

## MOSHE COLL (Sokolover)

### A. Curriculum Vitae

Sum of the Times Cited	1140
Sum of the Times Cited without self-citations	1076
Average Citations per Item	18.69
h-index	19

#### 1. Personal

Date & place of birth: 14 April 1957, Tel-Aviv, Israel.

ID number: 05424936-2

Nationality: Israel, USA.

Compulsory IDF military service: 1976 -1979.

Marital status: Married, two children (1988, 1992).

Work Address: Department of Entomology, the R.H. Smith Faculty of Agriculture, Food and Environment, the Hebrew University of Jerusalem, PO Box 12, Rehovot 76100, Israel.

Phones: 972-8-948-9153 (Work), 972-8-938-0421 (Home), 972-54-882-0150 (Mobile), 972-8-946-6768 (FAX).

e-mail: coll@agri.huji.ac.il

#### 2. Higher Education & Post-Doctoral Training

1979-1982 **B.Sc.** Biology. Tel Aviv University, Tel Aviv, Israel.

1982-1985 **M.Sc.** Zoology. Tel Aviv University, Tel Aviv, Israel. Adv: Prof. Abraham Hefetz

1986-1991 **Ph.D.** Entomology. University of Maryland, College Park, MD, USA. Adv: Prof. Dale G. Bottrell.

1992-1994 **Post-Doctoral Research Entomologist.** U.S. Department of Agriculture, Agricultural Research Service, Insect Biocontrol Laboratory, Beltsville, MD, USA. Host: Dr. Richard L. Ridgway.

1994-1997 **Post-Doctoral Fellow.** Department of Entomology, The Hebrew University of Jerusalem, P.O. Box 12, Rehovot 76100, Israel. Host: Prof. David Rosen.

#### 3. Appointments at the Hebrew University

1997 - 2006 **Senior Lecturer** of Insect Ecology. Department of Entomology, The Hebrew University of Jerusalem. (Tenured since June 2001)

2007 - 2012 **Associate Professor** of Insect Ecology. Department of Entomology, The Hebrew University of Jerusalem.

2013 - **Professor** of Insect Ecology. Department of Entomology, The Hebrew University of Jerusalem.

#### 4. Additional functions/tasks at the Hebrew University

1999 - 2003 **Member**, Teaching and Curriculum Committee. Faculty of Agriculture, Food and Environment.

2003 - 2008 **Head of Department** of Entomology.

2005 - 2009 **Academic Head**, International M.Sc. Degree Program in Plant Sciences.

2006 **Member**, ad-hoc faculty expert committee for promotion (Plant Protection).

2006 (Apr) **Member**, Faculty of Agriculture delegation to University of Ankara.

2007-present **Member**, Academic Committee, Interdisciplinary Ring Center for Environmental Studies.

2007 – 2012 **Head**, steering committee for the new Greenhouse Center of the Environmental Quality and Natural Resource Institute.

2008 – 2009 **Member**, steering committee for the new Natural Resources & Environmental Quality Institute building.

- 2007 – 2001 **Member**, ad-hoc screening committees for new faculty hiring in Plant Protection and Plant Sciences.
- 2007 – 2011 **Head/Member**, admission and academic committee for three Int'l MSc programs (Plant Sci., Anim. Sci. & Human Nutr.).
- 2008 – 2011 **Member**, ad-hoc faculty professional committees for academic promotions.
- 2009 – 2011 **Vice-Dean for Teaching Affairs** and **Head** of the Faculty Committee for Teaching and Curriculum, Faculty of Agriculture, Food and Environment.
- 2009 – 2011 **Member**, Faculty Committee for appointment of new tenure-track faculty members.
- 2009 – 2011 **Member**, The Hebrew University Committee for Teaching Policy and Procedures.
- 2009 – 2011 **Member**, Steering Committee, Faculty of Agriculture, Food and Environment.
- 2010-present **Academic Head**, extra-curricular training courses in plant protection, Faculty of Agriculture, Food and Environment.
- 2011-present **Head**, The Hebrew University Committee for Teaching Policy and Procedures.
- 2012-present **Member**, Faculty Steering Committee, Faculty of Social Sciences.
- 2013-present **Member**, Faculty Steering Committee, Faculty of Agriculture, Food & Environment
- 2012-present **Member**, ad-hoc committee for maintenance of greenhouse facilities, Faculty of Agriculture, Food and Environment.

#### 5. Service and positions in other academic and research institutions

- 1981 – 1982 **Research Assistant**. Institute for Nature Conservation Research and Department of Zoology, Tel Aviv University, Tel Aviv, Israel.
- 1982 – 1984 **Graduate Teaching Assistant**. Department of Zoology, Tel Aviv University, Tel Aviv, Israel (Courses: General and Faunistic Entomology, Environmental Vertebrate Faunistics).
- 1986 – 1989 **Graduate Research Assistant**. Department of Entomology, University of Maryland, College Park, MD, USA.
- 1989 **Graduate Instructor**. Department of Entomology, University of Maryland, College Park, MD, USA (Course: Principles of Plant Protection).
- 1990 – 1992 **Faculty Research Assistant**. Department of Entomology, University of Maryland, College Park, MD, USA.
- 1992 **Faculty Research Associate**. Department of Entomology, University of Maryland, College Park, MD, USA.
- 1993 – 1994 **Adjunct Assistant Professor**. Department of Entomology, University of Maryland, College Park, MD, USA.
- 2001 – 2002 **Visiting Scientist**, Department of Biological Sciences, Macquarie University, Sydney, Australia.

#### 6. Other activities

##### *Awards:*

- 1987 (Nov) **Dean's Graduate Travel Grant**, University of Maryland at College Park.
- 1989 (May) **Award to support undergraduate education**, University of Maryland at College Park, Improvement of Distribution Support Program (with collaborators).
- 1991 (Dec) **John Henry Comstock Award** for outstanding graduate students. Entomological Society of America.
- 1992 (Mar) **Travel Grant**, Organizing Committee XIX International Congress of Entomology.
- 1992 (May) Entomological Society of America **Director's Grant** to attend the XIX International Congress of Entomology in Beijing, China.
- 1992 (June) National Science Foundation **Travel Grant**, Entomological Society of America.
- 1994 (July) **Lady Davis Postdoctoral Fellowship**, The Hebrew University of Jerusalem.
- 1997 - 2000 **Allon Scholarship**, National Council for Academic Planning.
- 2007 (Mar) **Landau Award**, for excellence in research in Plant Protection.

*Memberships in professional societies and organizations:*

Ecological Society of America (1987-2001)  
 Entomological Society of America  
 International Organization for Biological Control  
 Israel Entomological Society  
 Israel Society of Ecology and Environmental Sciences  
 Israel Zoological Society

