Curriculum Vitae Dr. Trevor Randall Smith

CONTACT INFORMATION:

Florida Department of Agriculture and Consumer Services

Division of Plant Industry 1911 SW 34th Street

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EDUCATION

• University of Florida, Gainesville, Florida

Graduation: December 2006

Degree: Ph.D. Entomology and Nematology

Dissertation Title: Life History and Pesticide Susceptibility of Cybocephalus nipponicus Endrödy-Younga (Coleoptera: Cybocephalidae) and a Taxonomic Revision of the Cybocephalidae of North

America and the West Indies. Advisor: Dr. Ronald D. Cave

University of Florida, Gainesville, Florida

Graduation: December 2003

Degree: M.S. Entomology and Nematology

Thesis Title: Florida grasshoppers (Orthoptera: Acrididae) and their host plants.

Advisor: Dr. John L. Capinera

University of Central Florida, Orlando, Florida

Graduation: December 2000

Degree: B.S. Biology

EMPLOYMENT

Division Director, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, FL 5/2015-present.

Supervisor – Kelley Boree

• This position is responsible for the supervision, management and administration of personnel and activities in the Division of Plant Industry a Division of over 600 employees. The Division of Plant Industry is a regulatory agency of the Florida Department of Agriculture & Consumer Services which works to detect, intercept and control plant and honey bee pests and diseases that threaten Florida's native plant and agricultural resources. Responsible for ensuring all pest and disease mitigation programs are organized and facilitated for the protection of Florida's borders from unwanted pests and diseases, thereby providing viable trade for all of Florida's agricultural stakeholders.

Professor (courtesy) and Graduate Faculty, University of Florida, Graduate School, Entomology and Nematology Department and Doctor of Plant Medicine Program, Gainesville, FL 10/2012- present.

- Responsible for mentoring graduate students, chair and serve on Ph.D., M.S. and D.P.M. committees, direct graduate research projects and deliver lectures on various entomological and regulatory topics.
- Areas of Specialty Taxonomy, biological control, invasive species research, eradication technologies, regulatory agricultural issues, and leadership.

Bureau Chief, Methods Development and Biological Control, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, FL 2/2010-5/2015. Supervisor – Dr. Wayne N. Dixon

This position is responsible for the supervision, management and administration of personnel and activities in the Bureau of Methods Development and Biological Control. Bureau responsibilities include: development, initiation, analysis and implementation of various experiments, trials and tests involving new technologies or methodologies for the control or suppression of plant and apiary pests; management of hazardous materials and wastes; initiation and management of multiple biological control mass rearing programs; research commodity irradiation; and provision of expertise on various plant and apiary-related issues. Responsible for writing, obtaining and managing grants and cooperative agreements; publishing in scientific journals and giving technical and non-technical presentations to various stakeholder groups.

Biological Administrator III, State Survey Coordinator, Cooperative Agricultural Pest Survey, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, FL 1/2007-2/2010. Supervisor – Dr. Wayne N. Dixon

• This position is responsible for the supervision, management and administration of personnel and activities for the Cooperative Agricultural Pest Survey. Responsible for organizing survey and detection projects to determine the presence and location of domestic and exotic plant pests. Research pathways of introduction and determine the likelihood of pest and pathogen introductions throughout Florida. Coordinates the activities of both the State and Federal CAPS team members and determines the areas of focus for the program.

Laboratory Technician IV, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Florida State Collection of Arthropods, Gainesville, FL 1/2006-1/2007. Supervisor – Dr. Michael C. Thomas

• Responsible for receiving, sorting, recording and distributing specimens submitted by Plant Protection Specialists and others for identification. Assists in field surveys, curates reference collections and identifies arthropods to the lowest possible taxonomic unit, and curates by phylogenetic position into the Florida State Collection of Arthropods. Keeps appropriate files and records for data retrieval. Prepares specimens for loans to arthropod systematists, maintains invoice files and correspond with these scientists. Prepares arthropod specimens for identification, research purposes and curation. Uses rearing techniques for morphological and biological control studies. Researches entomological and other libraries and scientific reprint collections to maintain and update all taxonomic files, records, and literature.

Research Assistant, Entomology and Nematology Department, University of Florida, Gainesville, FL 1/2004-1/2006. Supervisor – Dr. Ronald D. Cave

• Responsible for conducting studies on the biological control of the cycad aulacaspis scale, *Aulacaspis yasumatsui*, in Florida. Carry out research on parasitic wasps and predatory beetles attacking the cycad

- aulacaspis scale. Collects field data on distribution, population dynamics and parasitism of cycad aulacaspis scale. Collect, curate and preliminarily identify arthropods associated with cycads.
- Dissertation Research Described and quantified the life cycle of *C. nipponicus* while feeding on *Aulacaspis yasumatsui* Takagi. Determined the susceptibility of *Rhyzobius lophanthae* and *Cybocephalus nipponicus* to the most common pesticides used to treat the cycad aulacaspis scale. Revised and reviewed the taxonomy of *Cybocephalus* beetles found in America, Mexico and the West Indies, including adventive species.
- Dissertation: Life History and Pesticide Susceptibility of Cybocephalus nipponicus Endrödy-Younga (Coleoptera: Cybocephalidae) and a Taxonomic Revision of the Cybocephalidae of North America and the West Indies.

Research Assistant, Entomology and Nematology Department, University of Florida, Gainesville, FL 5/2001-12/2003. Supervisor – Dr. John L. Capinera

- Responsible for insect rearing, grasshopper colony maintenance, insect taxonomy, occasional guest lectures, assistance rendered to visiting faculty and students in their research, and IPM consultant.
- Thesis Research Studies on the habitat and plant community preferences of grasshoppers and their host plants. Studies on the mandible morphology of grasshoppers and its relationship to food preferences. A taxonomic key to the grasshoppers of Florida.
- Thesis: Florida grasshoppers (Orthoptera: Acrididae) and their host plants.

Field Assistant II, The Nature Conservancy, Patrick Airforce Base, Titusville, FL 1/2001-5/2001. Supervisor – Dr. Ted Stevens

• Duties included field research to determine the status and distribution of Florida scrub-jays (FSJ) on Cape Canaveral. Identified habitats suitable for FSJs on the cape and identified size and composition of all FSJ groups. Studied the nesting biology and reproductive success of FSJ groups by banding nestlings and adults, observation of feeding behavior, egg mortality and many other components of FSJ biology and ecology. Habitat components were measured to correlate habitat quality with reproductive success.

