget microinjection. (Abstr.). Phytopathology 77:1618.
- Cooley, D. R.** 1987. An expert system for the management of apple scab. Expert System Symposium, National Meeting of the Amer. Phytopathol. Soc., Cincinnati, OH. (Invited). Unpublished.
- Cooley, D. R.** and W. J. Manning. 1986. Effects of ozone on the dynamics of growth and assimilate partitioning in alfalfa. Proc. of International Clean Air Congress, Sydney, Australia.
- Cooley, D. R.** and W. J. Manning. 1985. Ozone and crown and root rot: interactive effects on growth of alfalfa. (Abstr.). Phytopathology 76: 651.
- Cooley, D. R.**, W. A. Feder and W. J. Manning. 1984. Differences in alfalfa cultivar sensitivity to ozone. (Abstr.). Phytopathology 74: 843.
- Becker, C. M., T. R. Bardinelli, **D. R. Cooley** and W. J. Manning. 1983. Apple IPM in Massachusetts: a summary of the 5 yr. disease management program. (Abstr.). Phytopathology 73:362.
- Cooley, D. R.** and W. J. Manning. 1982. Fungi associated with roots of young apple trees with poor growth symptoms. (Abstr.). Phytopathology 72: 259.
- Cooley, D. R.** and W. J. Manning. 1981. Composted sewage sludge as a soil amendment: effects on *Rhizobium* nodulation of garden bean. (Abstr.). Phytopathology 71: 559.
- Manning, W. J., C. M. Becker, **D. R. Cooley** and P. D. Vineis. 1981. Cumulative effects of chronic and acute ozone injury and natural soil on early growth and root disease incidence in three tomato cultivars. (Abstr.). Phytopathology 71: 893.
- Manning, W. J., C. M. Becker, **D. R. Cooley** and P. D. Vineis. 1981. Cumulative effects of chronic and acute ozone injury on early growth and fruiting of eight tomato cultivars. (Abstr.). Phytopathology 71: 893.
- Cooley, D. R.** and W. J. Manning. 1980. Winter injury to apple roots causes tree decline and death. (Abstr.). Phytopathology 70: 460.
- Damicone, J. P., **D. R. Cooley** and W. J. Manning. 1980. Elimination of Fusaria from asparagus seed. (Abstr.). Phytopathology 70: 461.

Non-refereed publications

- Cooley, D. R.**, A. Tuttle and J. Krupa. 2011. Efficacy of standard and new fungicides against the sooty blotch/flyspeck complex and apple scab. Fruit Notes 76 (2): 10-15.

- Cooley, D.R.**, A. Tuttle and J. Clements. 2010 Massachusetts fruit IPM report. Fruit Notes. 75 (4): 18-19.
- Cooley, D.R.** and A. Tuttle. 2009. Preliminary observations in blocks using PAD to delay the first apple scab fungicide spray. Fruit Notes. 72 (4): 9-12.
- Cooley, D.R.**, W. R. Autio, J. M. Clements, W.P. Cowgill and R. Spitko. 2008. An annual fire blight management program for apples. Fruit Notes. 72 (2): 1-9.
- Cooley, D.R.** 2008. Are biological controls and resistance activators viable alternatives to streptomycin? Fruit Notes 71 (4): 12-16.
- Piñero, J., A. Tuttle, A. M. Agnello, H. Faubert, G. Koehler⁴, G. Morin, K. Leahy, L. Los, **D. R. Cooley**, and R. J. Prokopy. 2006. Using odor-baited trap trees as indicators of need and timing of insecticide spray against plum curculio in the Northeast: validation studies 2004-2005. Fruit Notes 71 (4) 1-11.
- Cooley, D.R.**, W.R. Autio, A. Tuttle, and J. Krupa. 2006. Alternative fungicides for management of sooty blotch and flyspeck. Fruit Notes. 72 (3): 1-3.
- Cooley, D.R.**, W.R. Autio, A. Tuttle, and J. Krupa. 2006. Alternative fungicides for management of sooty blotch and flyspeck. Fruit Notes. 71 (3): 1-3.
- Cooley, D.R.**, W. Coli, S. Schloemann, J. Vanden Heuvel, D. Greene, W. Autio, J. Clements, A. Averill, C. Hollingsworth, F. Caruso, H. Sandler, and J. Weiss. 2005. Development of a research and education program for small-scale, sustainable viticulture and enology in Massachusetts. Fruit Notes 70 (4): 13-16.
- Clements, J.M., A.F. Tuttle and **D. R. Cooley**. 2005. Evaluation of disease susceptibility of cultivars in the 1999 NE-183 apple cultivar trial. Fruit Notes 70 (4): 1-3.
- Green, T., M. Rozyne, A. Tuttle, W. Coli, J. Carroll, J. Clements K. Leahy and **D. R. Cooley**. 2005. Eco-apple protocol and grower self-assessment. Working document for 2005 growing season – version 1.0. IPM Institute of North America, Inc., Madison, WI. 23 pp.
- Cooley, D. R.**, S. M. Lerner and A.F. Tuttle. 2004 Flyspeck epidemics I: Measuring ascospore maturation of the causal fungus. Fruit Notes 69 (3), 5 – 11.
- Cooley, D. R.** Ron's papers. Fruit Notes 69 (2), 2004, 5-9
- Cooley, D. R.** 2004. Apple IPM in Massachusetts: Public scholarship in action. *Connections*, Kettering Foundation, July, pp. 1-4.
- Baj, A., A. Tuttle and **D. R. Cooley**. 2002. Comparison of Flint versus captan in every-row versus perimeter row spraying. Fruit Notes 67 (2) 1-8.
- Tuttle, A., C. Bergweiler, J. Hall, L. Reisner, S. Christle, W. Autio and **D. R. Cooley**. 2002. Development of a model for predicting flyspeck risks in blocks of apple trees. Fruit Notes 67 (1) 5-8.
- Cooley, D. R.**, A. Tuttle, J. Sincuk, and H. Faubert. 1999 Evaluation of Flint and Sovran, two new strobilurine fungicides, against apple diseases. Fruit Notes 64(2). 7-11.
- Tuttle, A.F., J. Smith, C. Bergweiler, D. McPadden, S. Christle, **D. R. Cooley**, S. Wright, J. Black, and W. Autio. 1999. Effects of planting density and IPM-level on apple fruit quality and crop density, 1999 results. Fruit Notes 64(4). 1-3.
- Cooley, D. R.**, A. Tuttle, J. Hall and D. Greene. 1998. Evaluation of scab on fruit of new apple cultivars. Fruit Notes 63(4) 12.
- Hall, J. C., M. Frank, A. F. Tuttle and **D. R. Cooley**. 1997. Can we predict flyspeck development? . Fruit Notes 62(4) 21-23.
- Lerner, S. T. Klorina and **D. R. Cooley**. 1997. What part do flyspeck ascospores play in disease development? . Fruit Notes 62(3) 4-6.
- Cooley, D. R.** 1997. "Massachusetts develops 'green' apples." Accents, Massachusetts Agricultural Expt. Sta., 1(2): 1-3