*Service on committees, professional societies, and editorial boards:*

1988 (April) **Member**, Ad-Hoc travel fund committee. Entomological Society of America.  
 1989 – 1991 **President**, Entomology Student Organization. University of Maryland, College Park, MD, USA.  
 1995 – 1998 **Member**, Scientific Advisory Committee, processing tomato, Ministry of Agriculture, Israel.  
 1997 – 2005 **Secretary**, Israel Entomological Society.  
 1997 –1998 **Member**, Search committee for a tenure track research position in entomology, Agricultural Research Organization, Volcani Center, Israel.  
 1998 **Member**, Promotion Committee for a tenure track researcher in entomology, Agricultural Research Organization, Volcani Center, Bet Dagan, Israel.  
 2000-present **Editorial Board Member**, *Biological Control*. Elsevier, San Diego, CA, USA  
 2000 (Jan) **Member**, Program Committee, 1<sup>st</sup> Symposium in Agricultural Sciences, "Plant protection and the environment: pesticides and their alternatives." Hebrew University of Jerusalem, Rehovot.  
 2003 – 2007 **Editor**, *Biological Control*. Elsevier, San Diego, CA, USA. [IF 1.52; 11/66 Ent]  
 2005 – 2008 **Project Leader**, Pear psylla management in pear orchards. A Ministry of Agriculture-Grower Association initiative.  
 2005 – 2008 **Treasurer**, Israel Entomological Society.  
 2005-present **Member**, National Advisory Committee for the Importation and Release of Beneficial Arthropods. Plant Protection & Inspection Service, Ministry of Agriculture and Rural Development.  
 2006 **Member**, Promotion Committee of Faculty Members, Tel Aviv University, Israel.  
 2006 – 2007 **Member**, Appointment Committee of Faculty Members, University of Haifa, Israel.  
 2008 **Member**, Promotion Committee for Faculty Members, University of Haifa, Israel.  
 2008, 2011 **Member**, Promotion Committee for Faculty Members, Ben Gurion University of the Negev, Israel.  
 2011-present **Member**, Steering Committee for Agricultural Biodiversity, National Consortium for Biodiversity Monitoring in Israel. Long Term Ecological Research-Israel & The Israel Academy of Sciences and Humanities.  
 2011-present **Member**, Environmental Sciences Professional Advisory Committee, Ministry of Education.  
**Member**, Review Panels (Ecology, Zoology), Israel Science Foundation (Twice).  
**Member**, Review Panel (Plant Protection), US-Israel Binational Agricultural Research and Development Fund (BARD) (Once).  
**Member**, Steering Committee (Environmentally Friendly Plant Protection), Chief Scientist, Ministry of Agriculture and Rural Development (Three terms).

*Ad-Hoc reviewer:*

Grant proposals for: The US-Israel Binational Agricultural Research & Development Fund (BARD); The US-Israel Binational Science Foundation (BSF); German-Israeli Foundation (GIF); Israel Science Foundation (ISF); Jewish National Fund (JNF-KKL); Chief Scientist, Israel Ministry of Agriculture; Chief Scientist, Israel Ministry of Science; China-Israel Fund.

Manuscripts for: *Annals of the Entomological Society of America*, *Annals of Applied Biology*, *Behavioral Ecology*, *BioControl*, *Biocontrol Science & Technology*, *Biological Control*, *Ecological*

*Entomology, Ecology, Entomologia Experimentalis et Applicata, Environmental Entomology, Functional Ecology, Israel J Entomology, Israel J Zoology, J Animal Ecology, J Economic Entomology, J Insect Behavior, J Insect Science, Oecologia, Oikos, Phytoparasitica, PLoS One.*

*Organization of symposia and scientific meetings:*

- 1989 (Dec) **Co-organizer** (with D.G. Bottrell), "Utilization of plant resources by insect natural enemies." Conference, Entomological Society of America, Annual Meeting, San Antonio, TX, USA.
- 1992 (June) **Co-organizer** (with D.G. Bottrell), "How plants affect behavior, fitness and performance of insect natural enemies." Symposium, XIX Int'l Congress of Entomology, Beijing, China.
- 1993 (Dec) **Organizer**, "Predaceous Heteroptera: ecological research interfaces biological control." Symposium, Entomological Society of America, Annual Meeting, Indianapolis, IN, USA.
- 1993 (Dec) **Organizer**, "Advances in research and use of *Orius* predators." Conference, Entomological Society of America, Annual Meeting, Indianapolis, IN, USA.
- 1997 (Feb) **Member**, Program Committee, annual meeting of the Israel Entomological Society.
- 1999 (July) **Co-organizer** (with T. Turlings), "Breeding crop plants to increase the effectiveness of natural enemies." Workshop, XIV Int'l Plant Protection Congress, Jerusalem, Israel.
- 2000 (Aug) **Organizer**, "Insect communities with complex intertrophic interactions." Symposium, XXI Int'l Congress of Entomology, Iguassu, Brazil.
- 2002 (Jan) Middle East **Coordinator**, The 1st International Symposium on Biological Control of Arthropods, Honolulu, Hawaii, U.S.A.
- 2005 (May) **Member**, Program Committee, annual meeting, the Israel Entomological Society.
- 2006 (Jan) **Member**, Organizing Committee, annual meeting, the Zoological Society of Israel.
- 2008 - 2012 **Organizer**, David Rosen Symposia on Agriculture and the Environment, Rehovot, Israel (5 annual symposia).
- 2009 (Sept) **Co-organizer**, Pears Foundation Workshop and Symposia ("Designing Crops for Functional Foods" & "Plant Crops in Marginal Landscapes"), Rehovot, Israel.
- 2013 **Member**, organizing Committee, annual meeting, Israel Society for Ecology and Environmental Science, Rehovot, Israel.

7. Research grants (my share/ the total allocated amount; publications)

- 1990 Sigma Xi, Grants-in Aid of Research: Effect of plant diversity on a Mexican bean beetle parasitoid, *Pediobius foveolatus*. \$50,000/50,000; V6, 7, 11.
- 1992 University of Maryland Agricultural Experiment Station Competitive Grants Program: Sweet potato whitefly strains in Maryland (co-PI G.K. Roderick). \$10,000/45,000; V5.
- 1992 US Department of Agriculture, Animal and Plant Health Inspection Service, Cooperative Agricultural Pest Survey program: Sweet potato whitefly strains in Maryland: determination and origin (co-PI G.K. Roderick). \$10,000/60,000; V5.
- 1995-1997 Vegetable Board, Ministry of Agriculture: Integrated pest management of the potato tuber moth" \$30,000/30,000; V14, 20, 25.
- 1995-1998 Cotton Grower Association: Population ecology of aphids in cotton: Integrated cropping systems for field crops in Kzaza (w/ co-PIs). \$40,000/200,000; V12, 22.
- 1995-2000 USAID/CDR: Reduction of pesticide use through integrated pest management in tomato fields (co-PI S.W. Applebaum). \$50,000/100,000; V17, 19, 21.
- 1996-1997 Vigevani Fund: Influence of host plants on cotton aphids \$16,000/16,000; V12, 22.
- 1996-1999 BARD: Parthenogenesis-inducing microorganisms in parasitic Hymenoptera: their mode of action and utilization for improvement of biological control (co-PIs J. Warren & E. Zchori-Fein). \$40,000/336,400; V18.
- 1996-2002 USAID/CDR: Integrated pest management in processing tomato fields in Ethiopia (co-PIs S. Applebaum & T. Abate). \$50,000/200,000; V24, 28, 29, 34.