Research Assistant, Biology Department, University of Central Florida, Orlando, FL 5/1999-12/2000. Supervisor – Stuart M. Fullerton

• Responsible for insect trapping and sampling, museum curation, insect identification, researching and acquiring literature relevant to research for the expansion of existing library, and local contact for the public with questions about insects.

Nursery Manager, Hechinger/Builder's Square, Casselberry, FL 4/1996-5/1999. Supervisor – Kevin Taylor

• Duties included plant maintenance, insect control, commercial landscaping and dealing with growers and nurseries all over the world. Trained and supervised all garden employees. Responsible for employee evaluations, promotions, scheduling and hiring.

SELECTED PUBLICATIONS

• Skelley, P.E., E.A. Buss, J. Allen, S. Bolton, L. Deeter, J.C. Fulton, D. Greer, S.E. Halbert, J. Hayden, M.R. Moore, C.E. Nance, E. Powell, G.S. Powell, E.J. Rodriguez, E.Roeder, K.E. Schnepp, F.N. Soto-Adames, G.J. Steck, E. Talamas and T.R. Smith. 2024. Adventive arthropods in Florida as reported by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry, 1990–2023. Florida Entomologist (In Press).

- Smith, T.R. and K. Szawaryn. 2024. *Pastillus aethiopicus* sp. nov. (Coleoptera: Cybocephalidae), a new fossil beetle from Miocene Ethiopian amber and a taxonomic key to the species of *Pastillus* Endrödy-Younga. Paleoworld 33: 448-458. https://doi.org/10.1016/j.palwor.2023.04.004
- Inserra, R.N., J. Stanley, G. Steck, P.J. Anderson and T.R. Smith. 2023. Phytosanitary measures and certification programs implemented in Florida. Bollettino Accademia Gioenia di Scienze Naturali Catania 56 (386): 42-69. https://doi.org/10.35352/gioenia.v56i386.110
- Smith, T.R. 2022. Review of the Cybocephalidae (Coleoptera) of North America and the West Indies with descriptions of two new species of *Cybocephalus* Erichson. Insecta Mundi 0950: 1-35. https://doi.org/10.5281/zenodo.7300613
- Penca, C., N.C. Goltz, A. Hodges, N. Leppla, J. Eger and T.R. Smith. 2022. Use of pyriproxyfen to induce oogenesis in diapausing *Megacopta cribraria* (Heteroptera: Plataspidae), and evaluation of pyriproxyfen-induced eggs for rearing the parasitoid *Paratelenomus saccharalis* (Hymenoptera: Scelionidae). Insects 13, 89: 1-14. https://doi.org/10.3390/insects13010089
- Smith, T.R. 2021. A catalogue of the Cybocephalidae (Coleoptera: Cucujoidea) of the world. Insecta Mundi 0858: 1-16. https://digitalcommons.unl.edu/insectamundi/1351/
- Urbina, H., T. Smith, C. Jones, X. Sun, J. McVay, C. Walker, L. Whilby, G. Hodges and T. R. Smith. 2021. Validation of quantitative and digital polymerase chain reaction assays targeting the mating types of *Phyllosticta citricarpa*, the causal agent of citrus black spot. PhytoFrontiers 1: 301-313. https://doi.org/10.1094/PHYTOFR-02-21-0011-R
- Smith, T.R. 2020. Description of two new genera and a taxonomic key to the world genera of Cybocephalidae (Coleoptera). Insecta Mundi 0834: 1-24.
 https://digitalcommons.unl.edu/insectamundi/1326/
- Teem, J.L., L. Alphey, S. Descamps, M.P. Edgington, O. Edwards, N. Gemmell, T. Harvey-Samuel, R. Melnick, K.P. Oh, A.J. Piagio, J.R. Saah, D. Schill, P. Thomas, T.R. Smith and A. Roberts. 2020. Genetic Biocontrol for Invasive Species. Frontiers in Bioengineering and Biotechnology 8 (452): 1-18. https://doi.org/10.3389/fbioe.2020.00452
- Dey, K, C. Li, K. Douglas, J. McVay, L. Whilby, G. Hodges and T.R. Smith. 2019. First report of Begonia flower breaking virus 2 infection begonia (*Begonia* spp.) in the USA. Plant Disease 104. https://doi.org/10.1094/PDIS-05-19-1071-PDN
- Dey, K, C. Li, M. Elliot, J. McVay, L. Whilby, G. Hodges and T.R. Smith. 2019. First report of Cucumber mosaic virus infecting Siam tulip (*Curcuma alismatifolia*) in Florida. Plant Health Progress 20: 132. https://doi.org/10.1094/PHP-03-19-0019-BR
- Dey, K, C. Li, M.C. Sellers, J. McVay, L. Whilby, G. Hodges and T.R. Smith. 2019. First report of Tomato spotted wilt virus identified in *Tulbaghia violacea* in Florida. Plant Health Progress 20: 131. https://doi.org/10.1094/PHP-03-19-0020-BR
- Steck, G.J., A.J. Fox, T.R. Smith, D. Dean, D. Carillo, A. Roda and N.D. Epsky. 2019. Oriental fruit fly eradication in Florida 2015-2016 program implementation, unique aspects and lessons learned. American Entomologist 65: 108-121. https://doi.org/10.1093/ae/tmz023

