

**Curriculum Vitae
Allen C. Cohen**

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Director: Insect Diet and Rearing Research, LLC. Adjunct Professor of Entomology, North Carolina State University. Subject Editor for Insect Rearing and Diets, *Journal of Insect Science*. Previously, research entomologist and research leader: USDA, ARS Biological Control and Mass Rearing Research Unit, Mississippi State University. Specializations: insect physiology, biochemistry, biological control, plant-insect interactions, insect rearing, diet development and feeding biology, biochemistry, behavior, morphology and ecology of arthropods. Research on arthropod feeding so that predators, parasites, and herbivores can be manipulated in biologically based systems of pest control. Mission: to provide education and consultation on insect diet mechanisms and dynamics and development of quality control systems and finding novel, improved ways of managing pests. More than 140 scientific papers five issued patents on an artificial diets and one patent pending. Technology transfer: 5 US patents, 4 licenses for patented diets. Extensive teaching. Recently published: *Artificial Diets for Insects: Science and Technology*, CRC Press.

Education:

•1963-65 California State University; major, English, B.A., 1965. •1965-66 California State University; major, English, M.A., 1966. •1968-71 California State University; major, Biology, M.A., 1971. •1975-78 University of California, Riverside, Entomology, Ph.D., 1978. Post-doctoral work University of Arizona.

Employment History:

•1970-1979, Professor of Biology, Cypress College, Cypress, CA. •1978-1979, Research Associate, University of California, Riverside, CA. •1979-1980, Research Associate, University of Arizona, Tucson, AZ. •1980-2003, GS-11-GS15 Research Entomologist, USDA, ARS, Honey Bee Biology and Biological Control of Insects Laboratory, Tucson, AZ., Western Cotton Research Laboratory, Phoenix, AZ., Biological Control and Mass Rearing Research Unit, Mississippi State, MS., Director, Insect Diet and Rearing Research, LLC.

Membership in Professional Societies (Current and Past)

Entomological Society of America, International Organization for Biological Control
Southwestern Entomological Society, Georgia Entomological Society, Mississippi Entomological Association

Honorary Positions, Awards, and Distinctions:

Formerly Adjunct Associate Professor of Entomology, University of Arizona
Formerly Associate Member of the Center for Insect Science
Adjunct Associate Professor of Entomology, Mississippi State University
Adjunct Professor of Entomology, Clemson University
Outside Examiner, University of Quebec, Montreal, Canada
Outside Examiner, Australian National University, Canberra, Australia
Over 200 invitations to present lectures, seminars, and symposia, world-wide
Invited to represent the USDA, ARS in several program and laboratory reviews
Subject Editor (Physiology, Biochemistry, Toxicology) *Journal of Entomological Science*
Numerous awards (Physiology & Biochemistry Award from the Mississippi Entomological Association, Southeastern Branch of the ESA Award for Superior Performance in Biochemistry (2000), Physiology, and Toxicology, ARS Award for Superior Technology Transfer (2001), USDA Superior Performance Awards, service, Federal Laboratory Consortium Outstanding Performance Award (2001), awards for teacher mentoring)
5 US patents, 2 patents pending

Technical Expertise:

I have routinely used most types of chromatography, electrophoresis, spectroscopy, light, fluorescent, electron microscopy, immunological & molecular techniques, and many other biological and chemical techniques for understanding living systems at levels from sub-organelles to ecological communities. I have both an extremely broad and in-depth background with vertebrates, invertebrates, plants, and microbes.

Leadership: Extensive training and experience in leadership, which for me has evolved into a total quality management/ facilitative leadership style (acquired through partnership with an elementary school and Intel). I have served formally as USDA ARS Research Leader and Project Leader, and my training includes extensive formal and informal education leadership and team efforts. Owner and director of a successful biotechnology company, Insect Diet and Rearing Research, LLC, since 2003.