- 1998-2000 US-Israel Bi-national Science Foundation (BSF): Sexual functioning of antibiotic-induced males of *Wolbachia*-infected parasitic wasps (co-PIs T. Karr & E. Zchori-Fein). \$40,000/93,100; V18.
- 1998-2001 BARD: Parasitoid movement between habitats and biological control of aphid pests (co-PI K. Hopper) \$134,400/300,200; V26, 30, 33, 37, 38.
- 1998-2001 ISF (Israel Science Foundation): The spatial dynamics of an omnivorous heteropteran: effects of prey and plant characteristics \$154,445/154,445; IVa2, V23, 46.
- 2001-2006 US-AID/CDR: Biological control of diamondback moth in Cole crops in South Africa (co-PI R. Kfir) \$90,000/199,500; IV6, V27, 32, 39.
- 2002-2004 EU-CRAFT: Development of an environmentally friendly protection for sweet pepper and strawberry (coordinator: S. Steinberg). EU127,000/1,338,600; V31, 40.
- 2003 HU, internal funds: Foraging behavior of plant-feeding omnivores \$12,000/12,000; V23, 25.
- 2005-2006 Australian Research Council: Global herbivory project (Coordinator: A. Moles) \$6,000/200,000; V47.
- 2005 HU, internal funds: Metapopulation structure of omnivorous bugs \$24,000/24,000; V41, 44, 49, 50.
- 2005-2008 BARD/TDA-TIE: Use of multiple biological control agents for control of western flower thrips (co-PIs K. Heinz & I. Glazer) \$84,000/300,000; V31, 32, 39, 42.
- 2007-2012 ISF (Israel Science Foundation): Spillover of agriculturally subsidized arthropods to adjacent natural arid habitats (co-PI Y. Lubin) \$89,600/172,000; V36, 43, *Sub PLoD ONE, Sub Ecol. Mod.*
- 2009-2013 Chief Scientist, Ministry of Agriculture: Area-wide dynamics of pests and their natural enemies in desert agroecosystems \$75,000/75,000.
- 2010-2013 BARD: Biological control of cereal aphids in wheat: implications of alternative foods and intraguild predation (co-PIs J. Lundgren & J. Harwood) \$105,400/373,500.
- 2010-2013 Chief Scientist, Ministry of Science: Establishing Inter-Institutional Scientific Infrastructure for a Combined Theoretical, Experimental, and Applied Research of Biodiversity Conservation (Coordinator: R. Kadmon) \$52,000/515,000.
- 2010-2012 Agriculture, Environment and Natural Resources Research Center, Hebrew University of Jerusalem: Research Center for Dairy farm waste management and the breeding site of two fly pests (co-PI Y. Gotlieb) \$10,000/20,000.
- 2012-2013 Nekudat Hen, Yad Hanadiv: Cover vegetation for the conservation of biodiversity and ecosystem services in citrus orchards. \$35,000.
- 2012-2016 EU-FA COST Action: Towards a sustainable and productive EU organic greenhouse horticulture (with an int'l work group) Funding for Int'l workshops.
- 2012-2014 Chief Scientist, Ministry of Agriculture: Pest management tools for *Tuta absoluta*, a key pest in tomato (co-PI L. Shaltiel) \$32,000/112,000.
- 2012-2014 Chief Scientist, Ministry of Agriculture: Effects of sowing wild flowers near field margins on the functional diversity of pollinators, pests and their natural enemies (co-PI Y. Mandelik) \$18,000/36,000.

## 8. Teaching at the Hebrew University

### a. Supervision of Graduate Students (refereed publications; \* denotes publications w/o M. Coll)

- Ph.D. students
- 1997-2000 Xiaofeng Zhou (co-advisor S. Applebaum; V17, 19, 21)
  - 1997-2001 Yuval Gottlieb (V18, \*)
  - 1996-2002 Liora Shaltiel-Harpaz (V20, 46)
  - 1999-2002 Bayeh Mulatu (co-advisor S. Applebaum; V24, 28, 29, 34)
  - 2001-2006 Einat Bilu (V30, 33, 37)
  - 2003-2008 Efrat Gavish, Ben Gurion Univ (co-adv Y. Lubin; V36, 38)
  - 2005-2010 Ezer Miller (V43, 49, *sub*)
  - 2007-2012 Valeria Hochman, Ben Gurion Univ (co-advisor Y. Lubin)

	2009-	Yonatan Maoz (co-advisor E. Palevsky; V48)
	2011-	Tarryn Harpaz
	2013-	Tal Shapira (Co-advisor Y. Mandelik)
Master students:	1995-1997	Sivan Gavish (V20)
	1996-1998	Yoseff Sarid (IV7)
	1996-1999	Ettay Nevo (V22)
	1999/2000	Einat Ben-Binyamin (Bilu) - continued program to PhD
	1997-2001	Ayala Yaacov (co-advisor S. Steinberg)
	1997-2001	Daniel Goldman (co-advisor S. Steinberg)
	2000-2002	Lior Rotenberg, in Environmental Studies
	2000-2003	Inbar Shouster (co-advisor S. Steinberg; V31)
	2001-2003	Efrat Gavish, Ben Gurion Univ (co-advisor Y. Lubin; V36)
	2002-2004	Ronny Groenteman (V27)
	2002-2005	Ezer Miller (V41)
	2003-2005	Sulochana Shakya (co-advisor P. Weintraub; V31, 40, 42)
	2003-2005	Sharon Tam
	2004/2005	Berhanu Hunepaaw Kassahun (non-thesis)
	2002-2006	Arnon Allouche (co-advisor S. Steinberg)
	2004-2006	Yftach Matalon (co-advisor E. Zchori-Fein; *)
	2004-2006	Carmit Sofer (co-advisor J. Kigel)
	2005-2007	Mika Leon-Beck (V32, 39)
	2006/2007	Bishnu Kumari Bhandari (non-thesis)
	2005-2008	Yonatan Maoz (co-advisor E. Palevsky; V45)
	2006-2008	Arnon Tabic (co-advisor E. Zchori-Fein)
	2004-2009	Lea Sela (co-advisor R. Harari)
	2008-2009	Vivian Danuor ((non-thesis; co-advisor S. Morin)
	2009-2010	Dinesh Kafle (co-advisor S. Morin)
	2006-2011	Carmit Tal (co-advisor P. Weintraub)
	2010/2011	Tarryn Harpaz - continued program to PhD (V51, ix, <i>sub</i> )
	2011-2012	Nurit Shapira
	2008-2011	Debora Diaz
	2011-	Maor Refael
	2011-	Diego Sercovich (co-advisor Y. Gottlieb)
	2012-	Tamir Rosenberg (co-advisor L. Shaltiel)
	2012-	Bnayahu Cohen, Tel Hai College (co-advisor L. Shaltiel)
	2013-	Shaked Eshet (co-advisor E. Zchori-Fein)
Honor (Amirim) students:	2000/1	Ronny Groenteman
	2005/6	Arnon Tabic (V44)
	2011/2	Dana Bar-Ziv
	2012/3	Shaked Eshet
Undergraduate Projects	2002/3	Tal Zucker (Hadassa College, Jerusalem)

***b. Post-doctoral fellows & visitors***

1995	Dr. Ekrem Atakan, Cukurva University, Adana, Turkey (6 month visit; V12)
1997	Dr. Shaaban Abd-Rabou, Agricultural Research Centre, Egypt (3 month visit; V16)
1997-2000	Dr. Einat Zchori-Fein (Post-Doc; V18, *)
1998-2000	Dr. Moshe Guershon (Post-Doc; IVa2, V27)
2004-2006	Dr. Yuval Gottlieb (Post-Doc; *)
2005-2007	Dr. Liora Shaltiel-Harpaz (Post-Doc)
2006-2007	Prof. Jay Rosenheim, University of California, Davis, USA (one yr sabbatical; IVa3)

2009-2011 Dr. Mor Salomon (Post-Doc; V50, *sub*)

2010-2012 Dr. Thomas M. Neeson, US (Post-Doc; V50)

2012-2013 Dr. Jessica Schaeckermann, Germany (Post-Doc, co-hosted by Y. Mandelik)

***c. Courses taught (since last promotion)***

Academic years	Course number	Course name	Hours / week	Course type	Level	No. of students
1997-2014	71530	General Ecology	2 hrs	Lecture	Undergraduate	189-255
1998-2014	71521	Insect Ecology	3 hrs	lecture+ practice	Undergraduate	19-26
2007, '09, '11, '13	71939	Biological Control of Insect Pests	2 hrs	Lecture	Graduate	25-31
2008 w/Y. Heifetz	71506	Entomology Lab for non-majors	1.5hrs	Lab	Undergraduate	58
2008	73915	Scientific Presentations	1 hr	Lecture	International M.Sc. Program	13
2010, '12, '14	71193	Plant Protection Seminar	1 hr	Seminar	Graduate	13-20
2007 w/ J. Rosenheim	73511	Evolutionary Ecology Workshop	2 hr	Discussion	Graduate	15

***d. Member of dissertation committees (not own students & non-HU students only)***

Eitan Amiel - Department of Desert Ecology, Ben Gurion University, Sde Boqer.

Peter Asiimwe - Department of Crop Science, Makerere University, Uganda.