- Rosenberger, D. and **D. R. Cooley**. 1997 "Sooty blotch and flyspeck". American Fruit Grower. May, 1997. 24L - 24M.
- Cooley, D. R.**, R. Szala, and W. M. Coli. 1996. 1995 tree fruit survey: disease management. Fruit Notes 61(3): 7-8.
- Coli, W. M., R. Szala, W. R. Autio, **D. R. Cooley**, K. I. Hauschild and R. J. Prokopy. 1996. 1995 Tree-fruit survey: integrated pest management. . Fruit Notes 61(3): 13-18.
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- Cooley, D. R.** 1985. Cankering of apple trees in the Northeast in 1984-85. Maine Apple Growers Assoc. Winter Meeting, 1985. Augusta, ME. Unpublished.

GRANTS

Active in 2010 or after PI

- Cooley, D.R.**, W. Autio, J. Clements and S. Schloemann. Tree fruit and grape pest management weather stations. Massachusetts Ag. Expt. Sta. Equipment Grant. \$17,360.
- Cooley, D. R.**, W. H. Reissig and T. Leskey. Development of advanced integrated pest management for northeastern apples. USDA/CSREES Northeast Regional IPM Research and Extension Grant. 9/1/09 – 8/31/11. \$164,626.
- Cooley, D. R.** Establishment of a multi-regional working group on sooty blotch and flyspeck of apple in the U.S. USDA/CSREES Northeast Regional IPM Partnership Grant. 10/1/08 – 09/30/10. \$20,000
- Cooley, D. R.** Management of apple scab using fluopyram. Bayer CropScience. 4/1/09-12/30/09. \$1,500
- Cooley, D.R.**, H. Reissig, A. Agnello and M. Rozyne. A pest management program using reduced-risk pesticides, Eco-Apple protocols, and value-added marketing for NY and New England growers. USDA/CSREES Crops at Risk. 11/06 – 10/1/10. \$423,105.

Active in 2010 or after Co-I

- Agnello, A. , **D. Cooley**, V. Jones and H. Reissig. 2010. Development and implementation of a national web-based decision support system for tree fruit IPM. USDA Specialty Crops Research Initiative-Planning Grant. 7/1/10 – 6/30/11. \$50,000
- Agnello, A. and **D. Cooley**. Northeast tree fruit IPM working group. Northeast Regional IPM Center Partnership Grant. 5/1/2010-5/30/2012. \$20,000
- Autio, W., **D. Cooley**, and J. Clements. Significant orchard pesticide reduction with containment spraying of high-density, dwarf apple orchards. Massachusetts Department of Agricultural Resources/USDA Specialty Crops Grant Program (AGR-SC-2010). 1/1/10-12/31/11. \$75,000. Proposal awarded through the Massachusetts Fruit Growers' Association.
- Coli, W., S. Schloemann, R. Hazzard, J. Clements, W. Autio, **D. Cooley**, A. Averill, C. Hollingsworth, and S. Rich. "Massachusetts IPM." USDA NIFA-eIPM-CS. 7/1/10-6/30/13. \$500,000.
- Gleason, M. L., Batzer, J. C., **Cooley, D. R.**, Miller, D. National effort to implement sustainable management of sooty blotch and flyspeck on apples. USDA/CSREES Pesticide Management Alternatives Program. 09/01/2009 – 08/31/2011. \$200,000.
- Rozyne, M. and **D. R. Cooley**. Steady growth, forward momentum: pesticide reduction in northeast apples. US EPA Strategic Agriculture Initiative Grant. 09/30/08 – 12/31/09. UMass funding: \$17,598.
- Leskey, T. C., S. E. Wright, A. Zhange, D. Shapiro-Illan, **D. R. Cooley** and P. Drohan. Manipulating host- and mate-finding behavior of the plum curculio: development of a multi-life stage management strategy for a key tree fruit pest. USDA/CSREES Specialty Crop Research Initiative. 09/01/2009 – 08/31/2013. Total \$559,531. UMass funding: \$32,027.
- Reissig, W. H., **D. R. Cooley**, K.D. Cox, A.M. Agnello, and V. Jones. Development and implementation of a national web-based decision support system for tree fruit IPM. USDA NIFA SCRI Planning Grant. 8/1/10-7/31/11. \$50,000.
- Reissig, W. H., **D. R. Cooley** and J. Clements. Development of enhanced, web-based New York and New England tree fruit pest management guidelines. USDA/CSREES Northeast Regional IPM. 10/08 – 08/31/10. \$55,000.
- Ferrandino, F. J., R. Kyomoto, R., **D. R. Cooley**, F. Caruso, J. LaMondia, H. Sandler, P. Rolshausen. Combining a disease and weather monitoring network with measurements of inoculum potential for disease forecasting in vineyard IPM for southern New England. USDA/CSREES Northeast Regional IPM Research and Extension. 08/01/08 – 07/31/11. \$128,738