Teaching Background:

- Graduate Seminar in Insect Rearing, NCSU (2008)
- Insect Diet and Rearing Research, LLC Classes (2003-2008)
- Biology Courses, Pima Community College (2004-5)
- Insect Rearing Courses, Mississippi State University (2000-2002)
- Insect Anatomy and Physiology, Mississippi State University (1998)
- Insect Feeding Biology University of Arizona (U of A) (1991)
- Insect Nutrition (U of A) (1988)
- Insect Physiology (U of A) (1984)
- Insect Pest Management (Team) (U of A) (1979-1990)
- Insect Behavior (Team) (U of A) (1979-1990)

Miscellaneous courses in biology, ecology, human physiology, majors' biology, marine biology, general zoology, natural history (Cypress College and California State University, Fullerton) (1971-1979)

Mentoring Experiences:**Visiting Scientists:**

- Hosted two visiting scientists from Canada (5 months)
- Spain (2 months)
- Indonesia (4 months)

Post Doctoral Researchers:

- Two post-docs published 4 or 7 papers, each under my supervision, both have developed highly successful careers based on the experiences in my laboratory; the other is just starting a very promising career.

Graduate Students:

- Committee member or advisor for several graduate students
- Recently served on 3 graduate students' committees, two doctoral and one masters (one in Canada, a second at Clemson University, the third, at Mississippi State University).
- Outside Examiner on the committee of an Australian doctoral student.
- Co-advisor for a Russian graduate student working on a master's degree focusing on fresh water prawn (at MSU).

Undergraduate Students:

- Involved numerous undergraduates in special projects
- Hired and trained dozens of undergraduate students to work in my laboratory

Teachers:

- Mentor of many elementary and secondary teachers on site and in my laboratory
- Development of numerous Partnership and Outreach Programs in Tucson and Phoenix Barrios and in rural Mississippi schools.
- Gave several local, state, and national presentations (invited and contributed) on preparing teachers to use science and integrated studies in the classroom
- Chairperson of the Mississippi Entomological Association Education Committee whose primary goal is to develop a statewide, hands on inquiry/discovery based teacher training program for K-12 teachers (with emphasis on plants and insects)
- Developed hands-on teaching experiences for teachers to use in classrooms at all levels (K-12). This includes projects in cooperative learning and problem based learning.

Frequently hosts classes for tours of lab, presentations, and hands-on lab experiences.

List of Publications

1. Cohen, A.C. and B.C. Myres. 1970. A function of the horns (supraocular scales) in the sidewinder rattlesnake, *Crotalus cerastes*, with comments on other horned snakes. *Copeia*. 3: 575-576.
2. Cohen, A.C. and B.C. Myres. 1971. Why are horned snakes horned? *Fauna*. 3: 38-39.
3. Myres, B.C., A.C. Cohen and F. Tamas. 1972. *Laboratory Concepts in Biology*. Kendall/Hunt. Dubuque, Iowa.
4. Cohen, A.C. 1972. Water balance in snakes. California State University at Fullerton. (Master's Thesis).
5. Cohen, A.C. 1975. Some factors affecting water economy in snakes. *Comp. Biochem. Physiol.* 51A: 361-368.
6. Cohen, A.C. and J.L. Cohen. 1976. Nest structure and microclimate of the desert cockroach *Arenivaga apache*. *Bull. Southern California Academy of Sciences* 75: 272-277.
7. Myres, B.C., A.C. Cohen and R.L. Harkrider. 1977. *Biology in the Laboratory*. Crotalus Press. Anaheim, California.
8. Cohen, A.C. and J.D. Pinto. 1977. An evaluation of the xeric adaptiveness of several species of blister beetles (Meloidae). *Ann. Entomol. Soc. Amer.* 70: 741-749.
9. Cohen, A.C. 1978. Water relations of the blister beetle, *Cysteodemus armatus* (Meloidae). University of California, Riverside. (Doctoral Dissertation).
10. Cohen, A.C. Hemolymph chemistry of two species of araneid spiders. 1980. *Comp. Biochem. Physiol.* 66A: 715-717.
11. Cohen, A.C., R.B. March and J.D. Pinto. 1981. Water relations of the desert blister beetle *Cysteodemus armatus* (Leconte) (Coleoptera: Meloidae). *Physiol. Zool.* 54: 179-187.
12. Cohen, A.C. 1981. An artificial diet for *Geocoris punctipes* (Say). *Southwest Entomol.* 6: 109-113.
13. Cohen, A.C. and J.L. Cohen. 1981. Microclimate, temperature and water relations of two species of desert cockroaches. *Comp. Biochem. and Physiol.* 69A: 165-167.
14. Cohen, A.C. and R. Patana. 1982. Ontogenetic and stress-related changes in hemolymph chemistry of beet armyworms. *Comp. Biochem. Physiol.* 71A: 193-198.
15. Cohen, A.C. 1982. Water and temperature relations of two hemipteran members of a predator-prey complex. *Environ. Entomol.* 11: 715-719.
16. Loper, G.M. and A.C. Cohen. 1982. The caloric content of bee-gathered pollen. *Amer. Bee J.* 122: 709-710.
17. Cohen, A.C. 1983. Improved method of encapsulating artificial diet for rearing predators of harmful insects. *J. Econ. Entomol.* 76: 957-959.
18. Cohen, A.C. 1983. A simple, rapid and highly sensitive method of separation and quantification of uric acid, hypoxanthine and xanthine by HPLC. *Experientia.* 39: 435-436.
19. Cohen, A.C. and J.W. Debolt. 1983. Rearing *Geocoris punctipes* on insect eggs. *Southwest. Entomol.* 8: 61-64.
20. Cohen, A.C. and R. Patana. 1984. Efficiency of food utilization by *Heliothis zea* (Lepidoptera: Noctuidae) fed artificial diets or green beans. *Can. Ento.* 116: 139-146.