Akinwande Kayode - Department of Zoology, University of Lagos, Nigeria

Itai Opatovsky - Department of Desert Ecology, Ben Gurion University, Sde Boker.

Ron Rotkopf - Department of Life Sciences, Ben Gurion University, Beer Sheva.

Adi Ramot - Department of Geography, Ben Gurion University, Beer Sheva.

Munir Samara - Department of Zoology, Tel Aviv University.

Udi Segev - Department of Life Sciences, Ben Gurion University, Beer Sheva.

Shirly Sharon-Shatnai - Department of Zoology, Tel Aviv University.

Orit Skotelsky - Porter School for Environ. Stud. and Zoology Dept., Tel Aviv University

***e. Other teaching activities at the HU***

- Guest lectures in several courses such as: Insect Pests of Vegetable and Field Crops (71518); Field Crops in Sustainable Agricultural Systems (71900/71924); Scientific Topics in Organic Agriculture (71534); Topics in Environmental Quality (71084); Biotechnology and Genetic Engineering in Agriculture & the Environment (Cornerstone course; 71261); and Graduate Seminar (89705, Environmental Studies, Hebrew University at Giv'at Ram).
- Taught "Introduction to Pest Control" in international training courses in horticultural crop production. Division for External Studies, The Hebrew University, Rehovot (1996, 1998).
- Taught "High-biotech in Biological Pest Control" as part of international training courses in Agriculture Biotechnology. Division for External Studies, The Hebrew University, Rehovot (2010, 2011).
- Guest lectures on IPM in practical courses in plant protection of fruit and vegetable crops Division for External Studies, The Hebrew University, Rehovot (2010-present).
- Guest lecturer on agriculture and the environment. Hadassa College, Jerusalem (2012)

9. Other teaching activities

- 1982 – 1984 **Teaching assistant**, Zoology Department, Tel Aviv University, Tel Aviv, Israel. Courses: General and Faunistic Entomology, Environmental Vertebrate Faunistics.
- 1987 – 1989 **Team member**, to develop a computer-based teaching module, Department of Entomology, University of Maryland, College Park, MD, USA.
- 1989 **Graduate Instructor**, Department of Entomology, University of Maryland, College Park, USA. Course: Principles of Plant Protection.
- 1993 **Instructor**, Department of Entomology, University of Maryland, College Park, MD, USA. Course: Ecological Issues in Biological Control.
- 1997 **Instructor**, The Center for Environmental Studies, The Western Galilee College. Course: Biological Control and Integrated Pest Management.
- 2013 **Instructor**, Exercises in Biological Pest Control, Hohenheim University.

## B. List of Publications

### I. Ph.D. Dissertation

Effects of vegetation texture on the Mexican bean beetle and its parasitoid, *Pediobius foveolatus*. University of Maryland, USA, 1991, advisor: Dale G. Bottrell. #IV4; V6,7,11

### II Books — none

### III Books - Edited

1. **Coll M.** and J.R. Ruberson (eds.) 1998. Predatory Heteroptera: Their ecology and use in biological control. Thomas Say Publications, Entomological Society of America. Lanham, MD. 233 pp. (36 citations)

### IV. Chapters in Collections

1. **Coll M.** 1998. Living and feeding on plants in predatory Heteroptera. 89-130. In M. Coll & J.R. Ruberson (eds.) Predatory Heteroptera in agroecosystems: Their ecology and use in biological control. Thomas Say Publications, Entomological Society of America. 233 pp. (70 citations)
2. **Coll M.** and J.R. Ruberson. 1998. Predatory Heteroptera: An important yet neglected group of natural enemies. 1-6. In M. Coll & J.R. Ruberson (eds.) Predatory Heteroptera in agroecosystems: Their ecology and use in biological control. Thomas Say Publications, Entomological Society of America. 233 pp.
3. Ruberson J.R. and **M. Coll.** 1998. Research needs for the predaceous Heteroptera. 225-233. In M. Coll & J.R. Ruberson (eds.) Predatory Heteroptera in agroecosystems: Their ecology and use in biological control. Thomas Say Publications, Entomological Society of America. 233 pp.
4. **Coll M.** 1998. Parasitoids activity and plant species composition in intercropped systems. 85-120. In C.H. Pickett & R. Bugg (eds.) Enhancing biological control: habitat management to promote natural enemies of agricultural pests. University of California Press, Berkeley, CA. 422 pp.
5. **Coll M.** 1999. Anthocoridae. In K.L. Steffey et al., Handbook of corn insects, Entomological Society of America, Lanham, MD. 164 pp.
6. **Coll M.** and K.R. Hopper. 2004. Guild structure of aphid parasitoids in broccoli: influence of host and neighboring crops. p 259-264. In NM Endersby & PM Ridland eds. The management of diamondback moth and other crucifer pests. The Regional Institute Ltd, Gosford NSW, Australia. 415pp
7. **Coll M.** 2004. Precision agriculture approaches in support of ecological engineering for pest management, p. 133-142. In G.M. Gurr, S.D. Wratten & M.A. Altieri (eds.) Ecological engineering for pest management: advances in habitat manipulation for arthropods. CSIRO Publishing, Australia. 225pp.
8. **Coll M.** 2009. Feeding on non-prey resources by natural enemies, p. ix-xxiii. An invited Foreword Chapter, ix-xxiii pp. In J. G. Lundgran, Relationships of Natural Enemies and Non-Prey Foods. Springer Publishers. 453pp.

#### a. Review and Editorial Articles in Peer Reviewed Journals:

1. Hardin M.R., Benrey B., **Coll M.**, Lamp W.O., Roderick G.K. and P. Barbosa. 1995. Arthropod pest resurgence: an overview of potential mechanisms. Forum Paper Crop Protection, 14: 3-18. [group project in graduate school]

2. **Coll M.** and M. Guershon. 2002 Omnivory in terrestrial arthropods: mixing plant and prey diets. Invited Review *Annual Review of Entomology*, 47: 267-297.
3. Rosenheim J.A. and **M. Coll**. 2008. Pest-centric vs. process-centric research in agricultural entomology. Commentary. *American Entomologist*, 54: 70-72.
4. **Coll M.** 2009. Conservation biological control and the management of biological control services: are they the same? Invited Editorial *Phytoparasitica* 37:205-208

#### **V. Scientific Articles in Peer Reviewed Journals**

1. Oron U., **Sokolover M.**, Yawetz A., Broza M., Sneh B. and A. Honigman. 1985. Ultrastructural changes in the larval midgut epithelium of *Spodoptera littoralis* following ingestion of endotoxin of *Bacillus thuringiensis* var *entomocidus*. *Journal of Invertebrate Pathology*, 45: 353-355.
2. **Coll M.**, Hefetz A. and H.A. Lloyd. 1987. Adnexal glands chemistry of *Messor ebeninus* Forel (Formicidae: Myrmicinae). *Zeitschrift fur Naturforschung*, 42: 1027-1029.
3. **Coll M.** and D.G. Bottrell. 1991. Microhabitat and resource selection of the European corn borer (Lepidoptera: Pyralidae) and its natural enemies in field corn. *Environmental Entomology*, 20: 526-533.
4. **Coll M.** and D.G. Bottrell. 1992. Mortality by natural enemies in European corn borer larvae in different corn micro-habitats. *Biological Control*, 2: 95-103.
5. **Coll M.**, Garcia de Mendoza L. and G.K. Roderick. 1994. Population structure of a predatory beetle: the importance of gene flow for intertrophic level interactions. *Heredity*, 72: 228-236.
6. **Coll M.** and D.G. Bottrell. 1994. Effects of a nonhost plant on an insect herbivore in diverse habitats. *Ecology*, 75: 723-731. (4.51, 8/112 Ecol, 49)
7. **Coll M.** and D.G. Bottrell. 1995. Predator-prey association in mono- and di-cultures: Effect of maize and bean vegetation. *Agriculture, Ecosystems and Environment*, 54: 115-125.
8. **Coll M.** and R.L. Ridgway. 1995. Functional and numerical responses of *Orius insidiosus* (Heteroptera: Anthracoridae) to its prey in different vegetable crops. *Annals of the Entomological Society of America*, 88: 732-738.
9. **Coll M.** 1996. Feeding and ovipositing on plants by an omnivorous insect predator. *Oecologia*, 105: 214-220.
10. Rapusas H.R., Bottrell D.G. and **M. Coll**. 1996. Intraspecific variation in the chemical attraction of rice to insect predators. *Biological Control*, 6: 394-400.
11. **Coll M.** and D.G. Bottrell. 1996. Movement of an insect parasitoid in simple and diverse plant assemblages. *Ecological Entomology*, 21: 141-144.
12. Atakan E., **Coll M.** and D. Rosen. 1996. Within-plant distribution of thrips and their predators: effects of cotton variety and developmental stage. *Bulletin of Entomological Research*, 86: 641-646.
13. **Coll M.**, Smith L.A. and R.L. Ridgway. 1997. Effect of plants on the searching efficiency of a generalist predator: the importance of predator-prey spatial association. *Entomologia Experimentalis et Applicata*, 83: 1-10.
14. **Coll M.**, Fleischer S.J. and D. Rosen. 1997. Marking potato tuberworm (Lepidoptera: Gelecheiidae) with rubidium for dispersal studies. *Journal of Economic Entomology*, 90:154-159.

