

**CASEY W. HOY**

Agroecosystems Management Program  
 The Ohio State University  
 Ohio Agricultural Research and Development Center  
 Ohio State University Extension  
 Wooster, OH 44691  
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EDUCATION and PROFESSIONAL EXPERIENCE

Ph. D. Cornell University, January 1988

B. S. Cornell University, May 1981, with Distinction and Honors

Kellogg Endowed Chair in Agricultural Ecosystems Management, Agroecosystems Management Program, The Ohio State University, July 2006 – present

Research and extension responsibilities include the science and practice of agroecosystems management, including landscape ecology, systems analysis and combining social, economic and environmental concerns in improving agricultural ecosystems and rural communities. Offer leadership to faculty, staff, students and stakeholders in interdisciplinary approaches to achieving agroecosystem health and sustainable communities.

Associate Chair, Dept. of Entomology, The Ohio State University, June 2001 – July 2006

Professor, The Ohio State University, July 1999 - Present

Associate Professor, The Ohio State University, July 1993 - June 1999

Assistant Professor, The Ohio State University, September 1987 - June 1993

Graduate Research Assistant, Cornell University, August 1983 - August 1987

Pest Management Consultant. June 1981-October 1985

HONORS AND PROFESSIONAL ASSOCIATIONS

Entomological Society of America

Society for Invertebrate Pathology

Professional Agricultural Consultants of New York State

Organizing committee, Chairman, January, 1983 - March, 1984

Vice President, March, 1984 - March, 1985

Sigma Xi

Potato Association of America

OARDC Multidisciplinary Team Research Award, 1997

OARDC Distinguished Research Award, 1998

ESA Award for Excellence in Integrated Pest Management, 1999, NCB ESA

RECENT COMPETITIVE GRANTS (> \$3 million total)

USDA, CSREES Initiative for Future Agriculture and Food Systems

Revitalizing Small and Mid-sized Farms: Organic Research, Education and Extension. B. R. Stinner, S. A. Miller, D. Stinner, R. Moore, J. Cardina, C. Hoy, P. Grewal, M. Kleinhenz, D. Doohan, F. Michel, J. Kovach. Amount funded: \$1,800,000 for 4 years; Starting date: 15 September 2000

OARDC Research Enhancement Grants Program – Interdisciplinary Grants

Landscape Pattern Indicators of Agroecosystem Health. Hoy, C., R. Moore, J. Cardina & F. Hitzhusen. Amount funded: \$75,695; Starting date: April, 2001.

USDA-CSREES National Research Initiative Competitive Grants Program

Habitat Characteristics and Entomopathogenic Nematode Persistence in Agroecosystems C. W. Hoy & P. S. Grewal Amount funded: \$206,000 for 2 years; Starting date: 1 September 2004

US Civilian Research & Development Foundation for Independent States of the Former Soviet Union. Microbial controls for pest insects of vegetable crops in Georgia. C. Hoy & C. Chkubianishvili. Amount funded \$35,000.00 for 2 years; Starting date 1 May 2005

NASA

Linking airborne measurements of CO<sub>2</sub> with terrestrial sources of carbon over heterogeneous landscapes. Vadrevu, K. Prasad and Hoy, C. W. Amount funded: \$25,000 2005-2006.

The National Science Foundation, Graduate Teaching Fellows in K-12 Education Program

Linking Watershed Research and GK-12 Education within an Ecosystem Context.. Richard Moore, Casey W. Hoy, Lance Williams, Patrick C. Goebel, Virginie L. Bouchard. Amount funded: \$2,914,957. 2007-2011.

RECENT PROFESSIONAL SERVICE

Ohio Potato Growers Association, Educational Advisory Committee, 1988-2006

Ohio Representative to NCR-148 (Migration and Dispersal of Biota) 1991-present, Chair 1998

OSU-OARDC Interdisciplinary Research Grant Program, 1997, Panel Manager 1998

USDA National Research Initiative Competitive Grants Program, Entomology Panel, 1993, 1999

USDA National Research Initiative Competitive Grants Program, Biologically Based Pest Management Panel Manager, 2000

ESCOPE/ACOP Leadership Development Program, Class 10, 2000-2001

Subject Editor, Sampling, Environmental Entomology, ESA, December 2003 - 2006

RECENT REFEREED RESEARCH PUBLICATIONS

Allaire, F., B. Stinner, D. Stinner, J. Hartzler, R. Moore, C. Hoy, J. Dorsey, F. Hitzhusen, and M. Weaver. 2001. Learning sustainable development with a farm enterprise and its community. *J. Sust. Agric.* 19: 65-83.

Zhou, X., C. W. Hoy, S. A. Miller, L. R. Nault. 2002. Spatially explicit simulation of aster yellows epidemics and control on lettuce. *Ecological Modeling.* 151: 293-307.

Miklasiewicz, T. J., P. S. Grewal, C. W. Hoy and V. S. Malik. Evaluation of entomopathogenic nematodes for suppression of carrot weevil. 2002. *BioControl.* 47: 545-561.

Torres, A. and C. W. Hoy. 2002. Relationship between carrot weevil (Coleoptera: Curculionidae) infestation, damage, and planting dates of parsley (Apiaceae). *Can. Entomol.* 134: 125-135.

