#### James R. Nechols

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#### **EDUCATION**

1980. Ph.D. Entomology, Cornell University, Ithaca, NY

1977. M.S. Entomology, Cornell University, Ithaca, NY

1973. B.S. Biology (honors), Baldwin-Wallace College, Berea, OH

#### PROFESSIONAL EXPERIENCE

2006-	Interim Department Head	, Department of Entomology	. Kansas State University

1996- Professor, Department of Entomology, Kansas State University

1991 Visiting Associate Professor, Entomology, Cornell University

1989-96 Associate Professor, Entomology, Kansas State University

1984-89 Assistant Professor, Entomology, Kansas State University

1980-84 Assistant Professor, Entomology, University of Guam

### ADMINISTRATIVE TRAINING AND ACCOMPLISHMENTS (selected)

ESCOP/ACOP Leadership Development Program – 2004

Acting Department Head -- periodically from 1998-2005

Coordinated and/or facilitated entomology involvement in NIOSH consortium and Biosecurity Center proposals

Co-authored pre-proposal to renovate/expand Insect Zoo

Coordinated new faculty recruitment/start-up (behavioral ecology)

Coordinated lab renovation for new extension horticultural entomologist

Drafted revised annual evaluation and promotion & tenure procedures

Provided support letters for Targeted Excellence proposals

Contributed to financial analysis and fundraising efforts for Insect Zoo

Made presentation to Indian delegation from Acharya N.G. Ranga Agricultural University and contributed to discussion with K-State administrators in establishing memorandum of understanding

## **DISTINCTIONS AND PROFESSIONAL ACTIVITIES (selected)**

Recipient of ESA North Central Branch Distinguished Achievement Award in Teaching, 2001

Recipient, Kansas State University Presidential Award for Outstanding Undergraduate Teaching, 2000.

Invited speaker, American Association for the Advancement of Science, Wash., DC., 1991

Organizer and invited speaker for multiple ESA symposia

Panelist, Office of Technology Assessment, U.S. Congress. Biological Control, 1993-94.

Rapporteur, Arthropod Panel. USDA/CSRS National Workshop, "Regulations and Guidelines: Critical Issues in Biological Control". Vienna, VA, 1991.

Panel Member: Southern (1992) and Western (1990) Regional IPM Grants Programs.

Extramural Funding: > \$700K since 1991 from: USDA - NRI, PMAP, NCR-IPM, APHIS-NBCI.

Editor, Crop Protection, 1991-1995; Formosan Entomologist, 2005-present

Editorial Board, Crop Protection, 1995-present

President, Kansas State University Chapter of Sigma Xi, 2002-03

President, Central States Entomological Society, 1993-94
Secretary-Treasurer, International Organization for Biological Control (Nearctic Region), 1993-94
Chair, Regional Research Projects (biological control): NCR-125 (1988), W-84 (1989), and W-185 (1999)
Chair, Entomological Society of America, Subsection Ca: Biological Control, 1988
Formal Cooperator, U.S. AID program, Jordan. Biological control of spherical mealybug, 1984-86

### AREAS OF RESEARCH INTEREST

Biological control of greenhouse pests Biological control of weeds and arthropods Horticultural pest management Ecology and behavior of natural enemy-pest interactions Sustainable agriculture and alternative pest management Insect dormancy and general phenology

## COURSES TAUGHT/GRADUATE STUDENT TRAINING

Biological control Horticultural entomology Turfgrass pest management/ Advise or co-advise seven graduate students (current)

## **PROFESSIONAL AFFILIATIONS (current and former)**

Entomological Society of America International Organization for Biological Control Central States Entomological Society AAAS Sigma Xi American Society of Zoologists

## **REFEREED JOURNAL PUBLICATIONS (past 3 years from total of 59):**

- Nachappa, Punya, David C. Margolies, and **James R. Nechols**. 2006. Resource-dependent giving-up time of the predatory mite, *Phytoseiulus persimilis*. J. Insect Behavior. 19: 741-752. Online First http://dx.doi.org/10.1007/s10905-006-9059-7.
- Grieshop, Matthew J., Paul W. Flinn, **James R. Nechols**, and James F. Campbell. 2006. Effects of shelf architecture and parasitoid release height on biological control of *Plodia interpunctella* (Lepidoptera: Pyralidae) eggs by *Trichogramma deion* (Hymenoptera: Trichogrammatidae). J. Econ. Entomol. 99: 2202-2209.
- Grieshop, Matthew J., Paul W. Flinn, and **James R. Nechols**. Biological control of the Indianmeal moth on finished stored products using egg and larval parasitoids. J. Econ. Entomol. 99: 1090-1084.
- Zhi, Junrui, David C. Margolies, **James R. Nechols** and John E. Boyer, Jr. 2006. Interactions between a true omnivore and a co-occurring herbivore. Entomologia Experimentalis et Applicata. 21: 59-66.
- Opit, George P., Greg K. Fitch, David C. Margolies, **James R. Nechols** and Kimberly A. Williams. 2006. Overhead and drip tube irrigation affects twospotted spider mites (*Tetranychus urticae*) and their biological control by the predatory mite *Phytoseiulus persimilis* on *Impatiens wallerana*. HortTechnology. HortScience. 41: 691-694.
- Holt, Kiffnie M., George P. Opit, **James R. Nechols** and David C. Margolies 2006. Testing for non-target effects of spinosad on twospotted spider mites and their predator *Phytoseiulus persimilis* under greenhouse conditions. Experimental and Applied Acarology. 38: 141-149.