Ended prior to 2010 PI

- Cooley, D. R.** Establishment of a multi-regional working group on sooty blotch and flyspeck of apple in the U.S. USDA/CSREES Northeast IPM Partnership grants. 3/08 – 2/10. \$20,000.
- Cooley, D. R.** Effect of injected potassium phosphite, *Bacillus subtilis*, and tubuconazole on apple scab. J.J. Mauget Co., Arcadia, CA 4/06 – 12/07. \$9,000.
- Cooley, D. R.** Economic incentives for reduction of high toxicity pesticides in Northeast apples. US EPA via Red Tomato, Inc. 4/05 – 12/05. \$4,000.
- Cooley, D. R.** Evaluation of antibacterial chemicals for control of fire blight (*Erwinia amylovora*) of apple. 4/05 – 12/05. DuPont, Inc. \$7,500.
- Cooley, D. R.** and A. F. Tuttle Evaluation of modified pesticide-treated sphere for apple maggot control. Pest Mgmt. Innovations. 7/05 -12/05. \$2,000.
- Cooley, D. R.,** W. Coli, S. Schloemann, J. Vanden Heuvel, D. Greene. Development of a research and education program for small-scale, sustainable viticulture and enology in Massachusetts. University of Massachusetts Amherst Center for Agriculture Grant. 4/05 – 3/08. \$150,000.
- Cooley, D. R.** and A. Tuttle. Reduced risk cropping system for Pioneer Valley apples: a development and marketing pilot project. Univ. of Mass. Amherst Pub. Serv. Endowment Grant. 5/04 – 4/05 \$12,500.
- Cooley, D. R.,** W. R. Autio, R. J. Prokopy, W. M. Coli Integrating high-density orchards and biointensive integrated pest management methods in Northeastern apple production. USDA/SARE Northeast Region. 1997 – 2000. \$121,535
- Cooley, D. R.** AIM: An interactive, dynamic apple information manager for New England USDA/Northeast Regional IPM .1997-1999. \$11,000.
- Cooley, D. R.,** W. R. Autio, R. J. Prokopy, W. M. Coli, and C. Harper. 1988 - 1997 Development of a low-input apple production system for the Northeast. USDA Sustainable Agric. Research and Education grant. \$342,658.
- Cooley, D. R.** Evaluation of fungicides for the management of scab and other apple diseases. United Agric. Prod. 1997. \$1,200.
- Cooley, D. R.** Developing a biological basis for treatment of flyspeck disease: spore trapping New England Tree Fruit Growers Research Committee. 1997. \$921.
- Cooley, D. R.** and R. J. Prokopy Development of IPM methods for peaches in Massachusetts Massachusetts Tree Fruit Growers Assoc. 1996-1997 \$2,500.
- Cooley, D. R.** Evaluation of CaCl plus low rates of captan for management of summer blemish diseases of apple Massachusetts Tree Fruit Growers Assoc. 1996-1997. \$2,500.
- Cooley, D. R.** Evaluation of fungicides for the management of scab and other apple diseases. ISK Biotech, Inc.; Atochem, Inc. 1996. \$3,600.
- Cooley, D. R.** Evaluation of two biocontrol agents for the management of *Botrytis* gray mold of strawberry. USDA Fruit Res. Lab., Kearneysville, WV. 1994 – 1995. \$4,400.
- Cooley, D. R.** Evaluation of fungicides for the management of scab and other apple diseases. ISK Biotech, Dow/Elanco, Rohm & Haas, Inc., Atochem., Inc. 1995. \$15,350.
- Cooley, D. R.,** and Schloemann, S. Evaluation of alternative strategies for small fruit production. USDA Sustainable Agric. Research and Education grant. 1989 – 1994. \$129,558.
- Cooley, D. R.** and S. G. Schloemann. Integrated pest management program for strawberries in Massachusetts. Univ. of Mass. Integrated Pest Management Program. 1987 – 1994. \$292,248.
- Cooley, D. R.** Evaluation of fungicides for the management of scab and other apple diseases. Dow/Elanco, ISK Biotech 1994. \$3,200.
- Cooley, D. R.** Evaluation of early-season fungicides to manage *Botrytis* gray mold of strawberry. ISK Biotech 1994. \$2,000.