- McVay, J. X, Sun, D. Jones, H. Urbina, F. Aldeek, J. Cook, J. Ayyamperumal. G. Hodges and T. Smith.
 2019. Limited persistence of residues and metabolites in fruit and juice following penicillin trunk infusion in citrus affected by Huanglongbing. Crop Protection 125. https://doi.org/10.1016/j.cropro.2019.03.001
- Dey, K, A. Jeyaprakash, J. Hansen, D. Jones, T.R. Smith, D. Davison, P. Srivastava, B. Bahder, C. Li and X. Sun. 2018. First report of the 16SrIV-D Phytoplasma associated with decline of a Bismarck palm (*Bismarkia nobilis*). Plant Health Progress 19: 128. https://doi.org/10.1094/PHP-01-18-0003-BR
- Dickens, K.L., J.L. Capinera and T.R. Smith. 2018. Effects of density and food deprivation on growth and survival of *Lissachatina fulica* (Gastropoda: Achatinidae). American Malacological Bulletin: 36: 57-61. https://doi.org/10.4003/006.036.0115
- Roda, A., M. Yong-Cong, B. Donner, K. Dickens, A. Howe, S. Sharma and T. Smith. 2018. Designing a trapping strategy to aid giant African snail (*Lissachatina fulica*) eradication programs. PLoS ONE 13(9): e0203572. https://doi.org/10.1371/journal.pone.0203572
- Dickens, K.L., J.L. Capinera and T.R. Smith. 2018. Suitability of selected ornamental plants for growth and survival of *Lissachatina fulica* (Gastropoda: Achatinidae). Florida Entomologist 100: 698-703. https://doi.org/10.1653/024.100.0415
- Dickens, K.L., J.L. Capinera and T.R. Smith. 2017. Laboratory assessment of growth and reproduction of Lissachatina fulica (Gastropoda: Achatinidae). Journal of Molluscan Studies: 1-8. https://doi.org/10.1093/mollus/eyx044
- Piñero, J.C., S.K. Souder, T.R. Smith and R. Vargas. 2017. Attraction of *Bactrocera cucurbitae* and *Bactrocera dorsalis* (Diptera: Tephritidae) to beer waste and other protein sources laced with ammonium acetate. Florida Entomologist 100: 70-76. http://doi.org/10.1653/024.100.0112
- Medal, J., A. Santa Cruz and T. Smith. 2017. Feeding responses of *Euthyrhinchus floridanus* (Heteroptera: Pentatomidae) to *Megacopta cribraria* (Heteroptera: Plataspidae) with *Spodoptera frugiperda* and *Anticarsia gemmatalis* (Lepidoptera: Noctuidae) larvae as alternative prey. Journal of Entomological Science 52: 87-91. https://doi.org/10.18474/JES16-30.1
- Medal, J., S. Halbert, A. Santa Cruz, T.R. Smith and B.J. Davis. 2016. Greenhouse study to determine the host range of the kudzu bug *Megacopta cribraria* (Heteroptera: Plataspidae). Florida Entomologist 99: 303-305. https://doi.org/10.1653/024.099.0224
- Medal, J., G. Lotz, T. Smith, A. Santa Cruz, E. Rohrig, K. Hoelmer, C. Dieckhoff and K. Tatman. 2016.
 Testing specificity with egg parasitoid *Trissolcus japonicus* (Ashmead) (Hymenoptera: Platygastridae) for biological control of the stink bug *Halyomorpha halys* Yang (Heteroptera: Pentatomidae) in the United States of America. Entomologia Mexicana 3: 191-196.
- Francis, A.W., I.C. Stocks, T.R. Smith, A.J. Boughton, C.M. Mannion and L.S. Osborne. 2016. Host plants and natural enemies of rugose spiraling whitefly (Hemiptera: Aleyrodidae) in Florida. Florida Entomologist 99: 150-153. https://doi.org/10.1653/024.099.0134
- Medal, J., A. Santa Cruz, K. Williams, S. Fraser, D. Wolaver, T.R. Smith and B.J. Davis. 2015. First
 Record of *Paratelenomus saccharalis* (Hymenoptera: Platygastridae) on kudzu bug *Megacopta cribraria*(Heteroptera: Plataspidae) in Florida. Florida Entomologist 98: 1250-1251.
 https://doi.org/10.1653/024.098.0438

- Medal. J, S. and T. R. Smith. 2015. Reversible polyphenism in *Trissolcus japonicus* (Hymenoptera: Platygastridae) induced by stink bug egg size. Journal of Entomological Science 50: 363-366. https://doi.org/10.18474/JES15-16.1
- Boughton, A.J., M.A. Mendez, A.W. Francis, T.R. Smith, L.S. Osborne and C. M. Mannion. 2015. Host stage suitability and impacts of *Encarsia noyesi* (Hymenoptera: Aphilinidae) on the invasive rugose spiraling whitefly, *Aleurodicus rugioperculatus* (Hemiptera: Aleyrodidae), in Florida. Biological Control 88: 61-67. https://doi.org/10.1016/j.biocontrol.2015.04.016
- Dickey, A.M., I.C. Stocks, T.R. Smith, L. Osborne and C.L. McKenzie. 2015. DNA barcode development for three recent exotic whitefly (Hemiptera: Aleyrodidae) in Florida. Florida Entomologist 98: 473-478. https://doi.org/10.1653/024.098.0213
- Iwanowicz, D.D., L.R. Sanders, W.B. Schill, M.V. Xayavong, A. da Silva, Y. Qvarnstrum and T.R. Smith. 2015. Spread of the rat lungworm (*Angiostrongylus cantonensis*) in giant African land snails (*Lissachatina fulica*) in Florida, USA. Journal of Wildlife Diseases 51: 749-753. https://doi.org/10.7589/2014-06-160
- Piñero, J.C., S.K. Souder, T.R. Smith, A. Fox and R. Vargas. 2015. Ammonium acetate enhances the attractiveness of a variety of protein-based baits to female *Ceratitis capitata* (Diptera: Tephritidae). Journal of Economic Entomology 108: 694-700. https://doi.org/10.1093/jee/tov046
- Smith, T.R., A. C. Howe, K. Dickens, J. D. Stanley, J. A. Brito and R. N. Inserra. 2015. First comprehensive molecular and morphological identification of the rat lungworm, *Angiostrongylus cantonensis* Chen, 1935 (Nematoda: Strongylida: Metastrongylida) in association with the giant African land snail, *Lissachatina fulica* Bowdich (Gastropoda: Pulmonata: Achtinidae) in Florida. Nematropica 45: 20-33. https://journals.flvc.org/nematropica/article/view/85036
- Cline, A, T. R. Smith, K. Miller, M. Moulton and M. Whiting. 2014. Molecular phylogeny of Nitidulidae: assessment of subfamilial and tribal classification and formalization of the family Cybocephalidae (Coleoptera: Cucujoidea) Systematic Entomology 39: 758-772. https://doi.org/10.1111/syen.12084
- Paraiso, O., T.R. Smith, S.D. Hight and B.J. Davis. 2014. Rearing a native cactus moth [*Melitara prodenialis* (Lepidoptera: Pyralidae)] on artificial diet and opuntia cladodes: preliminary comparisons. Florida Entomologist 97: 1232-1236. https://doi.org/10.1653/024.097.0331
- Stark J.D., R.I. Vargas, S. Souder, A.J. Fox, T.R. Smith, L. LeBlanc and B. Mackey. 2014. Simulated field applications of insecticide soil drenches for control of tephritid fruit flies. Biopesticides International 10: 136-142.
- Vargas, R.I., S. Souder, K. Hoffman, J. Mercogliano, T.R. Smith, J. Hammond, B.J. Davis, M. Brodie and J. Dripps. 2014. Attraction and mortality of *Bactrocera dorsalis* to STATIC[™] spinosad ME weathered under operational conditions in California and Florida: a reduced-risk male annihilation treatment. Journal of Economic Entomology 107: 1362-1369. https://doi.org/10.1603/ec14121
- Leavengood, J.M. Jr. and T. R. Smith. 2013. The Siricidae (Hymenoptera: Symphyta) of Florida. Insecta Mundi 0309: 1-16. https://doi.org/10.5281/zenodo.5176434
- Medal. J, S. Halbert, T. R. Smith and A. Santa-Cruz. 2013. Suitability of selected plants to the bean plataspid, *Megacopta cribraria* (Hemiptera: Plataspidae) in no-choice tests. Florida Entomologist 96: 631-633. https://doi.org/10.1653/024.096.0232

