## **CURRICULUM VITAE**

Name: KENNETH Y. KANESHIRO

## **Institutional Address:**

University of Hawaii at Manoa Pacific Biosciences Research Center Center for Conservation Research & Training 3050 Maile Way, Gilmore 406 Honolulu, Hawaii 96822

Phone: (808) 956-6739 Fax: (808) 956-2647 Email: kykanesh@hawaii.edu

#### **Education:**

B.A., Zoology, University of Hawaii, Manoa, 1965

M.S., Entomology, University of Hawaii, Manoa, 1968

Ph.D., Entomology, University of Hawaii, Manoa, 1974

### **Present Positions:**

Board of Directors of the Community Partnerships Center Foundation, March 2016 – present.

Board of Directors of the Alliance for Resilience and Global Empowerment, January, 2016 – 2019.

Founder/President/CEO of Hawaii Exemplary State Foundation, August, 2014- present.

Director, Center for Conservation Research & Training, University of Hawaii, July 1, 1993- present.

Researcher, Pacific Biosciences Research Center, University of Hawaii, July 1, 1989 - present.

Director, Hawaiian Evolutionary Biology Program, University of Hawaii, December 1, 1985 - present.

Executive Director, Hawaii Conservation Alliance (formerly the Secretariat for Conservation Biology), Dec. 1993 – present.

Graduate Faculty, Center for Okinawan Studies, 2008 – present.

Graduate Faculty, Ecology, Evolution, Conservation Biology Graduate Specialization (EECB), University of Hawaii, January 1991 – present.

Graduate Chair of EECB, January, 1991 – Feb. 1998.

Graduate Faculty, Department of Zoology, University of Hawaii, 1988 - present.

Graduate Faculty, Department of Entomology, University of Hawaii, June, 1976 - present.

Director, Hawaiian Drosophila Research Stock Center, 1979-present.

# **Professional Experience:**

Member of National Ecological Observatory Network (NEON) Planning/Design Committee, Jan. 2005 – June 2006

Board of Trustees, The Nature Conservancy of Hawaii, August, 1989 - Dec. 2017

Editorial Board, Pacific Science Journal, 1992 - present.

Editorial Board, Journal of Insect Behavior, 1995 - present.

Editorial Board, Journal of Applied Entomology and Zoology, 2002 - present.

Commissioner, Hawaii State Animal Species Advisory Commission, 1986 - 1994. Appointed by Gov. John Waihee.

Hawaii Tropical Forest Recovery Task Force, July 1993 – July 1994. Appointed by Gov. John Waihee,

Research Consultant, the JASON Foundation Education Project, 1994-1995.

Associate Researcher, Pacific Bioscience Research Center, University of Hawaii, July 1, 1984 – June 30, 1989.

Coordinator, Hawaiian Drosophila Project, University of Hawaii, 1972 - present.

Commissioner, Hawaii State Natural Area Reserve Systems Commission, 1979-1985, Chairperson 1984-1985. Appointed by Gov. George Ariyoshi,

Assistant Researcher, Department of Entomology, University of Hawaii, 1974 - 1984.

Research Consultant, Enrichment in Science Program, Department of Education, State of Hawaii, 1982-1983.

Research Consultant, Television Programs for British Broadcasting Corporation (BBC) and other natural history films, "The Life Game", 1975; "Evolution", 1979; "Hawaii: A Crucible of Life", 1982; "The Planet Earth", 1982; "Sexual Selection & Speciation", 1991; "Islands: Splendid Isolation", 1992; "Nomads of the Wind", 1993; "Insects", 1994.

Instructor, Department of Entomology, University of Hawaii, Manoa, Spring, 1982 (Course taught: "Systematic Entomology").

Visiting Professor, Department of Zoology, University of Sao Paulo, Sao Paulo, Brazil, 1979 (Developed and taught new course "Dynamics of Speciation: A multidisciplinary Approach").

Research Associate, Museu de Zoologia, Sao Paulo, Brazil, 1979.

Graduate Teaching Assistant, Department of Entomology, University of Hawaii, 1970-1971.

Graduate Research Assistant, Hawaiian Drosophila Project, University of Hawaii, 1965-1970; 1971-1972; University of Texas, 1968-1969.