- Cooley, D. R.** Evaluation of fungicides for the management of scab and other apple diseases. Zeneca, Inc., ISK Biotech., Dow/Elanco, Inc., Rohm and Haas, Inc. 1993. \$8,500.
- Cooley, D. R.** Evaluation of early-season fungicides to manage *Botrytis* gray mold of strawberry. ISK Biotech. 1993. \$1,500.
- Cooley, D. R.,** M. Hugo and R. Schraeder. Development of a database of alternative chemical and non-chemical pest management strategies. USDA Cooperative Extension Water Quality Program. 1992. \$12,000.
- Cooley, D. R.,** M. S. Mount and S. G. Schloemann. Developing biological management alternatives to soil fumigation. Univ. of Mass. IPM Mini-Grants Program. 1992. \$15,500.
- Cooley, D. R.,** S. G. Schloemann, and J. Schoenfeld. An integrated pest management manual for strawberries. USDA Special IPM Grants. 1992. \$11,355.
- Cooley, D. R.** Evaluation of fungicides for the management of apple diseases. ICI Americas., Rohm and Haas, Inc. 1992. \$5,000.
- Cooley, D. R.** and S. G. Schloemann. Survey of commercial strawberry fields for *Colletotrichum* spp. associated with anthracnose. USDA APHIS Cooperative Agricultural Pest Survey Program. 1992. \$1,500.
- Cooley, D. R.** and S. G. Schloemann. Survey of commercial strawberry fields for *Rhizoctonia* spp. associated with black root rot. USDA APHIS Coop. Agric. Pest Survey Program. 1992. \$1,500
- Cooley, D. R.** and S. G. Schloemann. Field evaluation of cultivar tolerance to black root rot in strawberry. North American Strawberry Growers Association. 1992. \$1,000.
- Cooley, D. R.** 1992 Evaluation of early-season fungicides to manage *Botrytis* gray mold of strawberry. ISK Biotech. \$1,500.
- Cooley, D. R.** Combining contact fungicides with DMI fungicides to replace EBDCs. Dow/Elanco, Inc. 1990. \$2,000.
- Cooley, D. R.** Survey of pesticide use by U. S. apple growers. International Apple Institute. 1990. \$5,000
- Cooley, D. R.,** W. M. Coli and C. Hollingsworth. Development of an transfer system to facilitate APHIS data entry via personal computer. USDA APHIS Grant. 1990. \$6,000.
- Cooley, D. R.** and S. Schloemann. A field study of the relative effectiveness of selected IPM techniques on strawberry production. North Amer. Strawberry Growers Assoc. 1988 – 1989. \$2,800.
- Cooley, D. R.** Development of innovative fungicides and strategies for management of apple scab in Massachusetts. Monsanto Chem. Corp., Elanco Products Co. 1989. \$7,000.
- Cooley, D. R.** Effect and economics of using newly registered fungicides on peach brown rot. BASF Wyandotte Corp. 1989. \$1,000.
- Cooley, D. R.** Implementation of electronic decision support technology for apple production. USDA Low-Input Sustainable Agric. grant. 1988 – 1989. \$5,000.
- Cooley, D. R.** Efficacy of delayed applications of ergosterol inhibiting fungicides on apple diseases in Massachusetts. DuPont, Inc., Elanco Prod. Co., Chevron Chem. Co., & Uniroyal Inc. 1988. \$6,000.
- Cooley, D. R.,** W. A. Autio and D. W. Greene. Effect of fenarimol, NAA, and oil, alone and in combination on fruit set of apple. Dow/Elanco. 1988. \$1,000.
- Cooley, D. R.** Comparison of copper and sulfur fungicides with conventional mancozeb applications to control apple diseases. Source Technology Biologicals. 1988. \$1,250.
- Cooley, D. R.** Effect and economics of using newly registered fungicides on peach brown rot. BASF Wyandotte Corp. 1988. \$2,000.
- Cooley, D. R.,** and T. A. Tattar. OTC management of peach X-disease. J. J. Mauget Corp. 1988. \$4,000.

- Cooley, D. R.**, W. J. Manning & S. Schloemann Biocontrol of two major strawberry diseases. Mass. Dept. of Agric. Biocontrol Grants Program. 1988 – 1989. \$18,000.
- Cooley, D. R.** & S. Schloemann. Efficacy of pre-plant soil chemicals for disease control of strawberry beds. Buckman Labs., Nourse Farms. 1988. \$2,500.
- Cooley, D. R.** & S. Schloemann. Survey of major strawberry pests in Massachusetts. USDA APHIS Grant. 1988. \$3,000.
- Cooley, D. R.** and P. Cohen. Expert system development for Integrated Pest Management in Massachusetts apples: pilot program. University of Massachusetts Public Service Grants. 1987. \$6,000.
- Cooley, D. R.** Effect of newly registered fungicides on peach brown rot. BASF Wyandotte Corp 1987. \$1,500
- Cooley, D. R.** Effect of covalently bound fungitoxic chemical (Agrishield) on long-term control of apple scab. Landis Assoc. 1987. \$4,000.
- Cooley, D. R.** Improvement of early apple growth using fungicides which control Phycomycetes. Rhone-Poulenc, Inc. 1986 – 1987. \$4,000.
- Cooley, D. R.** Efficacy of ergosterol inhibiting fungicides on apple diseases in Massachusetts. DuPont Co., Inc., Elanco Products Co., Rhone-Poulenc, Inc., Chevron Chemical Co., Rohm & Haas, Inc. & Uniroyal Inc. 1986 – 1987. \$10,000.
- Cooley, D. R.**, C. Hollingsworth and D. Ferro. Potato integrated pest management: examination of root diseases. University of Massachusetts Integrated Pest Management Program 1986. \$1,500.
- Cooley, D. R.** Efficacy of the copper compound Kocide and streptomycin for the control of fire blight on apples and the relative phytotoxicity of the compounds. BASF Wyandotte Corp. 1986. \$3,000.