15. **Coll M.** and S. Izraylevich. 1997. When predators also feed on plants: effects of competition and plant quality on omnivore-prey population dynamics. *Annals of the Entomological Society of America*, 90: 155-161.
16. **Coll M** and S. Abd-Rabou. 1998. Effect of oil emulsion sprays on parasitoids of the Black Parlatoria, *Parlatoria ziziphi* (Lucas), in Grapefruit. *BioControl*, 43: 29-37.
17. Zhou X., **Coll M.** and S.W. Applebaum. 2000. Effect of temperature and photoperiod on juvenile hormone biosynthesis and sexual maturation in the cotton bollworm *Helicoverpa armigera*: implications for life history traits. *Insect Biochemistry and Molecular Biology*, 30: 863-868.
18. Zchori-Fein E., Gottlieb Y. and **M. Coll.** 2000 *Wolbachia* density and host fitness components in *Muscidifurax uniraptor* (Hymenoptera: Pteromalidae). *Journal of Invertebrate Pathology*, 75: 267-272.
19. Zhou X., Factor O., Applebaum S.W. and **M. Coll.** 2000 Population structure of the pestiferous moth *Helicoverpa armigera* (Hubner) in the eastern Mediterranean using RAPD analysis. *Heredity*, 85: 251-256.
20. **Coll M.**, Gavish S. and I. Dori. 2000 Population biology of the potato tuber moth, *Phthorimaea operculella* (Lepidoptera: Gelechiidae) in two potato cropping systems in Israel. *Bulletin of Entomological Research*, 90: 309-315.
21. Zhou X., Applebaum S.W. and **M. Coll.** 2000 Overwintering and spring migration in the cotton bollworm *Helicoverpa armigera* (Lepidoptera: Noctuidae) in Israel. *Environmental Entomology*, 29: 1289-1294.
22. Nevo E. and **M. Coll.** 2001 Effects of nitrogen fertilization on *Aphis gossypii*: variations in color, size and reproduction. *Journal of Economic Entomology*, 94: 27-32.
23. Shaltiel L. and **M. Coll.** 2004. Reduction of pear psylla damage by the predatory bug *Anthocoris nemoralis* (Heteroptera: Anthocoridae): The importance of orchard colonization time and neighboring vegetation. *Biocontrol Science & Technology*, 14: 811-821.
24. Mulatu B., Applebaum S.W. and **M. Coll.** 2004. A recently acquired host plant provides an oligophagous insect herbivore with enemy-free space. *Oikos* 107: 231-238.
25. **Coll M.** and B. Yuval. 2004. Larval food-plants affect flight and reproduction in an oligophagous insect herbivore. *Environmental Entomology*, 33: 1471-1476.
26. Ode P.J., Hopper K.R. and **M. Coll.** 2005. Oviposition vs. offspring fitness in *Aphidius colemani* parasitizing different aphid species. *Entomologia, Experimentalis et Applicata*, 115: 303-310.
27. Groenteman R., Guershon M. and **M. Coll.** 2006. Effects of leaf nitrogen content on oviposition site selection, offspring performance and intraspecific interactions in an omnivorous bug. *Ecological Entomology*, 31: 155-161.
28. Mulatu B., Applebaum S.W., Kerem Z. and **M. Coll.** 2006. Tomato fruit size, maturity and  $\alpha$ -tomatine content influence the performance of potato tuber moth larvae. *Bulletin of Entomological Research* 96: 173-178.
29. Mulatu B., Applebaum S.W. and **M. Coll.** 2006. Effect of tomato leaf traits on the potato tuber moth and its predominant larval parasitoid: a mechanism for enemy-free space. *Biological Control*, 37: 231-236.

30. Bilu E., Hopper K.R. and **M. Coll**. 2006. Host choice by *Aphidius colemani*: effects of plants, plant-aphid combinations and the presence of intraguild predators. *Ecological Entomology*, 31: 331-336
31. **Coll M.**, Shakya S., Shouster I., Y. Nenner and S. Steinberg. 2007 Decision-making tools for *Frankliniella occidentalis* management in strawberry: consideration of target markets *Entomologia Experimentalis et Applicata*, 122: 59-67
32. Beck M. and **M. Coll**. 2007. Plant and prey consumption cause similar reductions in cannibalism by an omnivorous bug. *Journal of Insect Behavior*, 20: 67-76.
33. Bilu E. and **M. Coll**. 2007. The importance of intraguild interactions to the combined effect of a parasitoid and a predator on aphid population suppression. *BioControl*, 52:753–763.
34. Mulatu B., Applebaum S.W. and **M. Coll**. 2007. Biological performance of potato tuber moth on tomatoes leaves. *Pest Management Journal of Ethiopia* 11: 61-67.
35. **Coll M.** and L. Hughes. 2008. Effects of elevated CO<sub>2</sub> on an insect omnivore: a test for nutritional effects mediated by host plants and prey. *Agriculture, Ecosystems & Environment*, 123: 271-279.
36. Gavish E., Lubin Y. and **M. Coll**. 2008. Migration patterns and functional groups of spiders in a desert agroecosystem. *Ecological Entomology*, 33: 202–212
37. Bilu E. and **M. Coll**. 2009. Parasitized aphids are inferior prey for a coccinellid predator: implications for intraguild predation. *Environmental Entomology*, 38: 153-158.
38. Gavish E., Rotkopf R., Lubin Y. and **M. Coll**. 2009. Consumption of aphids by spiders and the effect of additional prey: evidence from microcosm experiments. *BioControl*, 54: 341-350.
39. Leon-Beck M. and **M. Coll**. 2009. The mating system of the flower bug *Orius laevigatus*. *Biological Control*, 50: 199-203.
40. Shakya S., Weintraub P. and **M. Coll**. 2009. Effect of pollen supplement on intraguild predatory interactions between two omnivores: the importance of spatial dynamics. *Biological Control*, 50: 281-287.
41. Miller E., **Coll M.** and L. Stone. 2010. Complementary predation on metamorphosing species promotes stability in predator-prey systems. *Theoretical Ecology*, 3: 153-161.
42. Shakya S., **Coll M.** and P. Weintraub. 2010. Incorporation of intraguild predation into a pest management decision-making tool: the case of thrips and two pollen-feeding predators in strawberry. *Journal of Economic Entomology*, 103: 1086-1093
43. Miller E. and **M. Coll**. 2010. Spatial distribution and deviations from the Ideal Free Distribution when animals forage over large resource patches. *Behavioral Ecology*, 21: 927-935.
44. Tabic A., Yonah R. and **M. Coll**. 2010. Association between omnivorous *Orius* bugs and their thrips prey at different spatial scales of *Verbesina encelioides* flowers. *Israel Journal of Plant Science*, 58: 131-141.
45. Maoz Y., Gal S., Zilberstein M., Noy M., Izhar Y., Alchanatis V., **Coll M.** and E. Palevsky. 2010. Determining an economic injury level for the persea mite *Oligonychus perseae*, a new pest of avocados in Israel. *Entomologia Experimentalis et Applicata*, 138: 110-116.
46. Shaltiel-Harpaz L., R. Kedoshim, D. Openhiem, R. Sterna and **M. Coll**. 2010. Effect of host plant makeup, nitrogen fertilization and growth regulators on pear psylla populations. *Israel Journal of Plant Science*, 58: 149-156.