- Vardeman, Erika A., Frank H. Arthur, **James R. Nechols**, and James F. Campbell. 2006. Effect of temperature, exposure interval and depth of diatomaceous earth on distribution, mortality, and reproduction of the lesser grain borer, *Rhyzopertha dominica* (F.) (Coleoptera: Bostrichidae) in stored wheat. J. Econ. Entomol. 99: 1017-1024.
- Zhi, Junrui, Greg K. Fitch, **James R. Nechols**, and David C. Margolies. 2005. Apple pollen as a supplemental food for the western flower thrips, *Frankliniella occidentalis* (Thysanoptera: Thripidae): response of individuals and populations. Entomol. Exp. Applic. 117: 185-192.
- Alatawi, F.J., G.P. Opit, D.C. Margolies, and **J.R. Nechols**. 2005. Within-plant distribution of twospotted spider mites (Acari: Tetranychidae) on impatiens: development of a presence-absence sampling plan. J. Econ. Entomol. 98: 1040-1047.
- Akbar, W., J.C. Lord, **J.R. Nechols**, and T. M. Loughin. 2005. Effect of *Beauveria bassiana* for red flour beetle when applied with plant essential oils or in mineral oil and organosilicone carriers. J. Econ. Entomol. 98: 683-688.
- Opit, G.P., **J.R. Nechols**, D.C. Margolies, and K.A. Williams. 2005. Survival, horizontal distribution, and economics of releasing predatory mites (Acari: Phytoseiidae) using mechanical blowers. Biological Control 33:344-351.
- Opit, G.P., Y. Chen, K.A. Williams, **J.R. Nechols**, and D.C. Margolies. 2005. Plant age, fertilization and biological control affect damage caused by twospotted spider mites on ivy geranium: development of an action threshold. J. Amer. Soc. Hort. Sci. 130: 159-166.
- Milbrath, Lindsey R. and **James R. Nechols**. 2004. Indirect effect of early-season infestations of *Trichosirocalus horridus* on *Rhinocyllus conicus* (Coleoptera: Curculionidae). Biological Control. 30(1): 95-109.
- Milbrath, Lindsey R. and **James R. Nechols**. 2004. Individual and combined effects of *Trichosirocalus horridus* and *Rhinocyllus conicus* (Coleoptera: Curculionidae) on musk thistle biological control. Biological Control. 30(2): 418-429.
- Opit, G.P., **J.R. Nechols**, and D.C. Margolies. 2004. Biological control of twospotted spider mite, *Tetranychus urticae* Koch (Acari: Tetranychidae), using *Phytoseiulus persimilis* Athias-Henriot (Acari: Phytoseidae) on ivy geranium: assessment of predator release ratios. Biological Control. 29:445-452.

# EDITED BOOKS AND CHAPTER CONTRIBUTIONS

## **Book chapters (selected from total of 15)**

- Nechols, James R. 2003. Fortuitous biological control. In: R. Van Driesche (ed.). Proc. First International Meeting of Biological Control of Arthropod Pests. January 2002, Honolulu, HI. U.S. Forest Service, Morgantown, WV.
- **Nechols, James R**. 1999. Biological control of musk thistle: a reassessment, pp. 245-259. *In P. A. Follett and J. J. Duan (eds.)*, Nontarget Effects of Biological Control. Kluwer, Boston.
- Nechols, James R. 1999. Challenges in searching for, releasing and evaluating natural enemies of native versus exotic pests, pp. 4-15. *In* G. J. Brewer and L. D. Charlet (eds.), Biological Control of Native or Indigenous Pests: Challenges, Constaints, and Potential. Thomas Say Publications in Entomology, Entomological Society of America, Lanham MD
- Ruberson, John R., **James R. Nechols** and Maurice J. Tauber. 1999. Biological control of arthropod pests, pp. 417-448. *In* J. R. Ruberson (ed.), Handbook of Pest Management. Marcel Dekker, New York
- Nechols, J. R. and T. L. Harvey. 1998. Evaluation of a mechanical exclusion method to assess the impact of Russian wheat aphid (Homoptera: Aphididae) natural enemies. Pp. 270-279. *In* S. S. Quisenberry and F. Peairs (eds.), Response Model for an Introduced Pest--The Russian Wheat Aphid (Homoptera: Aphididae). Thomas Say Publications in Entomology, Entomological Society of America, Lanham MD
- **Nechols, J.R.,** M.J. Tauber, C.A. Tauber and S. Masaki. 1998. Adaptations to Hazardous Seasonal Conditions: Dormancy, Migration, and Polyphenism, pp. 159-200. *In* C.B. Huffaker & A.P. Gutierrez

(eds.), Ecological Entomology (2<sup>nd</sup> ed.). John Wiiley & Sons, New York.

## **Books edited**

- Nechols, J.R., L.L. Andres, J.W. Beardsley, R.D. Goeden and C.G. Jackson (eds.). 1995. Biological Control in the U.S. Western Region: Accomplishments and Benefits of Regional Research Project W-84, 1964-1989. Pub. No. 3361, Univ. California Press, Division of Agricultural and Natural Resources. Oakland.
- Kauffman, W.C. and **J.R. Nechols** (eds.). 1992. Selection Criteria and Ecological Consequences of Importing Natural Enemies. Entomological Society of America, Thomas Say Symposia Proceedings Series.