21. Debolt, J.W. and A.C. Cohen. 1984. Composition of teratocytes from *Lygus hesperus* nymphs parasitized by *Leiophron uniformis*. Southwest. Entomol. 9:69-72.
22. Jackson, C.G. and A.C. Cohen. 1984. Temperature and water relations of a parasitic wasp in its free living adult stage and its phytophagous host. Comp. Biochem. Physiol. 78A: 437-440.
23. Thompson, S.N. and A.C. Cohen. 1984. Nitrogen elimination in *Trichoplusia ni* parasitized by the insect parasite, *Hyposoter exiguae*. Comp. Biochem. Physiol. 78A: 785-786.
24. Cohen, A.C. 1984. Food consumption, food utilization and metabolic rates of *Geocoris punctipes* fed *Heliothis virescens* eggs. Entomophaga. 29: 361-367.
25. Cohen, A.C. and J.W. Debolt. 1984. Fatty acid and amino acid composition of teratocytes from *Lygus hesperus* parasitized by two species of parasites, *Leiophron uniformis* and *Peristenus stygicus*. Comp. Biochem. Physiol. 79B: 335-337.
26. Cohen, A.C., S.W. Earl and H.M. Graham. 1984. Rates of water loss and desiccation tolerance in four species of *Lygus*. Southwest. Entomol. 9: 178-183.
27. Cohen, A.C. 1984. Effects of water stress on hemolymph volume, osmotic potential and chemical composition in *Megetra cancellata*. Comp. Biochem. Physiol. 79A 547-549.
28. Cohen, A.C. 1985. Metabolic rates of two hemipteran members of a predator-prey complex. Comp. Biochem. Physiol. 81A: 833-836.
29. Cohen, A.C. and R. Patana. 1985. Chemical composition of tobacco budworm eggs during development. Comp. Biochem. Physiol. 81B: 165-169.
30. Cohen, A.C. 1985. Simple method for rearing the insect predator *Geocoris punctipes* (Heteroptera: Lygaeidae) on a meat diet. J. Econ. Entomol. 78: 1173-1175.
31. Cohen, A.C. 1985. Review of Comparative Biochemistry and Physiology of Enzymatic Digestion. Quarterly Review of Biology. 60: 517-518.
32. Cohen, A.C., J.W. Debolt and H.A. Schreiber. 1985. Profiles of trace and major elements in whole carcasses of *Lygus hesperus* adults. Southwest. Entomol. 10: 239-243.
33. Cohen, A.C. and C.G. Jackson. 1986. Ontogenetic changes in waste purines from eggs of two species of insects. Comp. Biochem. Physiol. 85B: 269-271.
34. Cohen, A.C., R.B. March and J.D. Pinto. 1986. Effects of water stress and rehydration on hemolymph volume and amino acid content in the blister beetle, *Cysteodemus armatus*. Comp. Biochem. Physiol. 85A: 743-746.
35. Cohen, A.C. and N.M. Urias. 1986. Meat-based artificial diets for *Geocoris punctipes*. Southwest. Entomol. 11: 171-176.
36. Loper, G.M. and A.C. Cohen. 1987. Amino acid content of dandelion pollen, a honey bee (Hymenoptera: Apidae) nutritional evaluation. J. Econ. Entomol. 80: 14-17.
37. Cohen, A.C. 1987. Interim protocol for testing the effects of microbial pathogens on predatory hemipterans. Office of Pesticide Programs. Office of Pesticides and Toxic Substances. Registration for Testing New MPCA's. EPA. 8 pp.
38. Cohen, A.C. and N.M. Urias. 1988. Nutritional indices of a predator *Geocoris punctipes* (Heteroptera: Lygaeidae) fed artificial diets with rutin. J. Entomol. Sci. 23: 174-179.