Ended prior to 2010 Co-I

- Leahy, K., D. Greene and **D. R. Cooley**. Integrated control of potato leafhopper on apple in New England during fire blight outbreaks. US EPA Region 1. 08/27/08 – 12/31/09. \$32,402.
- Greene, D., **Cooley, D. R.** and Schloemann, S. Development of a demonstration winery. Massachusetts Dept. of Agricultural Resources, Agricultural Innovations 7/07 – 12/07. \$55,357.
- Leahy, K., Greene, D. W. and **Cooley, D. R.** Dissemination and vectoring of the fire blight pathogen (*Erwinia amylovora*) by the potato leafhopper (*Empoasca fabae*). USDA/CSREES Northeast IPM Center Minigrants 6/07 – 5/08. \$7,950.
- Autio, W. R., **D. R. Cooley**, J.M. Clements, S.G. Schloemann and D. W. Greene Income in support of fruit-crop extension efforts Generated from University of Massachusetts Amherst Fruit Program Activities 1/07 – 12/07. \$25,736.
- Autio, W.R., D.W. Greene, **D. R. Cooley**, and J.M. Clements Massachusetts Fruit Growers' Association Horticultural Research Center Research Fund, Massachusetts Fruit Growers' Association, Inc. plus a 50% State match, endowment gift 1/06 – 12/06. \$124,000.
- Koeller, W., J.E. Carroll, **D. R. Cooley** and A.R. Biggs Site-specific management of resistance (SMOR) in the control of apple scab: Final phase of development and implementation. Northeast Regional IPM Competitive Grants, USDA 7/05 – 6/08. \$177,785.
- Coli, W., F. Caruso, **D. R. Cooley**, W. Nail, H. Sandler, S. Schloemann and J. Vanden Heuvel. Integrated and sustainable wine grape production in southern New England. Northeast Regional SARE Research and Education Project 4/03 – 9/07. \$100,000.
- Prokopy, R.J., (PI), **Cooley, D. R.**, W.R. Autio, D.W. Greene, S. Wright, J.P. Nyrop, W.M. Coli, and A. Tuttle. Toward sustainability in Northeastern apple production: Orchard ecosystem architecture, key pests, and cultivar selection. Northeast Regional SARE Research and Education Project 11/00 – 10/05. \$134,030.