- Medal. J, T. R. Smith and A. Santa-Cruz. 2013. Biology of the brown marmorated stink bug *Halyomorpha halys* (Heteroptera: Pentatomidae) in the laboratory. Florida Entomologist 96: 1209-1212. https://doi.org/10.1653/024.096.0232
- Smith, T. R., J. White-McLean, K. Dickens, A. Howe and A. Fox. 2013. Efficacy of four molluscicides against the giant African snail, *Lissachatina fulica* Bowdich, (Gastropoda: Pulmonata). Florida Entomologist 96: 396-402. https://doi.org/10.1653/024.096.0202
- Stark J.D., R.I. Vargas, S. Souder, A.J. Fox, T.R. Smith and B. Mackey. 2013. A Comparison of the Bioinsecticide, Spinosad, the Semi-synthetic Insecticide, Spinetoram and Synthetic Insecticides as Soil Drenches for Control of Tephritid Fruit Flies. Biopesticides International 9: 120-126.
- Teem, J.L., Y. Qvarnstrom, H.S. Bishop, A.J. da Silva, J. Carter, J. White-Mclean and T.R. Smith. 2013. The Occurrence of the Rat Lungworm, *Angiostrongylus cantonensis*, in Nonindigenous Snails in the Gulf of Mexico Region of the United States. Hawaii Journal of Medicine and Public Health. 72[(6) Suppl 2]: 11-14. PMCID: PMC3689474
- Medal, J., T. R. Smith, A. Fox, A. Santa-Cruz, A. Poplin and A. Hodges. 2012. Rearing the brown marmorated stink bug, *Haylomorpha halys* (Heteroptera: Pentatomidae). Florida Entomologist 95: 800-802. https://doi.org/10.1653/024.095.0339
- Longo, S, P. J. Anderson, T. R. Smith and J.D. Stanley. 2011. New palm hosts for the red palm weevil, *Rynchophorus ferrugineus*, in Sicily. Palms 55: 15-20.
- Smith, T. R. and J. Brambila. 2008. A major pest of cotton, *Oxycarenus hyalinipennis* (Heteroptera: Oxycarenidae) in the Bahamas. Florida Entomologist 91: 479-482. https://doi.org/10.1653/0015-4040(2008)91[479:AMPOCO]2.0.CO;2
- Smith, T. R. and A. Sylagyi. 2008. Crushed vehicles an unusual pathway for the introduction of *Granodomus lima* (Pulmonata: Pleurodontidae) and other exotic terrestrial snails. Florida Scientist 72: 22-27. https://www.jstor.org/stable/24321722
- Smith, T. R. and R. Bailey. 2007. A new species of *Cybocephalus* (Coleoptera: Cybocephalidae) from Taiwan and a new distribution record for *Cybocephalus nipponicus*. Coleopterists Bulletin 61: 503-508. https://doi.org/10.1649/0010-065X(2007)61[503:ANSOCC]2.0.CO;2
- Smith, T. R. and R. D. Cave. 2007a. The Cybocephalidae (Coleoptera) of the West Indies and Trinidad. Annals of the Entomological Society of America 100: 164-172. https://doi.org/10.1603/0013-8746(2007)100[164:TCCOTW]2.0.CO;2
- Smith, T. R. and R. D. Cave. 2007b. The Cybocephalidae (Coleoptera) of Mexico. Annals of the Entomological Society of America 100: 839-849. https://doi.org/10.1603/0013-8746(2007)100[839:TCCOM]2.0.CO;2
- Smith, T. R. and R. D. Cave. 2006a. A revision of the Cybocephalidae (Coleoptera) of America north of Mexico. Annals of the Entomological Society of America 99: 776-792. https://doi.org/10.1603/0013-8746(2006)99[776:TCCOAN]2.0.CO;2
- Smith, T. R. and R. D. Cave. 2006b. The life history of *Cybocephalus nipponicus* a predator of the cycad aulacaspis scale, *Aulacaspis yasumatsui* (Homoptera: Diaspididae). Proceedings of the Entomological Society of Washington 108: 905-916. https://biostor.org/reference/55775

- Smith, T. R., R. D. Cave, and G. S. Hodges. 2006. A new North American record for *Haliaspis nakaharai* (Hemiptera: Diaspididae). Florida Entomologist 89: 414-415. https://doi.org/10.1653/0015-4040(2006)89[414:ANNARF]2.0.CO;2
- Smith, T. R. and R. D. Cave. 2006. Pesticide susceptibility of two predators of *Cybocephalus nipponicus* and *Rhyzobius lophanthae* (Coleoptera: Cybocephalidae, Coccinellidae). Florida Entomologist 89: 502-507. https://doi.org/10.1653/0015-4040(2006)89[502:PSOCNA]2.0.CO;2
- Smith, T. R. 2005. Observations on the habitat preference of *Auperia denominata* Chevrolat (Scarabaeidae: Aphodiinae: Eupariini). Coleopterists Bulletin 59: 256-257. https://doi.org/10.1649/775
- Smith, T. R. and J. L. Capinera. 2005. Mandibular morphology of some Floridian grasshoppers (Orthoptera: Acrididae). Florida Entomologist 88: 204-207. https://doi.org/10.1653/0015-4040(2005)088[0204:MMOSFG]2.0.CO;2
 - Smith, T. R. and J. L. Capinera. 2005. Host preferences and habitat associations of some Florida grasshoppers (Orthoptera: Acrididae). Environmental Entomology 34: 210-224. https://doi.org/10.1603/0046-225X-34.1.210
- Smith, T. R., J. G. Froeba and J. L. Capinera. 2004. Key to the grasshoppers of Florida. Florida Entomologist 87: 537-550. https://doi.org/10.1653/0015-4040(2004)087[0537:KTTGOA]2.0.CO;2