39. Bagnara, J.T., K.L. Kreutzfeld, W. Ferris, P. Fernandez and A.C. Cohen. 1988. Observations on tadpole iridophores in primary cell culture. *Pigment Cell Res.* 1: 361-365.
40. Jackson, C.G. and A.C. Cohen. 1988. Labeling *Anaphes oviventatus* (Hymenoptera: Mymaridae), an egg parasite of *Lygus* spp. (Hemiptera: Miridae) with rubidium. *Ann. Entomol. Soc. Amer.* 81: 919-922.
41. Cohen, A.C. 1989. Ingestion efficiency and protein consumption by a heteropteran predator. *Ann. Entomol. Soc. Amer.* 82: 495-499.
42. Cohen, A.C. and C.G. Jackson. 1989. Using rubidium to mark a predator (Hemiptera: Lygaeidae). *J. Entomol. Sci.* 24: 57-61.
43. Hagler, J.H., A.C. Cohen, and G.M. Loper. 1990. Production and composition of onion nectar and honey bees (Hymenoptera: Apidae) foraging activity in Arizona. *Environ. Ent.* 19: 327-331.
44. Cohen, A.C. and J.L. Cohen. 1990. Ingestion of blister beetles by a Texas horned lizard. *Southwestern Naturalist.* 35: 291.
45. Cohen, A.C. 1990. Fatty acid distribution as related to adult age, sex and diet in the phytophagous heteropteran, *Lygus hesperus*. *J. Entomol. Sci.* 25: 75-84.
46. Byrne, D.N., A.C. Cohen and E. Draeger. 1990. Water uptake from plant tissue by the egg pedicel of the greenhouse whitefly, *Trialeurodes vaporariorum* (Westwood). *Can. J. Zool.* 68:1193-1195.
47. Cohen, A.C. 1990. Feeding adaptations of some predaceous Hemiptera. *Ann. Entomol. Soc. Am.* 83: 1215-1223.
48. Hagler, J.R. and A.C. Cohen. 1990. Effects of time and temperature on digestion of purified antigen by *Geocoris punctipes* (Hemiptera: Lygaeidae) reared on artificial diet. *Ann. Entomol. Soc. Am.* 83: 1177-1180.
49. Hagler, J.R. and A.C. Cohen. 1991. Prey selection by in vitro- and field-reared *Geocoris punctipes*. *Entomol. exp. appl.* 59: 201-205.
50. Hagler, J.R., A.C. Cohen, F.J. Enriquez and D. Bradley-Dunlop. 1991. An egg-specific monoclonal antibody to *Lygus hesperus*. *Biological Control.* 1: 75-80.
51. Cohen, A.C., D.L. Hendrix and J.K. Brown. 1992. Determination of trophic enzymes in *Bemisia tabaci* (Gennadius). *Beltwide Cotton Conferences.* 951-952.
52. Cohen, A.C., L. Forlow Jech, C. Newman and T.J. Henneberry. 1992. Physiological ecology of putative strains A & B of *Bemisia tabaci* (Gennadius). *Beltwide Cotton Conferences.* 948-950.
53. Hagler, J.R., A.C. Cohen, D. Bradley-Dunlop and F.J. Enriquez. 1992. Field evaluation of predation on *Lygus hesperus* (Hemiptera: Miridae) using a species-and stage-specific monoclonal antibody. *Environ. Entomol.* 21: 896-900.
54. Cohen, A.C. 1992. Using a systematic approach to develop artificial diets for predators. In: *Advances in Insect Rearing for Research and Pest Management.* Ed. by T.E. Anderson and N.C. Leppla. Westview Press. Boulder. pp. 77-91.
55. Hagler, J.R., A.C. Cohen, D. Bradley-Dunlop and F.J. Enriquez. 1992. New approach to mark insects for feeding and dispersal studies. *Environ. Entomol.* 21: 20-25.
56. Cohen, A.C. and D.N. Byrne. 1992. *Geocoris punctipes* as a predator of *Bemisia tabaci*: a laboratory evaluation. *Entomol. exp. appl.* 64: 195-202.
57. Cohen, A.C. 1993. Organization of proteinases and preliminary characterization of salivary trypsin-like enzymes in a predaceous heteropteran. *J. Insect Physiol.* 39: 823-829.
58. Cohen, A.C., T.J. Henneberry and R.T. Staten. 1993. Evaluation of whitefly predators. *AAIE News.* 4: (Abstract).