- Prokopy, R. J. **D. R. Cooley**, W. M. Coli, W. R. Autio, A. F. Tuttle, S. E. Wright, D. W. Greene, and W. J. Bramlage. Initiation of second phase of third-level IPM in apple orchards. UMass State/Federal IPM Grants Program. 1999-2001. \$171,000.
- Prokopy, R. J. **D. R. Cooley**, P. L. Phelan. New multi-tactic alternatives to current pesticides against key apple pests. USDA/CSREES/CAR. 2001-2004. \$174,150.
- Prokopy, R. J. **D. R. Cooley**, W. R. Autio. Toward sustainability in northeastern apple production: orchard ecosystem architecture, key pests and cultivar selection. USDA/SARE Northeast Region 2000-2002. \$134,030.
- Prokopy, R. J. , **D. R. Cooley**, W. M. Coli and W. R. Autio. Integrated pest management program for apples. Integrated Pest Management Program, Univ. of Mass. 1997 – 1998. \$110,000.
- Prokopy, R. J. , **D. R. Cooley**, W. M. Coli and W. R. Autio. Integrated pest management program for apples. Integrated Pest Management Program, Univ. of Mass. 1996 – 1997. \$107,000
- Prokopy, R. J. and **D. R. Cooley**. Toward biotoxicant management of key summer apple pests. USEPA 1995 – 1996. \$35,175.
- Coli, W. M, **D. R. Cooley**, D. N. Ferro, R. V. Hazzard, S. G. Schloemann and T. Smith. A process to identify opportunities for and barriers to implementation of biologically-based IPM systems for diversified farms in the northeastern U. S. A. USDA/CREES. 1995 – 1996. \$20,000.
- Prokopy, R. J. , **D. R. Cooley**, W. M. Coli and W. R. Autio. Integrated pest management program for apples. Integrated Pest Management Program, Univ. of Mass. 1995 – 1996. \$102,000.
- Hazzard, R., F. Mangan, S. Schloemann, M. Else, S. Herbert, J. Howell, A. Miller, D. Ferro, R. Wick, **D. R. Cooley**, R. Christensen. Vegetable and berry integrated crop management. Integrated Pest Management Program, Univ. of Mass. 1995. \$124,454.
- Prokopy, R. J. , **D. R. Cooley**, W. M. Coli and W. R. Autio. Refinement of second-level IPM practices for Massachusetts apple orchards. USDA Northeast Regional IPM Special Grants Program. 1994 – 1996. \$80,000.
- Prokopy, R. J., **D. R. Cooley**, W. M. Coli, and W. R. Autio. Integrated pest management program for apples. Integrated Pest Management Program, Univ. of Mass. 1988 – 1995. \$32,000.
- Schupp, J., Ellworth, L., **Cooley, D. R.**, Berkett, L., Los, L., and Eaton, A. Pilot agricultural sector pollution prevention initiative for New England apple growers. USEPA via the National Foundation for Integrated Pest Management Education. 1993 – 1994. \$29,500.
- Prokopy, R. J., **D. R. Cooley**, W. M. Coli and W. R. Autio. Second-level IPM in Massachusetts apple orchards. Massachusetts Society for Promoting Agriculture. 1990 – 1993. \$90,000.
- Prokopy, R. J., **D. R. Cooley**, W. M. Coli and W. R. Autio. Development and incorporation of second-level IPM for Northeast apple growers. Northeast Regional IPM Special Grants Program. 1991 – 1994. \$120,000.
- H. Riessig, W. Coli, T. Robinson, A. Agnello, W. Wilcox and **D. R. Cooley**. Implimentation of an IPM program for small-scale apple growers in Romania. Part of a Univ. of Mass. and Cornell Univ. project with A. I. D., World Care International, Romania and local farmers. 1993 – 1994. \$100,000.
- Barker, A., **D. R. Cooley**, S. G. Schloemann, J. Gillan, D. Cox, and L. Craker. Evaluation of composts of municipal solid waste as media for production of fruit crops and landscape plants. Solid Waste Composting Council, Wash. D. C. 1992 – 1994. \$165,500.
- W. M. Coli, **D. R. Cooley**, N. Clifton. A microcomputer database of Massachusetts pesticide use estimates. National Pesticide Impact Assessment Program, USDA. 1990. \$15,000.
- Schloemann , S. G. and **D. R. Cooley**. Identification of economically important blueberry insects and diseases in Massachusetts. USDA APHIS Grant. 1990. \$1,700.
- Rohde, R. A., W. M. Coli and **D. R. Cooley**1 Agricultural management systems research. USDA/CSRS. Special Research Grant. 1990 – 1992. \$750,000.

Coli, W. M., K. Carroll, W. Autio and **D. R. Cooley** Statewide agricultural and home horticultural information network Telecommunications Pilot & Demonstration Project Grant, University of Massachusetts. 1986. \$13,500.

Herbert, S. J., and **D. R. Cooley** Crop management interactions with Fusarium crown and root rot: effects on yield and stand persistence. USDA Competitive Grants Program, Northeast Regional Integrated Pest Management. 1986 – 1987. \$42,000.

Other income generation

As part of my work with the UMass Fruit Team in the Agriculture & Landscape Program, I work to generate income to support our research and education efforts at the UMass Cold Spring Orchard, generate income from educational programming to the off-campus public, and to get contributions for the Research Center Trust Fund. The amounts for the period 2008 through 2010 are shown here.

Greene, D., J. Sincuk, W. Autio, J. Clements, J. Krupa, and **D. R. Cooley**. Income in support of operation of the UMass Cold Spring Orchard Research & Education Center. 1/10 – 12/10. \$232,080.

Autio, W., **D. R. Cooley**, J. Clements, S. Schloemann, and D. Greene. Income in support of fruit-crop extension efforts. 1/10 – 12/10. \$33,157.

Autio, W., D. Greene, D. Cooley, and J. Clements. “Massachusetts Fruit Growers’ Association Horticultural Research Center Research Fund.” From Massachusetts Fruit Growers’ Association, Inc. plus a 50% State match. 1/10 – 12/10. \$75,000.

Autio, W., D. Greene, **D. R. Cooley**, and J. Clements. “Massachusetts Fruit Growers’ Association Horticultural Research Center Research Fund.” From Massachusetts Fruit Growers’ Association, Inc. plus a 50% State match. 1/09 – 12/09. \$79,376.

Autio, W., **D. R. Cooley**, J. Clements, S. Schloemann, and D. Greene. Income in support of fruit-crop extension efforts. 1/09 – 12/09. \$16,539

Greene, D., J. Sincuk, W. Autio, J. Clements, J. Krupa, and **D. R. Cooley**. Income in support of operation of the UMass Cold Spring Orchard Research & Education Center. 1/09 – 12/09. \$188,296.

Autio, W., D. Greene, **D. Cooley**, and J. Clements. “Massachusetts Fruit Growers’ Association Horticultural Research Center Research Fund.” From Massachusetts Fruit Growers’ Association, Inc. plus a 50% State match, 1/08 – 12/08. \$116,100.

Greene, D., J. Sincuk, W. Autio, J. Clements, J. Krupa, and **D. Cooley**. Income in support of operation of the UMass Cold Spring Orchard Research & Education Center. 1/08 – 12/08. \$157,647.

Autio, W., **D. Cooley**, J. Clements, S. Schloemann, and D. Greene. Income in support of fruit-crop extension efforts. 1/08 – 12/08. \$17,544.