PUBLIC SERVICE ANNOUNCEMENTS AND EDUCATIONAL VIDEOS

- Safeguarding Florida: It All Starts with Diagnostics. 2019. https://youtube/Ec9pLiOwdxg
- Mikania micrantha: Help Stop It Now. 2011.
 https://www.youtube.com/watch?v=Gh9hymPHhx4
- Laurel Wilt in Florida: Slowing the Spread. 2010. http://www.youtube.com/watch?v=2x7vgFWLHkY
- Florida Emerald Ash Borer Trapping Program. 2009.
 http://www.youtube.com/watch?v=2x7vgFWLHkY

SELECTED PRESENTATIONS

- Smith, T. R. 2024. The legacy and contributions of Dr. Edward Berger and the Division of Plant Industry. (Keynote). Presented at the Florida Entomological Society Annual Meeting. July 1, 2024. Quincy, Florida (30 Minute Presentation).
- Smith, T. R. 2024. Non-traditional Pathways: Rethinking How Invasive Species Move Around the World (Keynote). Presented at the Invasion Science Research Symposium. May 6, 2024. Gainesville, Florida (30 Minute Presentation).
- Smith, T. R. 2024. Invasive Species and the Safeguarding Continuum. St. Augustine Master Gardner's Meeting. March 11, 2024. St. Augustine, Florida (1 Hour Presentation).
- Smith, T. R. 2024. Florida's Accelerated Citrus Budwood Initiative. Presented at the Florida Citrus Mutual Board of Directors Meeting. February 14, 2024. Bartow, Florida (30 Minute Presentation).

- Smith, T. R. 2023. Regulating Invasive Species in Florida. Presented at the DPI/European Union Cross-pollination Meeting. September 21, 2023. Gainesville, Florida (30 Minute Presentation).
- Smith, T. R. 2023. Major Changes in Florida's Citrus Black Spot Regulations. Presented at the Florida Citrus Mutual Board of Directors Meeting. September 13, 2023. Bartow, Florida (30 Minute Presentation).
- Smith, T. R. 2023. Harmonizing State and Federal Regulation to Mitigate Pest Movement. Presented at the Florida USDA-APHIS-PPQ Leadership Meeting. August 9, 2023. Jacksonville, Florida (1 Hour Presentation).
- Smith, T. R. 2023. The History of Plant Pest and Disease Management in Florida. Presented at the Annual Florida Youth Institute Meeting. July 11, 2023. Gainesville, Florida (1 Hour Presentation).
- Smith, T. R. 2023. New Challenges in Eradicating the Oriental Fruit Fly. Presented at the National Exotic Fruit Fly Working Group Meeting. June 29, 2023. Hilo, Hawaii (1 Hour Presentation).
- Smith, T. R. 2023. The Cotton Seed Bug. Presented at the Annual Southern Plant Board Meeting. May 23, 2023. Gulf Shores, Alabama (1 Hour Presentation).
- Smith, T. R. 2023. Pest and Disease Update: A Florida Perspective. Presented at the Annual Southern Plant Board Meeting. May 24, 2023. Gulf Shores, Alabama (15 Minute Presentation).
- Smith, T. R. 2023. The History of the Division of Plant Industry. Presented at the Empower Hour Meeting. April 13, 2023. Tallahassee, Florida (1 Hour Presentation).
- Smith, T. R. 2023. Lettuce Mosaic Virus Overview. Presented at the Florida Lettuce Technical Council Meeting. March 22, 2023. Belle Glade, Florida (15 Minute Presentation).
- Smith, T. R. 2022. Alien Invasions. Presented at the Annual St. Johns Bee Club Meeting. December 5, 2022. St. Augustine, Florida (1 Hour Presentation).
- Smith, T. R. 2022. Florida Citrus Update. Presented at the National Plant Board Meeting. August 2, 2022. Lancaster, Pennsylvania (20 Minute Presentation).
- Smith, T. R. 2022. Citrus Budwood Protection Program. Presented at the Florida Citrus Mutual Annual Meeting. June 15, 2022. Bonita Springs, Florida (30 Minute Presentation).
- Smith, T. R. 2022. Florida Pest and Disease Overview. Presented at the Annual Southern Plant Board Meeting. May 7, 2022. Oklahoma City, Oklahoma (15 Minute Presentation).
- Smith, T. R. 2022. Invasive Species. Presented at the Plant Protection Summit (CBP, USDA, DPI). May 16, 2022. Gainesville, Florida (1 Hour Presentation).
- Smith, T. R. 2021. Giant African Land Snail; Eradication Program Overview. Presented at the Caribbean Plant Health Directors Forum. August 31, 2021. Virtual (1 Hour Presentation).
- Smith, T. R. 2020. The Cotton Seed Bug, *Oxycarenus hyalinipennis* (Costa) and the possible impacts to Southern Agriculture. Presented at the Southern Plant Board Meeting. April 29, 2020. Virtual (30 Minute Presentation).