59. Cohen, A.C., R.T. Staten and T.J. Henneberry. 1993. Evaluations of predators of sweetpotato whiteflies: laboratory and field cage studies. 1993 Beltwide Cotton Conferences. pp. 710-713.
60. Cohen, A.C., C.M. Newman and D. Hendrix. 1993. Histochemical studies of feeding sites of *Bemisia tabaci* on cotton leaves. 1993 Beltwide Cotton Conference. p 959.
61. Cohen, A.C. and D. Hendrix. 1993. Demonstration and preliminary characterization of α -amylase in sweetpotato whiteflies, *Bemisia tabaci* (Aleyrodidae: Homoptera). 1993 Beltwide Cotton Conferences. pp. 955-960.
62. Cohen, A.C. and R.T. Staten. 1994. Long-term culturing and quality assessment of predatory big-eyed bugs, *Geocoris punctipes*. In: Applications of Genetics to Arthropods of Biological Control Significance. Ed. S. Karl Narang, Alan C. Bartlett and Robert M. Faust. CRC Press, Boca Raton, FL. pp. 122-132.
63. Erickson, A.C. Cohen and B. Cameron. 1994. Mite excreta: a new diagnostic tool for varroasis. Bee Science. 3: 76-78.
64. Skinner, R.H. and A.C. Cohen. 1994. Phosphorous nutrition and leaf age effects on sweetpotato whitefly (Homoptera: Aleyrodidae) host selection. Environ. Entomol. 23: 693-698.
65. Grenier, S., P. Greany and A.C. Cohen. 1994. Potential for mass release of insect parasitoids and predators through development of artificial culture techniques. In: Pest Management in the Subtropics: Biological Control: A Florida Perspective. D. Rosen, Fred D. Bennett and J. Capinera, Eds. Intercept Press. Andover, Hants, U.K. pp. 181-205.
66. Cohen, A.C. and D.L. Hendrix. 1994. Demonstration and preliminary characterization of α -amylase in the sweetpotato whitefly, *Bemisia tabaci* (Aleyrodidae: Homoptera). Comp. Biochem. and Physiol. 109B: 593-601.
67. Chu, C.C., T.J. Henneberry and A.C. Cohen. 1995. Silverleaf whitefly (Homoptera: Aleyrodidae): Host preference and factors affecting oviposition and feeding site preference. Environ. Entomol. 24: 354-360.
68. Cohen, A.C. Extra-Oral Digestion in Predatory Arthropods. Annual Review of Entomology. 40. 85-103. 1995.
69. Cohen, A.C. 1995. Plant feeding by predatory Hemiptera: Evolutionary and adaptational aspects of trophic switching. in Biological Control by Predatory Hemiptera. R. Wiedenmann, O. Alomar and D. Livingstone, eds.
70. Natwick, E.T., C.C. Chu, H.H. Perkins, T.J. Henneberry and A.C. Cohen. 1995. Pima and Upland cotton susceptibility to *Bemisia argentifolii* under desert conditions. Southwest. Entomol. 20: 429-439.
71. Chu, T.J. Henneberry, and A.C. Cohen. 1995. Silverleaf whitefly: host and feeding site preference. California-Arizona Cotton. November/December, 1995. pp. 12-18.
72. Cohen, A.C., D. Brummett and R.T. Staten. 1995. Profitability of whiteflies as prey: One predator's meal is another's junk food. 1995 Beltwide Cotton Conferences.
73. Cohen, A.C., T.J. Henneberry and C.C. Chu. 1995. The feeding biology of whiteflies: mechanical, behavioral and biochemical factors. 1995 Beltwide Cotton Conferences.
74. Chu, C.C., T.J. Henneberry, and A.C. Cohen. 1995. Silverleaf whitefly: host and feeding site preference. California-Arizona Cotton. November/December. pp. 12- 18. 1995.
75. Chu, C.C., T.J. Henneberry and A.C. Cohen. 1995. Host preference of silverleaf whitefly and factors associated with feeding site preference. In J.