Torres, A. and C. W. Hoy. 2002. Sampling scheme for carrot weevil (Coleoptera: Curculionidae) in parsley. *Environ. Entomol.* 31: 1251-1258.

Yildirim, E, and C. W. Hoy. 2003. Tests of synergism between cyromazine seed treatments for green onions and entomopathogenic nematodes. *Crop Protection.* 22: 923-927.

Yildirim, E, and C. W. Hoy. 2003. Cyromazine seed treatments for green onions *J. Econ. Entomol.* 96: 1494-1999

Zhou, L., C. W. Hoy, S. A. Miller, L. R. Nault. 2003. Marking methods and field experiments to estimate aster leathopper (*Macrosteles quadrilineatus*) dispersal rates. *Environ. Entomol.* 32: 1177-1186.

Prasad, K., B. Stinner, D. Stinner, J. Cardina, R. Moore, P. K. Gupta, H. Tsuruta, K. Tanabe, K.V.S. Badarinath and C. Hoy. 2003. Trends in food production and nitrous oxide emissions from the agriculture sector in India: environmental implications. *Reg. Environ.*

- Change 3:154–161.
- Prasad, K., K.V.S. Badarinath, H. Tsuruta, S. Dudo, S. Yonemura, J. Cardina, B. Stinner, R. Moore, D. Stinner and C. Hoy. 2003. Implications of land use changes on carbon dynamics and sequestration – evaluation from forestry datasets, India. *The Environmentalist* 23: 175-187.
- Zhang, J., Hogenhout, S. A., Nault, L. R., Hoy, C. W., and Miller, S. A. 2004. Molecular and symptom analyses of phytoplasma strains from lettuce reveal a diverse population. *Phytopathology* 94: 842-849.
- Torres, A. and C. W. Hoy. 2005. Relationship between carrot weevil infestation and parsley yield. *J. Econ. Entomol.* 98: 1213-1220.
- Jallow, M. F. A. and C. W. Hoy. 2005. Phenotypic variation in adult behavioral response and offspring fitness in *Plutella xylostella* (Lepidoptera: Plutellidae) in response to permethrin. *J. Econ. Entomol.* 98: 2195-2202.
- Beanland, L., Madden, L. V., Hoy, C. W., Miller, S. A., and Nault, L. 2005. Temporal distribution of aster leafhopper (*Macrosteles quadrilineatus*) sex ratios and spatial pattern of aster yellows phytoplasma disease in lettuce. *Annals Entomological Society of America* 98: 756-762.
- Alumai, A., P. S. Grewal, C. W. Hoy and D. A. Willoughby. 2006. Factors affecting the natural occurrence of entomopathogenic nematodes in turfgrass. *Biological Control.* 368-374.
- Barbercheck, M. and C. Hoy. 2005. A systems approach to conservation of entomopathogenic nematodes. Pp. 331-347. In *Nematodes as Biological Control Agents.* (Parwinder Grewal, Rolf Peters and David Shapiro-ilan, eds.) CABI, Cambridge, 505 pp.
- Stuart, R. J., M. E. Barbercheck, P. S. Grewal, R. A. J. Taylor, and C. W. Hoy. 2006. Population Biology of Entomopathogenic Nematodes: Concepts, Issues and Models. *Biological Control.* 38: 80-102.
- Lawrence, J. L., C. W. Hoy and P. Grewal. 2006. Spatial and temporal distribution of endemic entomopathogenic nematodes in a heterogeneous vegetable production landscape. *Biological Control.* 37: 247-255.
- Jallow, M. and C. W. Hoy. 2006. Quantitative genetics of adult behavioral response and larval physiological tolerance to permethrin in diamondback moth *Plutella xylostella* (Lepidoptera: Plutellidae) *J. Econ. Entomol.* 99(4): 1388-1395.
- Jallow, M. and C. W. Hoy. 2007. Indirect Selection for Increased Susceptibility to Permethrin in Diamondback Moth (*Plutella xylostella*) (Lepidoptera: Plutellidae). *J. Econ. Entomol.* 100: 526-533.
- Hoy, C. W., J. E. McCully, J. Laborde, A. Vargas, R. Bujanos, E. Rangel. 2007. The linkage between integrated pest management and agroecosystem management: a case study in the Bajío, México. *American Entomologist.* 53: 174-183.
- Casey W. Hoy, Gilles Boiteau, Andrei Alyokhin, Galen Dively and Juan Manuel Alvarez. In Press. *Managing Insect and Mite Pests. Potato Health Management* (Dennis Johnson, ed.) APS Press.
- Phil Hamm, Casey W. Hoy, Andrei Alyokhin, Galen Dively et al. In Press. *Managing Pesticide Resistance. Potato Health Management* (Dennis Johnson, ed.) APS Press.
- Casey W. Hoy. In Press. *Pesticide Resistance Management. Integrated Pest Management* (E. B. Radcliffe and W. B. Hutchison, eds.) CABI
- Krishna Prasad Vadrevu, John Cardina, Fred Hitzhusen, Isaac Bayoh, Richard Moore, Jason Parker, Ben Stinner, Deb Stinner and Casey Hoy. In Press. *Case study of an integrated framework for quantifying agroecosystem health. Ecosystems.*