- Smith, T. R. 2019. Risk Assessment for Classical Biological Control. Presented at the International Society for Biosafety Research. Genetic Biocontrol for Invasive Species Workshop March 31, 2019. Tarragona, Spain (1 Hour Presentation).
- Smith, T. R. 2018. Alien Invasions Keeping Florida Free from Exotic Invasive Pests. Presented at the PestWorld. October 25, 2018. Orlando, Florida (1 Hour Presentation).
- Smith, T. R. 2018. An Introduction to Florida's Division of Plant Industry. Presented at the Texas/Florida Plant Safeguarding Summit. September 18, 2018. Orlando, Florida (40 Minute Presentation).
- Smith, T. R. 2018. Regulating Invasive Species from North America's Front Lines. Presented at the Florida Entomological Society Meeting. July 24, 2018. St. Augustine, Florida (30 Minute Presentation).
- Smith, T. R. 2018. Invasive Forest Pests in Florida. Presented at the U.N. Forest Health Summit. February 9, 2018. Gainesville, Florida (20 Minute Presentation).
- Smith, T. R. 2017. 100 Years of Regulating Exotic Pests in Florida. Presented at the Entomological Society of America Meeting. November 7, 2017. Denver, Colorado (20 Minute Presentation).
- Smith, T. R. 2017. New World Screwworm Response in Florida. Presented at the Entomological Society of America Meeting. November 8, 2017. Denver, Colorado (20 Minute Presentation).
- Smith, T. R. 2017. New Exotic Pest Update. Presented at the National Plant Board Meeting. August 16, 2017. Savannah, Georgia (1 Hour Presentation).
- Smith, T. R. 2017. Battling Invasive Species in Florida, a Unique Perspective from the North American Front Lines. Presented at Zhongkai University of Agriculture and Engineering. June 21, 2017. Guangzhou, China (30 Minute Presentation).
- Smith, T. R. 2017. Regulating Exotic Citrus Pests and Diseases in Florida. Presented at Yunnan Agricultural University. June 17, 2017. Kunming, China (30 Minute Presentation).
- Smith, T. R. 2017. USDA Policy Change on Import Treatments and the Possible Impacts to US agriculture. Presented at the Southern Plant Board Meeting. May 2-4, 2017. Cocoa Beach, Florida (20 Minute Presentation/each).
- Smith, T. R. 2017. A Review of the Division of Plant Industry. Presented to the Senate Agriculture Committee. January 23, 2017. Tallahassee, Florida (10 Minute Presentation).
- Smith, T. R. 2017. Overview of the Division of Plant Industry. Presented to the House Agriculture and Property Rights Subcommittee. January 11, 2017. Tallahassee, Florida (20 Minute Presentation).
- Smith, T. R. 2016. Overview of Citrus Canker in Florida. Presented to the Senate Appropriations Committee. December 15, 2016. Tallahassee, Florida (10 Minute Presentation).
- Smith, T. R. 2016. Increasing Pest and Disease Pressure. Presented at the Invasive Pests and Diseases, Climate Change, Research and Innovation Fall Forum. October 25, 2016. Gainesville, Florida (30 Minute Presentation).

- Smith, T. R. 2016. The Redland Oriental Fruit Fly Eradication Program in Florida. Presented at the 100th Annual Meeting of the Pacific Branch of the Entomological Society of America. April 6, 2016. Honolulu, Hawaii (20 Minute Presentation).
- Smith, T. R. 2016. Regulating, Controlling and Eradicating Invasive Species in Florida. Presented as part of the University of Florida Entomology Seminar Series. January 29, 2016. Entomology and Nematology Department, Gainesville, FL. (1 Hour Presentation).
- Smith, T. R. 2016. Redland Oriental Fruit Fly Eradication Program, Miami-Dade County. Presented at the University of Florida Statewide Pest Update. April 27, 2016. McCarty Hall, Gainesville, FL. (20 Minute Presentation).
- Smith, T. R. 2015. Regulating invasive species in Florida. Presented at the Reduce Risk from Invasive Species Coalition Symposium Training. December 4, 2015. Rayburn House, Washington D.C. (2 Hour Presentation).
- Smith, T. R. 2015. Oriental Fruit Fly Eradication Program, Miami-Dade County. Presented to the Senate Agricultural Committee. October 20, 2015. The State Capitol, Tallahassee, Florida (20 Minute Presentation).
- Smith, T. R. 2015. Division of Plant Industry, An Overview. Presented to the Senate Appropriations Committee. October 20, 2015. The State Capitol, Tallahassee, Florida (20 Minute Presentation).
- Smith, T. R. 2015. The Old-World Bollworm program in Florida. Presented at the 2015 National Plant Board Meeting. August 5, 2015. Sedona, Arizona (20 Minute Presentation).
- Smith, T. R. 2015. A View from Florida. Presented to the Port Authorities. July 8-9, 2015. Port of Jacksonville, Port of Tampa, Port of Manatee, Florida (30 Minute Presentation).
- Smith, T. R. 2015. Giant African Land Snail, Eradication Program Overview. Presented at the Southern Animal Health Association. June 1, 2015. Orlando, Florida 30 Minute Presentation).
- Smith, T. R. 2015. Improved Asian Citrus Psyllid Traps Using 3D Printing Technologies. Presented at the International Research Conference on Huanglongbing; Specialty Crop Research Initiative Break Out Session. February 10, 2015, Orlando, Florida. (45 Minute Presentation).
- Smith, T. R. 2014. Asian Citrus Psyllid Biological Control in Florida. Presented at the ACP Biological Control Meeting. September 4, 2014, San Antonio, Texas. (30 Minute Presentation).
- Smith, T. R. 2014. The Florida Giant African Land Snail Eradication Program. Presented at the Strategies for the Eradication of the Giant African Snail and Other Invasive Species Workshop (Technical Presentation), 15-17 April 2014, Barbados and St. Lucia. (1 Hour Presentation).
- Smith, T. R. 2014. Giant African Land Snail, A View From Florida. Presented at the Strategies for the Eradication of the Giant African Snail and Other Invasive Species Workshop (Public Lecture), 15-17 April 2014, Barbados and St. Lucia. (1 Hour Presentation).
- Smith, T. R. 2013. Collaborative Biological Control Efforts in Florida. Presented at the Florida Entomological Society Annual Meeting 22-25 July 2013, Naples, Florida. (20 Minute Presentation).