## **Summary Statement of Current Interests:**

Kaneshiro's systems approach in his research on the Hawaiian Drosophila has led to the development of the emerging field of "Sustainability Science" based on an understanding of the fundamental interactions between nature and humans. This requires a new research and education paradigm that embraces biological complexity, integrates the physical, biological and social sciences, and uses a coupled, human-natural systems approach. Such integrative research is required to provide fundamental knowledge and strategic solutions to address the wide range of issues associated with ecosystems and their relationship to human health and well-being. This is the cornerstone of the mission of the Hawaii Exemplary State Foundation.

## **Invited Lectureships:**

December	1974	Department of Biology, New York University.
December	1975	Department of Zoology, University of California, Davis.
March	1977	Department of Biology, University of California, Irvine.
March	1977	Department of Biology, California Institute of Technology.
May	1979	Department of Genetics, Universidade do Rio Grande do Sul, Porto Alegre,
		Brazil.
June	1979	Department of Zoology, Museu de Zoologia, Universidade do Sao Paulo, Sao
		Paulo, Brazil.
October	1980	Sigma Xi Lecture, University of Hawaii, Hilo.
November	1982	Department of Entomology, University of Hawaii, Manoa.
November	1983	Museum of Zoology, University of Michigan, Ann Arbor, Michigan.
November	1983	Department of Biological Sciences, Wayne State University, Detroit, Michigan.

December	1983	Department of Biological Sciences, Bowling Green State University, Bowling Green, Ohio.
December	1983	Department of Biology, Washington University, St. Louis, Missouri.
October	1985	Department of Biology, University of Utah, Salt Lake City, Utah.
October	1985	College of Biology and Agriculture, Brigham Young University, Provo, Utah.
October	1985	Department of Entomology, Utah State University, Logan, Utah.
February	1986	Quaternary Research Center, University of Washington, Seattle, Washington.
February	1986	Department of Zoology, University of Washington, Seattle, Washington.
July	1987	Department of Chemistry, Montana State University, Bozeman, Montana.
November	1987	Department of Ecology and Evolutionary Biology, Cornell University, Ithaca, New York.
May	1988	Department of Entomology, University of the Ryukyus, Naha, Okinawa, Japan.
May	1988	Fruit Fly Eradication Project, Okinawa Prefectural Government Experimental
•		Field Station, Naha, Okinawa, Japan.
November	1989	Department of Zoology, Arizona State University, Tempe, Arizona.
November	1989	Department of Ecology and Evolutionary Biology, University of Arizona,
		Tucson, Arizona.
March	1991	Department of Organismic & Evolutionary Biology, Harvard University,
		Cambridge, Massachusetts.
November	1993	Department of Entomology, Cornell University, Grace E. Griswold Distinguished Lectureship.
November	1994	Department of Entomology, University of California at Riverside
January	1995	Department of Biology, Stanford University, Stanford, California
December	1996	Centre Scientific D'Orsay - Mechanismes de Communication, Universite Paris- Sud
May	1997	Nippon Bunri University, Distinguished Lecturer on the occasion of the 30 <sup>th</sup>
Iviay	1///	Anniversary of NBU. Oita, Japan.
July	1999	Humboldt University, Distinguished Lecturer for new Graduate Curriculum in
·		Evolutionary Biology. Berlin, Germany.
August	1999	Distinguished Lecture at Annual Meeting of ERATO program, Tokyo, Japan
October	1999	Invited Lecture at Institute for Global Environmental Strategies, Shonan Village,
		Japan
November	2002	Invited Lecture at Victoria University Wellington, New Zealand

# **Invited Presentations at Local/ National/International Symposia and Conferences:**

August	1968	XIIth International Congress of Genetics, Tokyo, Japan
June	1970	Hawaiian Academy of Science Symposium. Honolulu, Hawaii
June	1972	Entomological Society of America, Honolulu, Hawaii
August	1972	14th International Congress of Entomology, Symposium on "Genetic
_		Mechanisms of Speciation in Insects." Canberra, Australia.
October	1978	U.S./Japan Symposium on "Dynamics of Speciation in Plants and Animals,"
		Tokyo, Japan.
July	1979	XXV Brazilian Congress of Genetics, Symposium on "Mechanisms of Evolution
		and Speciation." Forteleza, Ceara, Brazil.
July	1980	II International Congress of Systematics and Evolutionary Biology, Symposium
		on "The Evolutionary Biology of Hawaiian Drosophilidae." Vancouver,
		Canada.

