

César R. Nufio

Curator Adjoint, Entomology
CU Museum of Natural History, UCB 265
University of Colorado, Boulder, CO 80309
nufio@colorado.edu, 303- 492-6270

EDUCATION

University of Arizona.

Ph.D. in IDP Insect Sciences, Minor department: Entomology, 2001; Dissertation: Host Utilization patterns of the walnut fly, *Rhagoletis juglandis*, and their implications for female and offspring fitness. Advisor: Daniel R. Papaj.

University of Costa Rica.

Tropical Biology: An Ecological Approach. Organization for Tropical Studies.
University of Costa Rica, 1998.

University of California at Santa Cruz.

B.A. in Biology and Environmental Studies (combined degree), 1994; Honors Thesis: Factors correlated with the productivity and distribution of temperate ants of the genus *Myrmica*. Advisor: Deborah Letourneau.

RESEARCH POSITIONS HELD

Entomology Section, Museum of Natural History, University of Colorado, Boulder: Researcher & Co-PI:
The Gordon Alexander Collections Improvement Grant. March 2005-present.

Entomology Section, CU Museum of Natural History, University of Colorado, Boulder: Curator Adjoint.
June 2001-present.

Entomology Section, Museum of Natural History, University of Colorado, Boulder: Acting Curator of
Entomology. January 2003-April 2004

Research Assistant. Collaborator on research project designed to examine “social facilitation” in walnut flies. PI Dr. R. Prokopy. University of Massachusetts, Amherst Entomology. May 1999 – September 1999.

National Museum of Natural History Intern, Smithsonian Institution. January 1995 – March 1995.

Completed project on herbivory patterns in an ancient fossil flora. Advisor: Dr. C. Labandeira

Natural History Internship Program, Smithsonian Institution. June 1994 – August 1994.

Herbivory levels of the Big Cedar Ridge Flora (Maastrichtian) of Wyoming. Advisor: Dr. C. Labandiera.

Junior Research Assistant, Department of Agroecology, University of California, Santa Cruz. December 1993–June 1994. Preparation and editing and of manuscripts for publication. Advisor: Dr. S. Sweezy.

Minority Undergraduate Research Program, Illinois State University. June 1993 – September 1993.

Factors affecting diet breadth in the lubber grasshopper *Romelia guttata*. Advisor: Dr. D. Whitman.

Rocky Mountain Summer Internship Program, Rocky Mountain Biological Laboratory. June 1992 – August 1992. Factors correlated with the productivity and distribution of ants in the genus *Myrmica*.

Advisor: Dr. J. Evans.

Minority Summer Research Internship Program, University of California, Irvine. June 1991 – August 1991. Evolutionary Theories of Senescence. Advisor: Dr. M. Rose.

PROFESSIONAL MEMBERSHIPS (activity within last five years)

Entomological Society of America

Organization for Tropical Studies

RESEARCH AND GRANTS

PUBLICATIONS

Publications in Preparation:

- Nufio, C.R.**, Carmona, V., Rota, J. and Smith, D.M. Nuptial gifts and mating behavior of the staphilinid beetle, *Chroaptomus regalis*. *Journal of Insect Behaviour*. To be submitted December 2006.
- Nufio, C.R.** and D.R. Papaj. Aggregative behavior is not explained by an Allee effect in the walnut-infesting fly, *Rhagoletis juglandis*. *Oecologia*. To be submitted March 2007.

Publications in Review

- Nufio, C.R.**, D.R. Papaj and R. J. Prokopy. Effects of social history on reproduction and aggression in the walnut-infesting fly, *Rhagoletis juglandis* (Cresson). *Journal of Insect Behaviour*.