- Smith, T. R. 2013. Florida GALS Eradication Program: Methods Development. Presented at the Giant African Land Snail Science Symposium 9-10 April 2013, Gainesville, Florida. (40 Minute Presentation).
- Smith, T. R. 2012. Methods for Managing Established and/or Emerging Invasive Species. Presented for the Exotic Species and Biosecurity Issues Course. October 2012. University of Florida, Entomology and Nematology Department, Gainesville, Florida (1 Hour Presentation).
- Smith, T. R. 2012. Regulating Biomass in Florida. Presented for the Issues in Agricultural and Life Sciences course. September 2012. University of Florida, Agricultural Education and Communication Department, Gainesville, Florida (1 Hour Presentation).
- Smith, T. R. 2012. Biomass is Coming to Florida, Presented at the 32nd Annual Florida Native Plant Society Meeting, Hillsborough Community College, Plant City, Florida (1 Hour Presentation).
- Smith, T., A. Fox, E. Rohrig, and R. Stuart. 2012. Mass rearing and evaluation of *Tamarixia radiata* (Hymenoptera: Eulophidae) a biological control agent of *Diaphorina citri* (Hemiptera: Psyllidae). Presented at the Florida Entomological Society Annual Meeting 22-25 July 2012, Jupiter, Florida (15 Minute Presentation).
- Smith, T. R. 2011. Methods Development and Biological Control. Presented for the Exotic Species and Biosecurity Issues Course. October 2011. University of Florida, Entomology and Nematology Department, Gainesville, Florida (1 Hour Presentation).
- Smith, T. R. 2011. Permitting and Regulating Biomass Plantings in Florida. Presented at the Biomass and Biofuel Review and Scoping Meeting. May 2011. Division of Plant Industry, Gainesville, Florida (30 Minute Presentation).
- Smith, T. R. 2010. Surveying for *Mikania micrantha* in South Florida. Presented at the FWC Invasive Species Meeting. December 2010. Division of Plant Industry, Gainesville, Florida (30 Minute Presentation).
- Smith, T. R. 2010. *Oxycarenus hyalinipennis* (Costa) "The Cotton Seed Bug." Presented at the CAPS/Mexico Summit. August 2010. Division of Plant Industry, Gainesville, Florida (30 Minute Presentation).
- Smith, T. R. 2009. Laurel Wilt and the Redbay Ambrosia Beetle in Florida II. Presented at the Laurel Wilt Working Group Meeting. September 2009. USDA Horticultural Laboratory, Ft. Pierce, Florida (10 Minute Presentation).
- Smith, T. R. 2009. Laurel Wilt and the Redbay Ambrosia Beetle in Florida. Presented at the Laurel Wilt Working Group Meeting. July 2009. UF, Indian River Research and Education Center, Ft. Pierce, Florida (10 Minute Presentation).
- Smith, T. R. 2009. Texas Phoenix Palm Decline in Florida. Presented for the Doctor of Plant Medicine Colloquium on Plant Pests of Regulatory Significance. February 2009. University of Florida, Gainesville, Florida (1 Hour Presentation).
- Smith, T. R. 2008. The Emerald Ash Borer: Future Trapping and Survey Initiatives. Polycom Training. November 2008. University of Florida, Gainesville, Florida (20 Minute Presentation).

PROFESSIONAL COMMITTEE AND WORKING GROUP EXPERIENCE

- North Florida Research and Education Center, Stakeholder Advisory Board, University of Florida (2024-present)
- Invasion Science Research Institute External Advisory Committee, University of Florida (2023-present)
- Strategic Alliance Committee: New Pest Detections, United States Department of Agriculture and the National Plant Board (2023-present)
- Southern Plant Board (President 2019-2021; Vice President 2018-2019; Secretary/Treasurer 2017-2018)
- Citrus Research and Field Trials (CRAFT) (Board of Directors 2019-present)
- HLB Multi-Agency Coordination (MAC) Group, United States Department of Agriculture (Committee Member, 2015-present)
- USDA APHIS PPQ Citrus Health Response Program (CHRP) National Program Coordination Group, National Plant Board (Committee Member, 2015-present)
- USDA APHIS PPQ New Pest Advisory Group (NPAG) National Program Coordination Group, National Plant Board (Committee Member, 2015-present)
- USDA APHIS PPQ Farm Bill Planning Group, National Plant Board (Committee Member, 2015-present)
- Doctor of Plant Medicine Advisory Committee, University of Florida (Committee Member, 2015-present)
- National Plant Board (State Plant Regulatory Official, 2015-present)
- National Biological Control Technical Panel, National Plant Board (Committee Member, 2013-present)
- Florida Biological Control Initiative Advisory Committee, Florida A&M University (Board Member, 2011-present)
- Sweet Sorghum Technical Advisory Board (Board Member, 2011-2016)
- Giant African Snail Technical Advisory Panel (Chairmen, 2011-2015)
- Caribbean Fruit Fly Technical Committee (Technical Advisor, 2010-2015)
- Center for Biological Control Technical Advisory Committee, FAMU (Board Member, 2010-present)
- CAPS State Survey Committee (Committee Member, 2010-2015)
- *Mikania micrantha* Working Group (Board Member, 2009-2014)
- Laurel Wilt Working Group (Committee Member, 2009-2015)
- Tropical Soda Apple Task Force (Board Member, 2010-2014)
- North Florida Pest Risk Committee (Board Member, 2008-2011)

- Greater Caribbean Safeguarding Initiative Committee (Board Member, 2008-2010)
- National Analytical Hierarchy Process Committee (Committee Member, 2008-2010)
- CAPS State Survey Committee (Co-Chairmen, 2006-2010)
- Center for Systematic Entomology (Board of Directors, Treasurer, 2007-2010)
- Center for Systematic Entomology, Gifts, Grants and Endowments Committee (Co-Chairmen, 2007-2015)

INCIDENT COMMAND SYSTEM (ICS) EXPERIENCE

- Pasco/Lee/Broward Giant African Land Snail Eradication Program September 2022 present (Multi-Agency Coordinator)
- St. Petersburg Oriental Fruit Fly Eradication Program June 2022 November 2022 (Multi-Agency Coordinator)
- Redland Oriental Fruit Fly Eradication Program June 2018 October 2018 (Multi-Agency Coordinator)
- Redland Oriental Fruit Fly Eradication Program August 2015 February 2016 (Multi-Agency Coordinator)
- Miami-Dade/Broward Giant African Land Snail Eradication Program September 2011 September 2012 (Incident Commander; Planning Chief; Chief Science Officer; Chairmen, Technical Advisory Board)
- Pompano Beach Mediterranean Fruit Fly Eradication Program February March 2011 (Incident Commander; Planning Chief)
- Boca Raton Mediterranean Fruit Fly Eradication Program June September 2010 (Incident Commander; Planning Chief)
- South Florida Red Palm Mite Response; December 2007 March 2008 (Incident Commander)
- Miami-Dade *Spodoptera litura* Response; September December 2007 (Incident Commander)
- South Florida Citrus Greening Response; March May 2007 (Strike Team Leader)

GRANTS AND FELLOWSHIPS

2021	Citrus Research and Field Trials	\$2,000,000
2016	Bean Plataspid Biological Control	\$98,436
2015 - 2020	Asian Citrus Psyllid SmartTrap Technologies	\$200,000
2015	Asian Citrus Psyllid Biological Control	\$530,500
2015 - 2016	Activators and Attractants For Giant African Land Snails	\$107,908
2014 - 2015	Air Potato Biological Control	\$326,094