Experiment Station Projects

MAS 00407. **Cooley, D. R.** Development of more sustainable disease management tactics for apple production in the Northeast. (10/1/2010 – 9/30/2015).

NC-140. Improving economic and environmental sustainability in tree- fruit production through changes in rootstock use. <http://www.nc140.org/> (1997-present).

NE-183. Multi-disciplinary evaluation of new apple cultivars. <http://www.ne183.org/> (1995-2004).

NECC 1009. (continuation of NE-183). Multi-disciplinary evaluation of new apple cultivars. (2005 - 2008)

NE 1020. Multi-state evaluation of wine grape varieties and clones.

<http://nimss.umd.edu/homepages/home.cfm?trackID=4034> (10/1/2005 – 9/30/2017)

NEERA 1001. The Northeast Research, Extension, and Academic Program Committee for Integrated Pest Management. <http://nimss.umd.edu/homepages/home.cfm?trackID=8656> (10/01/2006 - 09/30/2011)

Awards

National. USDA Group Honor Award for Excellence to Multi-State Research Project NE-183 for providing timely information to apple growers nationally about the likely success of establishing new apple cultivars in different regions while meeting consumers' desire for diverse and tasty apples.

Regional. Northeast Regional Association of State Agricultural Experiment Station Directors 2000 Award for Excellence to Multi-State Research Project NE-183 for multidisciplinary evaluation of new apple cultivars.

TEACHING – Undergraduate and graduate

Current

- PLSOILIN 140 Plagues: The Ecology of Disease (co-taught) 4 cr. (2003 – present) latest enrollment 306.
- PLNTSOIL 510 Plant Disease Ecology and Management 3 cr. (1993 -?; 2008-2011) latest enrollment 29
- PLNTSOIL 692A Special Topics in Plant-Pathogen Interactions 1 cr. (2009 – present)
- UNIVRSTY 197PSIS1 Feast or Famine: Agriculture and Disease 1 cr. (2010 – present) latest enrollment 16.
- PLSOILIN 496 Independent Study (currently 3 students; credits vary)

Previous

- PLSOILIN 140-0H Honors Colloquium: Ecology of Disease 1 cr. (2009 – 2010) enrollment
- PLSOILIN 104 Horticultural Plant Pathology. 3 cr. (1994 -99; 05-07) avg. enrollment 86
- MICBIO 581 Integrated Pest Management (co-taught). 5 cr. (1995 -2003) avg enrollment 14
- MICBIO 320 Infectious Disease and Defense (co-taught). 3 cr. (2000-03) avg enrollment 63
- MICBIO 310H Honors Colloquium in Microbiology 1 cr. (1997) avg enrollment 10
- PLPATH 390A Ecology and Plant Disease. 3 cr. (1994 - 96) avg enrollment 12
- ENTOMOL 190B Introductory Integrated Pest Management (co-taught). 2 cr. (1995 - 97) avg enrollment 32

Honors projects, Practica and Independent Study

Supervision of 21 students.

Example: Honors Project:

Antill, E. and **D. R. Cooley**. 2006. Free-living *Pylaiella littoralis* in culture from Nahant Bay, Massachusetts related to population growth, the amphipod *Gammarus tigrinus*, and the parasitic oomycete *Eurychasma dicksonii*. 12th Annual Massachusetts Statewide Undergraduate Conference, Apr. 17, Boston MA. Unpublished.

Advising - undergraduate

Currently advising 6 undergraduates.

Advising - graduate

Chair of 11 graduate committees, 2 Ph. D., 9 MS.

Served on 29 additional graduate committees, 18 Ph. D., 11 M.S.

Fellowship

Awarded **General Education Fellowship**, 2010

SERVICE

Professional Memberships

- American Phytopathological Society, National and Northeast Div. *Officer, President, V.P. and Sect. Treas. to V.P. to President, 2006 – 2009.*
- International Organization for Biological Control

Committees**Departmental**

- Seminar Committee (2009-present)
- Undergraduate Curriculum and Policy Committee, (chair 2004 -2010) (member 2010 - present)
- Personnel Committee(1998-1999; 2005 -2007)
- Executive Committee (advising department head; 2008 – 2010)
- Web Site Development Committee (2005 -06)
- AQAD Report, Undergraduate Teaching section (2005 – 06)
- Graduate Admissions (1997-98)
- Search committee
- Department infection and immunity faculty (1997-98)
- Department turf pathologist faculty, chair (2005)
- Department genomics, biofuels (2010)

Interdepartmental

- Member, Plant Biology Graduate Program (2001 – present)
- Member, Organismic and Evolutionary Biology Program (2007 – present)
- Environmental Science Steering Committee (1997-98)
- Plant Biology Curriculum Committee (1997-98)
- Plant Biology Steering Committee (1997-00)

University and College

- University Calendar Committee (2005 - present)
- College Committee on Agricultural Curriculum. Charged to study and propose changes in the College's agricultural curriculum. (2009-2010)
- Water Supply and Demand Panel. Technical advisor, agriculture. In collaboration with EPA and the Environmental Institute. (2010)
- Faculty Senate Roles and Rewards Subcommittee (2001)
- Committee on Plant and Insect Biology charged with exploring potential for merged Depts. of Plant & Soil Sci., Entomology, and plant pathologists from Microbiology (2000-01).
- Univ. of Mass. / Mass. Exec. Office of Env. Affairs Agricultural sub-committee for development of UMass/State memorandum of understanding (co-chair) (2000-01)