Refereed Publications

- D.M. Smith, A. Cook and **C.R. Nufio**. 2006. How Physical Characteristics of Beetles Affect their Fossil Preservation. *Palaios* 21(3):305-310.
- Nufio, C.R.** and D.R. Papaj. 2004. Host preference of the walnut fly, *Rhagoletis juglandis*, and its implications for female and offspring performance. *Oecologia*. 141 (3): 460-467
- Smith, D.M and **C.R. Nufio**. 2004. Levels of Herbivory in Two Costa Rican Rainforests: Implications for Studies of Fossil Herbivory. *Biotropica*. 36 (3): 318-326 Sep 2004
- Nufio, C.R.** and D.R. Papaj. 2004. Host marking behavior as a quantitative signal of infestation levels in host use by the walnut fly, *Rhagoletis juglandis*. *Journal of Ecological Entomology*. 29 (3): 336-344.
- Nufio, C.R.** and D.R. Papaj. 2001. Host marking behavior in phytophagous insects and parasitoids. *Entomologia Experimentalis et Applicata*. 99. 273-293.
- Nufio, C. R.** , Papaj, D.R. and H. Alonso-Pimentel. 2000. Host Utilization by the Walnut fly, *Rhagoletis juglandis* (Diptera: Tephritidae). *Environmental Entomology*. 93:994-1001.
- Alonso-Pimentel, H., Korner, J. B., **Nufio, C.** and Papaj, D. R. 1999. Role of colour and shape in host-enhanced oogenesis in the walnut fly, *Rhagoletis juglandis*. *Physiological Entomology*. 22:97-104.

Other Publications

- Nufio, C.R.** 2002. Host utilization patterns of the walnut fly *Rhagoletis juglandis*, and their implications for female and offspring fitness. University of Arizona. Dissertation

Abstracts

- Nufio, C. R.** and D.R. Papaj. 1999. The Ecology of superparasitism and host marking in the walnut fly, *Rhagoletis juglandis*. XII International Entomophagous Insect Workshop. Asilomar, California.
- Nufio, C. R.** and D.R. Papaj. 1998. Host Utilization and the use of marking pheromones by the walnut fly, *Rhagoletis juglandis*. Entomological Society of America, Las Vegas, Nevada.
- Nufio, C. R.** and D.R. Papaj. 1996. Host fruit utilization by the walnut infesting fruit fly, *Rhagoletis juglandis*.. Animal Behavior Society. Flagstaff, Arizona.
- Nufio, C. R.** and C. C. Labandiera. 1994. An analysis of herbivory patterns in the Late Cretaceous: an inferential assessment of plant/insect interactions. Southwestern Association of Biologist. Abiquiu, New Mexico.
- Nufio, C. R.** and J. Evans. 1994. Factors correlated with the productivity and distribution of temperate ants in the genus *Myrmica*. Society for the Advancement of Chicanos and Native American in Science, Chicago, Illinois.
- Nufio, C. R.** 1993. Factors correlated with the productivity and distribution of temperate ants in the Genus *Myrmica*. Entomological Society of America, Indianapolis, Indiana.

INVITED COLLOQUIA

“The West Nile Virus: Who, what, where, and when?”. University of Colorado at Boulder Natural History Museum. August 2005.

“Host marking behavior and competition in the boxing fly, *Rhagoletis Juglandis*”. Department of Ecology, Population and Organismic Biology - Colloquium, University of Colorado, Boulder, CO. September 2002.

GRANT ACTIVITY

Funded Grants

NSF - Biological Research Collections. D. Bowers (PI), C. Nufio and R. Guralnick (co-PIs). *The Gordon Alexander Collections Improvement Grant*. Dates: March 2005 – March 2007. Amount: \$202,201.

Awards and Fellowships prior to arrival at CU Boulder

Arizona Research Laboratories Fellowship. University of Arizona. 1999.

National Science Foundation Minority Graduate Research Fellowship. June 97 – June 99.

Minority Graduate Fellowship. 1994. Department of Entomology, University of Arizona.

OTS - Research Grant. 1998. Organization for Tropical Studies.

Grant in Aid of Research. 1997. Sigma Xi.

Minority Graduate Research Scholarship. 1997. University of Arizona, Tucson.

Analysis of Biological Diversification - Research Training Group Grant. 1995. University of Arizona.

The Laurence A. Carruth Scholarship. 1994. University of Arizona, Tucson.

TEACHING EXPERIENCE

Courses Taught

Instructor, Insect Biology EBIO 4660. Fall 2003, Spring 2005, Spring 2004.