June	1982	Genetics Society of America, "Selection Experiments on Mating Behavior of <i>Drosophila silvestris</i> ". Yale University, New Haven, Connecticut.
March	1983	24th Annual National Drosophila Research Conference, Workshop on Reproductive Behavior in Drosophila." Asilomar, California.
June	1984	Symposium on "Sexual Selection" sponsored by the American Society of Naturalist, Crested Butte, Colorado.
June	1985	International Symposium on "Genetics, Speciation, and the Founder Principle", sponsored by the Hawaiian Evolutionary Biology Program, Honolulu, Hawaii.
June	1986	Symposium on "Diversity in Hawaiian Drosophila: ATribute to Hampton Carson" sponsored by the Behavior Genetics Society, Honolulu, Hawaii.
August	1986	First International Conference on Tropical Entomology, Symposium on "Biotypes, Polymorphism, and Co-evolution in Tropical Insects." Nairobi, Kenya.
December	1986	Symposium on "Biology of Habitat-Related Population Variations: Evolution and Ecology of Immigrant Species" sponsored by the Entomological Society of America, Reno, Nevada.
November	1987	International Symposium on "Speciation and Adaptation" at the 175th Anniversary of the Philadelphia Academy of Natural Sciences.
March	1988	First International Conference on Fruit Flies in the Tropics, Symposium on "Fruit Fly Eradication". Kuala Lumpur, Malaysia.
July	1988	XVIII International Congress of Entomology, Symposium on "The Evolutionary Significance of Hybridization and Introgression in Insects", in Vancouver, Canada.
January	1989	US/Australia Cooperative Science Project, Workshop on the "Ecological and Evolutionary Genetics of Drosophila" at the University of New England, Armidale, Australia.
April	1989	Invited Lecturer for Short Course in "Selective Forces in the Evolution of Communication Systems" sponsored by the Nordic Council of Ecology, Lund University, Lund, Sweden.
October	1990	International Symposium on "Fruit Flies of Economic Importance", Antigua, Guatemala.
December	1990	Hawaii Invitation Symposium on "Fighting Alien Fruit Flies in the Unique Hawaiian Environment", Poipu Beach, Kauai, Hawaii.
February	1991	Keynote Address, "Introduction, Colonization, and Establishment of Exotic Insect Pests", Pacific Branch of Entomological Society of America, Sacramento, California.
May	1991	XVII Pacific Science Congress, Symposium on "Biodiversity and Evolution of Speciose Pacific Diptera", Honolulu, Hawaii.
July	1991	National Meetings of Society for the Study of Evolution, American Naturalists, and Society of Systematic Zoology, Local Coordinator for Field Trips, Organizer for Symposium on "Evolutionary Biology of Hawaiian Drosophilidae", Hilo, Hawaii.
August	1991	22nd International Ethological Conference, Symposium on Behavioral Ecology of Tephritid Fruit Flies, Kyoto, Japan.
September	1991	International Symposium on the "Biology and Control of Fruit Flies", Co- Organizer of conference, Ginowan, Okinawa, Japan.
June	1992	XIX International Congress of Entomology, Symposium on "USA Quarantine Treatments - International Passports for Agricultural Commodities", Beijing,