47. Moles A.T., 26 co-authors, **Coll M.**, 21 co-authors. 2011. Putting plant resistance traits on the map: a test of the idea that plants are better defended at lower latitudes. *New Phytologist*, 191: 777-788.
48. Maoz Y., Gal S., Argov Y., **Coll M.** and E. Palevsky. 2011. Biocontrol of perseid mite, *Oligonychus perseae*, with an exotic spider mite predator and an indigenous pollen feeder. *Biological Control*, 59: 147-157.
49. Miller E. and **M. Coll**. 2012. Effects of local interaction range and mobility on the spatio-temporal dynamics of competing animals in uniform habitats. *Population Ecology*, 54: 205-212.
50. Schuldiner-Harpaz T. and **M. Coll** 2012. Identification of *Orius* (Heteroptera: Anthracoridae) females based on egg operculum structure. *Journal of Economic Entomology*, 105(5): 1520-1523
51. Neeson T.M., Salomon M. and **M. Coll**. 2013. Nutrient-specific foraging leads to Allee effects and dynamic functional responses. *Oikos*, 122: 265-273.
52. Schuldiner-Harpaz T. and **M. Coll**. 2013. Effects of global warming on predatory bugs supported by data across geographic and seasonal climatic gradients. *PLoS ONE* 8(6): e66622. doi:10.1371/journal.pone.0066622.
53. Salomon M., Aflalo E.D., **Coll M.** and Y. Lubin. Irreversible physiological changes preceding suicidal maternal care. *Arthropod Structure and Development* (Submitted)
54. Maoz Y., Gal S., Argov Y., Domeratzky S., Melamed E., Gan-Mor S., **Coll M.**, Palevsky E. Efficacy of indigenous phytoseiids against the citrus rust mite (*Phyllocoptruta oleivora*): augmentation and conservation biological control in Israeli citrus orchards. *Experimental and Applied Acarology* (submitted)
55. Miller E. and **Coll M.** Animal spatial distribution among habitat resource patches due to adaptive movement pattern. *Ecological Modeling* (submitted)

#### **Other Publications** (excluding abstracts in proceedings)

- Sokolover M.** 1985. Chemical communication in ants. *Teva Va'aretz* (the journal of The Society for Nature Protection in Israel), 27(2): 14-17. (in Hebrew).
- Gavish S. and **M. Coll**. 1997. Integrated control of landscape pests. *Gan Vanof* (The Journal for Landscaping), 52: 14-19 (in Hebrew).
- Kfir R., **M. Coll** and S. Tam. 2003. *Plutella xylostella* [(=*maculipennis*) (Linnaeus)]. In S.W. Applebaum & U. Gerson (eds.) Insect pests of the Middle East. <http://www.agri.huji.ac.il/mepests2/testmenu.html>.
- Coll M.**, I. Shouster and S. Steinberg. 2005. Removal of a predatory bug from a biological control package facilitated an augmentative program in Israeli strawberry. pp. 501-509. Chapter in Proceedings of the 2nd International Congress of Biological Control of Arthropods, Davos, Switzerland, 11-16 September 2005.
- Gavish, E., Lubin, Y. and **M. Coll** 2006. Testing the use of spiders as natural enemies of insect pests. *Beshvil HaTeva* (the journal of the Israeli Society of Bio-Organic Agriculture), 9: 34-36 (In Hebrew).
- Coll, M.**, Shakya, S., and P. Weintraub 2007. Interplay between omnivory and intraguild predation: thrips spatial dynamics and damage to strawberry. *IOBC/wprs Bulletin* 30(5): 19-21.

- Maoz, Y., Gal S., Argov Y., Berkeley M., Zilberstein M., Noy M., Izhar Y., Abrahams J., **Coll M.** and E. Palevsky. 2007. Biological control of the newly introduced perseia mite with indigenous and exotic predators. *IOBC/wprs Bulletin* 30(5): 73-79.
- Tal, C., **Coll M.** and P.G. Weintraub. 2007. Biological control of *Polyphagotarsonemus latus* by the predatory mite *Amblyseius swirskii*. *IOBC/wprs Bulletin* 30(5): 111-115.
- Maoz Y., G. Shira, E. Palevsky, **M. Coll**, M. Zilberstein, M. Noy Y. Yzhar, J. Abrahams and S. Gan-Mor. (2008). Integrated pest management of the avocado mite *Oligonychus perseae* in Israel: action thresholds, and identification and conservation of native natural enemies. *Alon Hanotea* 62: 18-22 (in Hebrew)
- Maoz Y., S. Gal, J. Abrahams, S. Gan-Mor, **M. Coll** & E. Palevsky. (2008) Pollen provision enhances *Euseius scutalis* (Phytoseiidae) populations and improves control of *Oligonychus perseae* (Tetranychidae). pp. 339-346. Chapter in Mason PG, Gillespie DR, Vincent C (eds) Proceedings of the 3rd International Congress of Biological Control of Arthropods, Christchurch, New Zealand, 8-13 February 2009.
- Groenteman R., L. Shaltiel & M. Coll. (2008) Plants as heterogeneous resources for omnivorous bugs in conservation biocontrol. pp. 258-267. Chapter in Mason PG, Gillespie DR, Vincent C (eds) Proceedings of the 3rd International Congress of Biological Control of Arthropods, Christchurch, New Zealand, 8-13 February 2009.
- Maoz Y., E. Palevsky, S. Gal., M. Zilberstein, M. Noy, Y. Izhar, J. Abrahams, S. Gan-Mor & **M. Coll** (2009) Integrated pest management of *Oligonychus perseae*: Developing action thresholds and the identification and conservation of natural enemies. *IOBC/wprs Bulletin* 50: 57-60.
- Tabic A., E. Zchori-Fein, **M. Coll** & Y. Argov. 2009. The olive fly and its natural enemies, *Alon Ha'notea* 63: 40-45. (in Hebrew)
- Schuldiner-Harpaz T. and **M. Coll**. 2013. Provisioning biological control services by predatory bugs in different climatic regions: effect of temperature on antagonistic interactions. *Ecology and Environment*, 4(1) 27-28. (in Hebrew)

## **VI. Participation in Scientific Conferences, Lectures and Other Activity**

### **a. Invited talks in scientific meetings** (accepted invitations only)

#### **International**

- 1989 (Dec) **Coll M.** and D.G. Bottrell. Role of plant pollen in sustaining populations of *Coleomegilla maculata* and *Orius insidiosus*. A symposium presentation. Entomological Society of America, Annual Meeting, San Antonio, Texas, USA.
- 1990 (Dec) **Coll M.** and D.G. Bottrell. Plant mixtures and the enhancement of natural enemies: examples from corn and bean systems. A symposium presentation. Entomological Society of America, Annual Meeting, New Orleans, Louisiana, USA.
- 1991 (Sept) **Coll M.** Do diverse plant habitats favor insect natural enemies? Invited plenary session address. Eastern Branch Meeting, Entomological Society of America, Richmond, Virginia, USA.
- 1992 (June) **Coll M.** Effects of plant habitat on parasitoid performance. A symposium presentation. XIX International Congress of Entomology, Beijing, China.
- 1993 (Dec) **Coll M.** Interactions between plants and Heteroptera predators: implications for biocontrol. Invited symposium presentation. Entomological Society of America, Annual Meeting, Indianapolis, Indiana, USA.
- 1996 (Aug) **Coll M.** Phytophagy in predatory Heteroptera and its implications for biological control. Invited symposium presentation. XX International Congress of Entomology, Florence, Italy.