2014	US Department of State Travel Grant (Giant African Land Snail)	\$5,000
2013 - 2016	Enhanced Mitigation Techniques for Exotic Whiteflies	\$477,446
2012 - 2016	Brown Marmorated Stink Bug Biological Control	\$640,101
2012 - 2016	Fruit Fly Methods Development	\$85,000
2011 - 2016	Cactus Moth Biological Control	\$997,388
2011 - 2015	Imported Fire Ant Biological Control	\$1,414,000
2011 - 2012	Tropical Soda Apple Biological Control	\$56,800
2011 - 2012	Pink Hibiscus Mealybug Biological Control	\$330,000
2011	Cactus Moth Sterile Insect Release Program	\$200,000
2010	Laurel Wilt Survey	\$15,000
2009 - 2011	Light Brown Apple Moth Survey	\$211,750
2009 - 2010	Potato Cyst Nematode Survey	\$127,814
2009 - 2010	Increased Inspection and Surveillance of Plant Materials at Marinas and in the Environs of the Marina/Canal System in South Florida	\$642,502
2009 - 2010	Increased Inspection of Plant Materials at Florida Interdiction Stations and Increased Pest Surveillance in the Environs	\$640,602
2009 - 2010	Emerald Ash Borer Survey	\$32,000
2009	Panicle Rice Mite Survey	\$15,000

HONORS AND AWARDS

TOTAL

- FNGLA Friend of the Industry Award, Florida Nurserymen, Growers and Landscape Association (2022)
- USDA APHIS Administrator's Award (2011-2021 Giant African Land Snail Eradication Program), United States Department of Agriculture (2022)
- Sustained Excellence Award, Florida Department of Agriculture and Consumer Services (2014)
- Giant African Land Snail Team Award (Exceptional Contributions to the Giant African Land Snail Eradication Program), Florida Department of Agriculture and Consumer Services (2014)
- Regulatory Entomologist of the Year Award (Outstanding Contributions in Detection and Control of Invasive Arthropods in Florida), Florida Entomological Society (2013)

\$9,153,341

- Sustained Exemplary Executive Service Award, Florida Department of Agriculture and Consumer Services (2013)
- Outstanding Contributions to the Pink Hibiscus Mealybug Biological Control Program, United States Department of Agriculture (2012)
- USDA APHIS Administrator's Award (Boca Raton Medfly Program), United States Department of Agriculture (2011)
- Citation of Special Recognition (Medfly Emergency Programs), Florida Department of Agriculture and Consumer Services (2011)
- Plant Protection Program Award (Biomass Permitting), Florida Department of Agriculture and Consumer Services (2011)
- Outstanding Service Award (Advisory Council for the Center for Biological Control), Florida A&M University (2010)
- Davis Productivity Eagle Award (Sustained Exemplary Performance), State of Florida (2008)
- Florida State Record Award, Florida Department of Agriculture and Consumer Services (2006, 2008)
- John A. Mulrennan, Sr. Outstanding Ph.D Award (Best Doctoral Research, UF-Entomology and Nematology Dept.) University of Florida, \$500 (2006)
- John Henry Comstock Graduate Student Award Nominee, Entomological Society of America (2006)

RESEARCH SUPPORT AND SCHOLARSHIPS

- Doctoral Research Assistantship (UF) (2003-2006)
- Master's Research Assistantship (UF) (2001-2003)
- James E. Fullerton Biology Scholarship \$15,000 (UCF) (1999-2000)

NEW SPECIES DESCRIBED

- Conglobatus armatus T.R. Smith
- Conglobatus fullertoni T.R. Smith
- *Cybocephalus antilleus* T.R. Smith
- *Cybocephalus beverlyae* T.R. Smith
- *Cybocephalus brethesi* T.R. Smith
- *Cybocephalus championi* T.R. Smith
- Cybocephalus edmondsoni T.R. Smith
- *Cybocephalus geoffreysmithi* T.R. Smith
- *Cybocephalus huastecus* T.R. Smith
- Cybocephalus hausiecus T.R. Siini
- *Cybocephalus iviei* T.R. Smith
- *Cybocephalus kathrynae* T.R. Smith
- *Cybocephalus randalli* T.R. Smith
- *Cybocephalus skelleyi* T.R. Smith
- *Cybocephalus zakotus* T.R. Smith
- *Microthomas brevicornis* T.R. Smith

• *Pastillus aethiopicus* T.R. Smith and Szawaryn

MUSEUM WORK

EXAMINED TYPES, BORROWED SPECIMENS/TYPES, IDENTIFIED SPECIMENS FOR, OR VISITED:

Australia:

Queensland Museum, Brisbane

Australia Museum, Sydney

South Australian Museum, Adelaide

Australian National Insect Collection, Canberra

Canada:

Canadian Museum of Nature, Ottawa

Canadian National Collection of Insects, Ottawa

• Egypt:

Plant Protection Research Institute, Agricultural Research Center Ismailia Governorate, Cairo

England:

Natural History Museum, London [formerly British Museum (Natural History)],

London

• France:

Musee d'Histoire Naturelle, Paris

Hungary:

Hungarian Natural History Museum, Budapest

• New Zealand:

New Zealand Arthropod Collection, Auckland

• Poland:

Museum and Institute of Zoology, Polish Academy of Sciences, Warszawa

• South Africa:

Transvaal Museum of Natural History, Pretoria

South African National Collection of Insects, Pretoria

Trinidad:

University of the West Indies, St. Augustine

• USA:

Albert Allen Insect Collection, Idaho

American Museum of Natural History, New York

California Academy of Sciences, San Francisco

California State Collection of Arthropods, Sacramento

Entomology Research Museum, University of California Riverside

Essig Museum of Entomology, University of California Berkeley

Field Museum, Chicago

Florida State Collection of Arthropods, Gainesville

Holly Glenn Insect Collection, Homestead, Florida

Illinois Natural History Survey, University of Illinois

Los Angeles County Museum of Natural History, University of California

Louisiana State Arthropod Museum, Louisiana State University

Montana Entomology Collection, Montana State University

Museum of Comparative Zoology Collection, Harvard University

Ohio State University Collection, Museum of Biological Diversity

Oregon State Arthropod Collection, Oregon State University

Orma J. Smith Museum of Natural History, Albertson College of Idaho

R. M. Bohart Museum of Entomology, University of California Davis

Santa Barbara Museum of Natural History, Santa Barbara

Snow Entomological Museum, University of Kansas

Texas A&M University, Department of Entomology University of Central Florida Insect Collection, University of Central Florida W. F. Barr Entomological Museum, University of Idaho West Indian Beetle Fauna Project Collection, Montana State University United States National Museum, Smithsonian Institute