Department of Ecology and Evolutionary Biology, University of Colorado, Boulder

Instructor, Introductory Biology EBIO 1210. Fall 2004.

Department of Ecology and Evolutionary Biology, University of Colorado, Boulder

Laboratory coordinator, Environmental Biology EBIO 2040, Fall 2003.

Department of Ecology and Evolutionary Biology, University of Colorado, Boulder

Coordinator, OTS: Tropical Biology: An Ecological Approach. Spring 2001, Spring 2002,

Spring 2003. Organization for Tropical Studies, University of Costa Rica, San Jose, Costa Rica.

Co-coordinator, OTS: Tropical Biology: An Ecological Approach. Summer 2001.

Organization for Tropical Studies, University of Costa Rica, San Jose, Costa Rica.

Resource instructor, OTS: Tropical Biology: An Ecological Approach. Spring 2005, Summer

2004, Spring 2000, Spring 1999, Summer 1999. Organization for Tropical Studies, University of Costa Rica, San Jose, Costa Rica.

Guest Lecturer, Field Research: Basic Methods and New Technologies MUSM 5916. Fall 2001.

Museum Studies Program, University of Colorado, Boulder

Guest Lecturer, Practicum in Entomology, MUSM 5916. Fall 2001. Museum Studies Program,

University of Colorado, Boulder

Other Teaching & Training

Designed the lab manual for Principles of Ecology, EBIO 2040. Summer 2005.

Department of Ecology and Evolutionary Biology, University of Colorado, Boulder.

Parasitic Hymenoptera Training Session XI. June 2000. University of Maryland, College Park.

Attended week long intensive session emphasizing identification of parasitic hymenoptera systematics, evolution and identification.

Students

Graduate Committees

Christopher McGuire, PhD candidate. Climate change and its affects on grasshopper penology and diversity. Geography Department, University of Colorado, Boulder.

Krista Fisher, PhD candidate. Primates and bats as potential evolutionary competitors. Department of Anthropology, University of Colorado, Boulder.

Kristi Yelnick, Ms (graduate). Beetles associated with *Daemonelix* burrows. Geological Sciences, University of Colorado, Boulder.

Independent study

Co-advised, **Karen Loyd**, Ms Student. The biography of Dr. Gordon Alexander. Museum Studies Program, University of Colorado, Boulder. Spring 2006.

Undergraduate Student Advisees

Jeff McClanahan. Co-advised a summer Research Experience for Undergraduates (REU) student. Shrinking habitat size and its affects on plant and grasshopper diversity. Summer 2006- Present.

Gianna Hernandez. Co-advised Summer Minority Access to Research Training (SMART) Student. The role of climate in plant-insect interactions: A study of Costa Rican Lifezones. Summer 2004.

CURATION & SERVICE

2006

Chair of the CU Museum's Grants and scholarships committee. CU Museum of Natural History
Bugs in our Back yard (June 18) . Three workshops for 1st-3rd grade children to introduce them to insects.
Mamie Doud Eisenhower Public Library, Broomfield.

Ask the Insect Biologist (July 15). Part of the Children's Pet Parade. Mamie Doud Eisenhower Public Library, Broomfield.

The William H. Burt and Walker Van Riper student presentations (February-March). Organized and moderated student presentations. CU Museum of Natural History.

2005

Chair of the CU Museum's Grants and scholarships committee. CU Museum of Natural History.
The William H. Burt and Walker Van Riper student presentations (February-March). Organized and moderated student presentations. CU Museum of Natural History.

2004

Member of the CU Museum's Grants and scholarships committee. CU Museum of Natural History.
Grasslands Bioblitz in south Boulder. Group leader of the Entomology Section (June 25-26). Over 3,129 specimens were collected and databased.

Curator for the "Photography by Clyde Butcher: Seeing the Light" exhibit. (April- September).

Bug Safari. Led field walks to introduce children to insects.

2003

Bug Safari. Led field walks to introduce children to insects.

Manuscripts Reviewed for the following journals

Animal Behavior, Biological Journal of the Linnaean Society, Chemical Ecology, Environmental Entomology, Entomologia Experimentalis Et Applicata, Oecologia