- 1999 (July) **Coll M.** Predatory Heteroptera for insect control. Egypt-Israel Workshop, 'Reducing Pesticide Use in Agriculture: Achievements and Challenges'. Cairo, Egypt. Invited symposium presentation
- 2000 (Aug) **Coll M.** Feeding on plant tissue by heteropteran predators, a review of its importance for population dynamics and biocontrol. Invited symposium presentation. XXI International Congress of Entomology, Iguassu Falls, Brazil.
- 2000 (Aug) **Coll M.** Plant spatial heterogeneity and herbivore-enemy interactions: the underlying mechanisms when the enemy is a plant-feeding omnivore. Invited symposium presentation. XXI International Congress of Entomology, Iguassu Falls, Brazil.
- 2004 (July) **Coll M., A. Allouche and S. Steinberg.** When can Pestiferous Mirid Bugs be Beneficial Biological Control Agents? Invited symposium presentation. XXI International Congress of Entomology, Brisbane, Australia
- 2005 (Sept) **Coll, M., Shouster, I. and S. Steinberg.** Removal of a predatory bug from a biological control package facilitated an augmentative program in Israeli strawberry. Invited symposium presentation. International Symposium on Biological Control of Arthropods, Davos, Switzerland.
- 2008 (July) **Coll, M.** Spatial dynamics of omnivore-prey systems, Invited symposium presentation. XXI International Congress of Entomology, Durban, South Africa.
- 2010 (Dec) **Coll, M.** Food source diversity and the performance of predators of greenhouse pests. Invited symposium presentation, Entomological Society of America, Annual Meeting, San Diego, California, USA.
- 2011 (June) **Coll M.** Nutrient balancing by predatory arthropods: mechanisms and importance. Invited Keynote Lecture. Second Entomophagous Insects Conference, Antibes, France
- 2013 (Mar) **Coll M.** On the interplay between omnivores' behavior and the nutritional value of plant and prey foods. Invited symposium presentation. International Symposium on Biological Control of Arthropods, Pucon, Chile.

### In Israel

- 2000 (Jan) **Coll M.** Plant protection in the era of precision agriculture. Invited symposium presentation. 1<sup>st</sup> Symposium in Agricultural Sciences, the Hebrew University, Rehovot, Israel.
- 2003 (March) **Coll M and BM Aregay.** The effect of enemy free space in tomato on host use by the potato tuber moth. Parasite-Host Symposium, Achva Academic College, Israel Invited symposium presentation (in Hebrew)
- 2003 (May) **Coll M.** Effect of elevated atmospheric CO<sub>2</sub> on inter-trophic interactions. Fourth Symposium on Recent Developments in Arthropod Ecology and Evolution, in Memory of Merav Ziv. Ben Gurion University, Sde Boker. Invited symposium presentation
- 2008 (Dec) **Coll, M.** Biological control services by predatory arthropods and parasitoids. The National Natural History Collection Symposium on Ecosystem Services, Tel Aviv University. Invited symposium presentation
- 2009 (Jan) **Coll, M.** The biodiversity of natural enemies and its importance for biological pest control. Invited symposium presentation. David Rosen Symposia on Agriculture and the Environment "Biodiversity in the Service of Humans." Rehovot, Israel.
- 2010 (Feb) **Coll, M.** Spatial dynamics of pests and their enemies: towards environmentally friendly area-wide pest management systems. Invited symposium presentation. Annual meeting, Israel Society for Field Crop and Vegetable Sciences, Rehovot, Israel
- 2010 (Mar) **Coll, M.** Ecological importance of agricultural landscapes: supporting sustainable agriculture. Invited symposium presentation. Annual meeting for "Environmental Education." Tel Aviv, Israel.
- 2010 (June) **Coll, M.** Managing plants to increase biological control services in agroecosystems. Invited symposium presentation. Annual Meeting, Israel Society of Ecology and Environmental Sciences, Beer Sheva, Israel.

- 2012 (Apr) **Coll, M.** Ecosystem services for agricultural pest management: enhancement of natural enemies in biological control programs. Invited symposium presentation. Ecosystem Services Symposium. National Academy of Sciences, Jerusalem, Israel.
- 2012 (Oct) Coll, M et al. Towards an integrated pest management of muscid flies on dairy farms. Invited symposium talk. Conference of the Research Center for Agriculture, Environment & Natural Resources. Hebrew University, Palmachim, Israel.

***b. Invited seminars*** (accepted invitations only)

**International**

- 1987 (Nov) **Coll M.** Chemical communication in *Messor* harvester ants. Department of Entomology, University of Maryland, College Park, MD, USA.
- 1991 (Mar) **Coll M.** Considering effects of plants when evaluating the impact of natural enemies on pest populations. Insect Biology Lab., USDA. ARS and University of Georgia, Coastal Plain Experiment Station, Tifton, Georgia, USA.
- 1995 (Nov) **Coll M.** Plant feeding by insect predators: omnivory, intraguild predation, and biological control. Department of Entomology, University of Arizona, Tucson, Arizona, USA.
- 2002 (June) **Coll M.** Ecological consequences of omnivory. Division of Life Sciences. Macquarie University, Sydney Australia.
- 2004 (July) **Coll M.** Omnivorous insects: The good, the bad and all the others. Agricultural Research Council, Rietondale Research Centre, Pretoria, South Africa.
- 2004 (Aug) **Coll M.** Ecological and applied significance of omnivory. Department of Zoology, University of Pretoria, Pretoria, South Africa.

**In Israel**

- 1994 (Aug) **Coll M.** Insect herbivores: between the effect of plants and the act of natural enemies. Zoology Department, Tel Aviv University, Tel Aviv, Israel.
- 1995 (Jan) **Coll M.** Populations of insect pests and their natural enemies in simple and diverse agroecosystems. Entomology Department, Agricultural Research Organization, the Volcani Center, Israel.
- 1995 (Mar) **Coll M.** The effect of vegetation characteristics on insect populations: the importance of host range of a pest and its natural enemies. Department of Entomology, the Hebrew University of Jerusalem, Rehovot, Israel.
- 1995 (May) **Coll M.** Habitat diversity and herbivore-parasitoid interactions. Ecology and Evolution Department, Haifa University, Israel.
- 1996 (Jan) **Coll M.** Predators that feed on plants: a unique omnivory system. Mitrani Center for Desert Ecology, Ben-Gurion University of the Negev, Sde Boker, Israel.
- 2004 (Jan) **Coll M.** Complex trophic interactions and the need for a new framework. Department of Ecology, Systematic and Evolution, the Hebrew University of Jerusalem.
- 2009 (Mar) **Coll M.** Food webs and biological control services provided by natural ecosystems. Department of Biochemistry, Tel Aviv University, Israel.
- 2012 (Mar) **Coll M.** Environmental challenges and sustainable agriculture. Hadassah College, Jerusalem, Israel.
- 2012 (Apr) **Coll M.** Complex effects of plants on insects: antagonism, mutualism and application in pest management. Institute of Plant Sciences, Hebrew University of Jerusalem, Rehovot.
- 2013 (Feb) **Coll M.** Approaches, challenges and accomplishments in biological control of pests in Israel. Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Rehovot.