Extension and outreach

- Tree Fruit Team, head (1997 - ?)
- Fruit Team, member (1991-present)
- Center for Agriculture, CFNR, Director (1998 -)
- Agroecology Program Director (1998 -)
 - Committee for Strategic Plan Development and 2000-2004 Plan of Work
- Agroecology Steering Committee (1997 - 99)
- Agriculture and Landscape Program, member (1997 - present)
- Massachusetts IPM Steering Committee (2000 -)
- Pioneer Valley Plan for Progress, Agriculture Sub-Committee (2000 - 2003)
- Southeast Mass. Agricultural Partnership Steering Committee (2000 - 2004)

American Phytopathological Society

- Member, President (2007-2008), past Vice-President (2006-7), past Sect./Treas. (2005-6), Northeast Division, American Phytopathological Society
- Member, Chemical Control Committee (2004 – present)
- Past Chair of the Extension Committee (1994-5)
- Past Chair IPM Committee (1992-3)
- Chair, Colloquium, 1995 APS Mtg., "Realities of Socially Legislated Agriculture: Plant Pathologists Face the Issues."
- Chair, Symposium, 1991 APS Mtg, "Food and the Environment: IPM Meets the 90's."
- Co-chair, Discussion Session, 1989 APS Mtg, "IPM and LISA: Meeting Crop Production Challenges in the 1990's"
- Past President of Extension Plant Pathologists Committee of NED/APS
- Past member and chair of the Graduate Student Awards Com. NED/APS

Other Disciplinary

- Tree Fruit IPM Working Group, Northeast IPM Center, co-chair (2009-2011)
- Apple Sooty Blotch/Flyspeck Disease Working Group, Northeast IPM Center, chair (2008-2010)
- Kettering Institute Committee on the Scholarship in Land Grant Institutions (2003-2006)
- Northeast Sustainable Agriculture Research & Education Technical Committee (1996-2001)
- Review Board, Certification Committee of the National Alliance of Independent Crop Consultants (1998-1999)

EDITORIAL

- Associate Editor, Plant Disease (1997 – 2002)
- Section editor, Biological and Cultural Tests for Control of Plant Diseases (1998-2002)
- Section editor, Fungicide & Nematicide Tests (2005 - 2006)
- Section editor, Plant Disease Management Reports (approx. 45 reports/yr; 2007 – present)
- Ad hoc reviewer, presently review 5 to 10 additional scientific papers per year.

Grant review Panels

- Western Regional Integrated Pest Management Research Grant Panel, 2011, Davis, CA.
- Northeast Sustainable Agric. Res. and Educ. Grants, Mar. 1998-2001, Burl., VT
- Southern Regional IPM Review Panel, June, 1996. Lexington, KY.

ADMINISTRATION

As Director of Agriculture and Landscape (Agroecology) Program, UMass Extension (1998 – 2004)

- Coordination and oversight of agricultural outreach and applied research, including 78 faculty and professional staff in five University departments
- Oversee \$1.48 million personnel budget.
- Develop and monitor \$200,000 operating budget for 11 teams in the program
- Deal with personnel issues and in annual performance review for 24 professional staff
- Facilitate grant development for Ag. Extension and related departments.
- Represent the University and Extension at public functions (e.g. Massachusetts Grows Trade Convention, Legislative Agricultural Day)
- Meet with regional agricultural stakeholder groups (e.g. Southeast Mass. Ag. Partnership, Community in Support of Agriculture - CISA) on a regular basis (e.g. monthly) to support and improve agricultural resources.
- Report quarterly to the Board of Public Overseers charged with oversight of UMass Extension.
- Meet with the Commissioner of Agriculture and/or state Dept. of Food & Agriculture staff on a regular basis to discuss funding and areas of mutual concern

- Develop material for reports to the University, State and Federal officials (e.g. Vice Chancellor for Outreach; CSREES)
- Develop and implement program web site.
- Develop other program public relations material (e.g. descriptive brochure “Agroecology at the University of Massachusetts”.)
- Attend Advisory Committee meetings for Teams as required (1 per month total)
- Meet monthly with 11 team leaders to develop and monitor program activities
- Meet monthly with Extension leadership and other program leaders
- Establish and participate in Program Committees in key areas such as Web development and use, and the general public’s access to Extension

As Director of the Center for Agriculture (1998 – 2003):

- Coordinate revised Center for Agriculture
- Deal with inquiries and agricultural issues pertinent to the University of Mass. Amherst
- Identify and facilitate opportunities for contract research between the University of Massachusetts Amherst and outside funding agencies.
- Work with Experiment Station Director on cooperative programs, including development of mini-grant program, for innovative agricultural research and outreach.
- Meet with department heads in CNRE to discuss agricultural research, teaching and outreach
- Coordinate CNRE agricultural research and teaching with Extension Agroecology
- Link Departmental expertise to agricultural needs and opportunities (e.g. Res. Economics with purchase of Cains in S. Deerfield)
- Develop physical facilities in West Experiment Station

Leader, Tree Fruit Team, Agroecology, UMass Extension (1996 - 1998)

- Organize educational and applied research programming around the Massachusetts tree fruit industry
- Represent the Tree Fruit Team at Agroecology Program meetings