- Silvertooth (ed.) p. 280-286, Cotton - A College of Agriculture Report, Series P-99, 1995, Coop. Ext., Agric. Exp. Sta., Univ. Arizona, Tucson and USDA.
76. Houck, M.A. and A.C. Cohen. 1995. The potential role of phoresy in the Evolution of parasitism: radiolabel ling (tritium) evidence from an astigmatid mite. *Experimental and Applied Acarol.* 19: 677-694.
 77. Cohen, A.C., T.J. Henneberry and C.C. Chu. 1996. Whitefly feeding biology: applications of basic research. *California-Arizona Cotton.* April. 1996. pp. 16-19.
 78. Cohen, A.C., C.C. Chu, T.J. Henneberry, T. Freeman, J. Buckner and D. Nelson. 1996. Cotton leaf surface features serve as behavioral cues to the silverleaf whitefly. *Cotton Insect Research and Control Conference. 1996 Beltwide Cotton Conferences.* pp. 1017-1020.
 79. Cohen, T.J. Henneberry, T. Freeman, D. Margosan, P. Vail and C.C. Chu. 1996. Microstructure of feeding in nymphal *Bemisia argentifolii* in cotton and cantaloupe. *Cotton Insect Research and Control Conference. 1996. Beltwide Cotton Conferences.* pp. 740-743.
 80. Benedict, M.Q. A.C. Cohen, A.J. Cornel and D.L. Brummett. 1996. Uric acid in *Anopheles* mosquitoes (Diptera: Culicidae): effects of Collarless, Stripe and White Mutations. *Ann. Ent. Soc. Amer.* 89: 261-265.
 81. Cohen, A.C., C.C. Chu. T.J. Henneberry, T. Freeman, J. Buckner and D. Nelson. 1996. Cotton leaf surface features serve as behavioral cues to silverleaf whiteflies. *Southwest. Entomol.* 21: 377-385.
 82. Cohen, A.C., T.J. Henneberry and C.C. Chu. 1996. Geometric Relationships Between Whitefly Feeding Behavior and Vascular Bundle Arrangements. *Entomologia Exp. et Applic.* 78: 135-142.
 83. Cohen, A.C. and T.J. Henneberry. 1996. Biocontrol of Cotton Insects. *California-Arizona Cotton.* February. pp. 10-13.
 84. Chu, C.C., T.J. Henneberry and A.C. Cohen. 1996. Development and evaluation of a trap for monitoring *Bemisia argentifolii* for survey and monitoring population density. In D.J. Herber and J. Armour (eds.), p. 1029-1031, *Proc. Belt. Cotton Conf.*, Nashville, TN, Jan. 8-12.
 85. Cohen, A.C. and R. Tang. 1997. Relative prey weight influences handling time and extracted biomass in predatory hemipterans. *Environ. Entomol.* 26: 559-565.
 86. Erickson, E., A.C. Cohen, D.L. Brummett and J. Lusby. 1997. Tyrosine nodules in honeybees parasitized by varroa mites. *Journal of Invertebrate Pathology.* 70: 27-32.
 87. Atmowidjojo, A.H., D.E. Wheeler, E.H. Erickson and A.C. Cohen. 1997. Temperature tolerance and water balance in feral and domestic honey bees. *Comp. Biochem. & Physiol.* 118A:1399-1403.
 88. Cohen, A. C. and D. L. Brummett. 1997. The non-abundant nutrient (NAN) concept as a determinant of predator-prey fitness. *Entomophaga.* 42:85-91.
 89. Henneberry, T. and A. C. Cohen. 1997. Mass-reared insects get fast food. *Agricultural Research.* June, 1997. pp. 3-8.
 90. Cohen, A.C. 1998. Biochemical and morphological dynamics and predatory feeding habits in terrestrial Heteroptera. Pp. 21-32. *Predaceous Heteroptera: Implications for Biological Control.* J.R. Ruberson and M. Coll., eds. Thomas Say Publications in Entomology. Entomological Society of America, Lanham, MD.
 91. Cohen, A.C. and A.G. Wheeler. 1998. Role of saliva in the highly destructive four-lined plant bug (Hemiptera: Miridae). *Annals Ent. Soc. Amer.* 91:94-100.