***c. Other presentations in scientific meetings*** (only presentations by M. Coll are listed before last promotion)

**International**

- 1987 (Oct) **Coll M.** and A. Hefetz. A comparative exocrinological study of three species of harvester ants of the genus *Messor*. Entomological Society of America, Eastern Branch Meeting, Atlantic City, New Jersey, USA. [Talk](#)
- 1987 (Dec) **Coll M.** and A. Hefetz. The alarm-defense system of the harvester ant *Messor ebininus*. Entomological Society of America, Annual Meeting, Boston, Massachusetts, USA. [Talk](#)
- 1988 (July) **Coll M.** and D.G. Bottrell. Mortality by natural enemies in the European corn borer, *Ostrinia nubilalis* (Hübner)(Lepidoptera: Pyralidae). XVIII International Congress of Entomology, Vancouver, Canada. [Talk](#)
- 1988 (Dec) **Coll M.** and D.G. Bottrell. European corn borer egg and larval mortality in different corn micro-habitats. Entomological Society of America, Annual Meeting, Louisville, Kentucky, USA. [Talk](#)
- 1989 (Oct) **Coll M.** and D.G. Bottrell. The influence of vegetation diversity on populations of the Mexican bean beetle, *Epilachna varivestis* Mulsant (Coleoptera: Coccinellidae). Entomological Society of America, Eastern Branch Meeting, Providence, Rhode Island, USA. [Talk](#)
- 1990 (Oct) **Coll M.** and D.G. Bottrell. Population dynamics of corn leaf aphid, *Rhopalosiphum maidis* and corn thrips, *Frankliniella williamsi* and the increase of predator densities in field corn. Entomological Society of America, Eastern Branch Meeting, Baltimore, Maryland, USA. [Talk](#)
- 1991 (Dec) **Coll M.** and D.G. Bottrell. Dispersal and reproductive biology of a parasitoid in simple and diverse plant habitats. Entomological Society of America, Annual Meeting, Reno, Nevada, USA. [Talk](#)
- 1992 (Dec) **Coll M.**, L.G. de Mendoza, and G.K. Roderick. Population structure and gene flow in natural enemies. Entomological Society of America, Annual Meeting, Baltimore, Md, USA. [Talk](#)
- 1993 (Feb) **Coll M.** and D.G. Bottrell. Effects of a nonhost plant on the Mexican bean beetle, *Epilachna varivestis* Mulsant (Coleoptera: Coccinellidae). Entomological Society of America, Eastern Branch Meeting, Williamsburg, Virginia, USA. [Talk](#)
- 1993 (June) **Coll M.**, L.A. Smith, and R.L. Ridgway. Influence of plants on insect predators: a case study using the insidious flower bug. Beltsville Poster Day, US Department of Agriculture, Agricultural Research Service, Beltsville, Maryland, USA. [Poster](#)
- 1996 (Sept) **Coll M.** Plant feeding by natural enemies: A desirable trait for biological control? The 1st meeting of the International Organization for Biological Control, Montpellier, France. [Poster](#)
- 1997 (Dec) **Coll M.** The effect of larval food plant on flight tendency in the potato tuber moth, *Phthorimaea operculella* (Zeller). The Entomological Society of America, Annual Meeting, Nashville, Tennessee, USA. [Talk](#)
- 2001 (Nov) **Coll M.** Guild structure of aphid parasitoids in broccoli: influence of host and neighboring crops. The Fourth Workshop on the Management of Diamondback Moth and Other Crucifer Pests. Melbourne, Australia. [Talk](#)
- 2003 (July) **Coll M.** and B. Mulatu. Provisioning of an enemy-free space for an oligophagous insect herbivore: direct effect of a recently acquired host plant on parasitoids. International Entomophagous Insects Workshop. Tucson, Arizona, USA. [Talk](#)
- 2004 (July) Gavish E., Y. Lubin and **M. Coll.** Spatial heterogeneity affects spider assemblages in a desert agroecosystem. XXI International Congress of Entomology, Brisbane, Australia. [Poster](#)
- 2006 (June) **Coll M.**, S. Shakyia and P. Weintraub. Omnivory and spatial dynamics reduce adverse effect of intraguild predation on herbivore suppression. Entomophagous Insect Workshop, Newark, Delaware, USA [Talk](#)
- 2006 (June) Beck M. and **M. Coll.** Feeding on plants reduces cannibalism in an omnivorous bug. Entomophagous Insect Workshop, Newark, Delaware, USA [Poster](#)

- 2007 (Mar) **Coll M.**, S. Shakya and P. Weintraub. Interplay between omnivory and intraguild predation: thrips spatial dynamics and damage to strawberry. 1<sup>st</sup> International IOBC workshop "Integrated Control of Plant Feeding Mites", Jerusalem, Israel Talk
- 2007 (Sept) **Coll M.** and E. Bilu. Unexpected behaviors of a parasitoid and a predator that are engaged in intraguild predatory interactions. European Workshop on Insect Parasitoids, Sicily, Italy. Talk.
- 2007 (Dec) **Coll M.** and R. Groenteman. Egg deposition by the omnivorous bug *Orius albidipennis*: Effect of intraspecific and intraguild interference. Entomological Society of America, Annual Meeting, San Diego, California, USA. Talk
- 2008 (Oct) **Coll M.** Species diversity of predatory and parasitic arthropods and the functioning of agroecosystems. First International Congress on Documenting, Analyzing and Management of Biodiversity in the Middle East. Aqaba, Jordan. Talk.
- 2009 (Aug) **Coll M.** The importance of the mating system of biological control agents: the case of *Orius laevigatus*. International Entomophagous Insect Conference, Minneapolis, Minnesota, USA. Talk.
- 2010 (Dec) Diaz D. and **Coll M.** Effect of diet on the reproductive biology of the omnivorous biological control agent *Orius laevigatus*. Entomological Society of America, Annual Meeting, San Diego, California, USA. MSc student Poster.
- 2010 (Sept) Diaz D. and **Coll M.** Reproduction of the biological control agent *Orius laevigatus* (Heteroptera: Anthocoridae). 61<sup>o</sup> Congreso Agronómico de Chile, Santiago, Chile. MSc student Poster.

### In Israel

- 1994 (Nov) **Coll M.** Plant feeding by an insect predator and the significance of omnivory for intertrophic interactions. Israel Zoological Society, Annual meeting, Haifa, Israel. Talk
- 1997 (Feb) **Coll M.** Flight tendency in the potato tuber moth: effect of larval diet. The Entomological Society of Israel, Annual Meeting, Bet Dagan, Israel. Talk
- 2010 (Oct) Harpaz T. and **Coll M.** Zoogeography of *Orius* bugs in Israel. Annual Meeting of the Entomological Society of Israel, Bet Dagan, Israel. MSc student Talk (Received first prize for best student talk).
- 2011 (Dec) Neeson T.M., Salomon M. and **Coll M.** Nutrient-specific foraging leads to Allee effects and dynamic functional responses. Annual Meeting of the Israel Zoological Society, Tel Aviv, Israel. Post-doc Talk.

### *d. Other invited talks in Israel*

- 1995 (Oct) **Coll M.** Insect predators that feed on plants: ecological and agricultural implications. A commemorative talk. Faculty of Agriculture, The Hebrew University of Jerusalem, Rehovot.
- 1996 (May) **Coll M.** Principles of integrated pest management. A symposium presentation. 2nd International Agro-Ecology Symposium. Tel Aviv, Israel.
- 1997 (Mar) **Coll M.** The central role of biological control in integrated pest management systems. A symposium presentation. International Flowers Expo, Hadera, Israel.
- 2004 (Mar) **Coll M.** Insect at the cutting edge of science: from molecular biology to environmental quality and back. The Hebrew University of Jerusalem, Rehovot.
- 1997-2012 **Coll M.** Delivered more than 50 talks to extension officers, researchers, growers, pest management scouts, and professionals in the private and public sectors.

### **VII. Patents - none**