92. Nordlund, D. A., Z. X. Wu, A. C. Cohen, and S. M. Greenberg. 1998. Recent advances in the *in vitro* rearing of *Trichogramma* spp. In: Hassan, S. A. (ed) Proceedings of the 5th International Symposium "*Trichogramma* and Other Egg Parasitoids". (In Press).
93. Cohen, A. C., C. C. Chu, T. J. Henneberry, T. Freeman, D. Nelson, J. Buckner, D. Margosan, P. Vail, and L. H. Aung. 1998. Feeding biology of the silverleaf whitefly (Homoptera: Aleyrodidae). Chinese Journal of Entomology. 18: 65-82.
94. Chu, C. C., E. T. Natwick, H. H. Perkins, D. E. Brushwood, T. J. Henneberry, S. J. Castle, A. C. Cohen, and M. A. Boykin. 1998. Upland cotton susceptibility to *Bemisia argentifolii* (Homoptera: Aleyrodidae) infestations. Journal of Cotton Science 2:1-9.
95. Atmowidjojo, A. H., D. E. Wheeler, E. H. Erickson and A. C. Cohen. 1999. Regulation of hemolymph osmolality in feral and domestic honey bees, *Apis mellifera* L. Comp. Biochem. Physiol. 122A: 227-233.
96. Chu, C. C., E. T. Natwick, T. J. Henneberry, A. C. Cohen, and S. J. Castle. 1998. Silverleaf whitefly cotton cultivar preference. 1998 University of Arizona Cotton Report. 5 pp.
97. Chu, C. C., E. T. Natwick, A. C. Cohen, G. S. Simmons, D. E. Brushwood, and T. J. Henneberry. 1998. *Bemisia argentifolii* colonization, vascular bundle depth relationships, lint yield, and nymphal parasitism in selected Deltapine cotton cultivars. Southwest. Entomol. 23:293-299.
98. Cohen, A. C. 1998. Solid-to-liquid feeding: the inside(s) story on extra-oral digestion in predaceous Arthropoda. American Entomologist. 44:103-116.
99. Cohen, A. C. and L. Smith. 1998. A novel concept in artificial diets for *Chrysoperla rufilabris*: the efficacy of solid diet. Biological Control. 13:49-54.
100. Cohen, A. C. 1998. Future diets for entomophages. Bio-Control Matters (ANBP Newsletter). pp. 9-11. (Non-refereed).
101. Cohen, A. C. 1998. Biochemical basis of quality assessment. Bio-Control Matters. (ANBP Newsletter). pp. 11-12. (Non-refereed).
102. Cohen, A. C. 1998. Artificial media for rearing entomophages comprising cooked, whole egg. US Patent # 5,834,177. November 10, 1998.
103. Chu, C. C., A. C. Cohen, E. T. Natwick, G. S. Simmons, and T. J. Henneberry. 1999. *Bemisia tabaci* (Hemiptera: Aleyrodidae) biotype B colonisation and leaf morphology relationships in upland cotton cultivars. Australian J. Entomol. 38: 127-131.
104. Cohen, A. C. Robert Frost's arthropods. Amer. Entomol. 45: 70-72. 1999.
105. Cohen, A. C. 1999. Artificial media for rearing entomophages comprising sticky, cooked whole egg. US Patent 5,945,271 issued August 31, 1999.
106. Cohen, A. C., D. A. Nordlund, and Rebecca A. Smith. 1999. Mass rearing of entomophagous insects and predaceous mites: are the bottlenecks biological, engineering, economic, or cultural? Biocontrol News and Information. 20: 85N-90N.
107. Agusti, N. and A. C. Cohen. 2000. *Lygus hesperus* and *L. lineolaris* (Hemiptera: Miridae), phytophages, zoophages, or omnivores: evidence of feeding adaptations suggested by the salivary and midgut digestive enzymes. J. Entomol. Sci. 35: 176-186.
108. Zeng, F. and A. C. Cohen. 2000. Comparison of alpha-amylase and protease activities of a zoophytophagous and two phytozoophagous Heteroptera. Comp. Biochem. and Physiol. 126: 101-106.
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