		China.
July	1992	9th Annual Conference of International Society of Chemical Ecology,
<b>3</b>		Symposium on "Chemical Ecology of Fruit Flies", Keynote Address, Kyoto,
		Japan.
August	1992	43rd Annual Meeting of the American Institute of Biological Sciences,
C		Symposium on "Patterns of Speciation and Biogeography of Hawaiian Biota",
		Honolulu, Hawaii.
September	1992	Workshop on Development of Eradication Strategy of the Melon Fly in the
•		Mariana Islands, Sponsored by USDA/APHIS, Saipan, Northern Marianas.
November	1992	First Meeting of Working Group on Fruit Flies of the Western Hemisphere,
		Discussion Leader on "Taxonomy, Genetics, Behavior of Fruit Flies of the
		Western Hemisphere", San Jose, Costa Rica.
January	1993	Organizer of US/Japan Symposium on "Ecology & Evolutionary Biology on
		Islands with Implications for Conservation Research", Honolulu, Hawaii.
June	1993	Pacific Science Inter-Congress, Keynote Speaker for Symposium on "Speciation,
		Dispersal and Conservation of Species in the Pacific", Okinawa, Japan.
October	1993	International Workshop on "Biological Diversity and Ecosystem Function:
		Islands as Model Systems," sponsored by the Scientific Committee on Problems
		of the Environment (SCOPE). Paradise Island, Bahamas.
December	1993	National Meetings of the Entomological Society of America, Symposium on
		"Insect Mating Systems". Indianapolis, Indiana.
November	1994	Workshop on Medfly Biology and Development of Exotic Pest Research Center
	400-	at University of California, Riverside.
August	1996	International Congress of Entomology, Symposium on "The Legacy of R.C.L.
D 1	1006	Perkins, 100 Years of Entomology", Florence, Italy.
December	1996	Winter Meetings of Animal Behavior Society, Keynote Speaker on "Sexual
A	1007	Selection and the Evolution of Hawaiian Drosophilidae", London, England
April	1997	US/Japan Common Agenda: Roundtable Discussion on Environmental Education; Ministry of Foreign Affairs, Tokyo, Japan.
August	1997	International Congress of Ethology, Symposium on Sexual Selection, Vienna,
August	1997	Austria.
November	1997	Hawaii/Okinawa Joint Partnership in Development; Member of Hawaii Team led
rovember	1///	by Governor Benjamin Cayetano to address issues such as Nature Conservation
		and Fruit fly control in Hawaii and Okinawa; Naha City, Okinawa, Japan.
February	1998	International Symposium on "The Evolution of Fruit Fly (Diptera: Tephritidae)
1 0010,001	1,,,,	Behavior", Keynote Lecture on "Evolution of Behavior in Drosophila: Parallels
		to Tephritid Flies", Xalapa, Vera Cruz, Mexico.
March	1998	Invited participant in US/Japan Common Agenda Open Forum, Subcommittee on
		Water and Forest, Ministry of Foreign Affairs, Tokyo, Japan.
March	1998	International Symposium on Fruit Fly Control Technology Transfer to the Asia
		Pacific Region, sponsored by the Research Institute for the Subtropics, Okinawa,
		Japan.
July	1998	International Congress of Ecology, Symposium on "The Ecology of Natural
		Hybridization", Firenze, Italy.
August	2000	International Congress of Entomology, Symposium on "the Evolution of
		Acoustical Signals in Insects", Iguassu, Brazil
January	2001	Environmental Law Institute's National Biodiversity Symposium, "Status of the
		States: Innovative State Strategies for Biodiversity Conservation", Washington

		DC.
November	2001	Symposium on Joint Partnership for Academic Leadership in the Pacific Region,
		University of the Ryukyus, Okinawa, Japan.
March	2002	Okinawan Discovery Series, "Natural Living Treasures of Hawaii and Okinawa,
		Hawaii United Okinawan Association Invited Lecture, Honolulu, Hawaii.
November	2002	LEAD Japan Workshop on "Partnerships on Conservation Science through
		Shared Geospatial Databases", Okinawa, Japan.
August	2003	Royal Society of New Zealand, Wellington, NZ. "The Dynamics of Sexual
		Selection and the Genetic Consequences of Small Population Sizes".
November	2003	EPSCoR Foundation Workshop on NSF GK-12 Grantsmanship. "The GK-12
		Program in Hawaii – Using the Unique Biota of Hawaii for Enhancing Science
November	2003	Education", University of Oklahoma, Norman, Oklahoma. NSF Workshop to discuss AAPI (Asian-American – Pacific Islander) issues,
November	2003	National Science Foundation, Washington, D.C.
March	2004	Workshop on Designing Projects for Pacific Island Nations sponsored by the
17141011	2001	Ministry of Foreign Affairs of Japan – Okinawa, Japan
March	2004	Symposium on Partnerships in Science Education, AAAS National Conference,
		Seattle, Washington
September	2005	Keynote Address on "The Evolution of Hawaiian Drosophila: Genetic
		Consequences of Small Population Size" at the Brazilian Congress of Genetics,
		Aqua Lindoia, Sao Paulo, Brazil.
November	2006	Organizer and Sponsor for Workshop on "Cyberinfrastructure for Integrated
N. 1	2007	Earth Observing Systems", Honolulu, Hawaii
November	2007	Organizer and Sponsor for Workshop on "Cyberinfrastructure for Environmental
		Research & Education" held in conjunction with National EPSCoR Conference, Waikaloa, Kona, Hawaii.
November	2008	Keynote Address on "Dynamics of Sexual Selection in Hawaiian Drosophila: A
rovember	2000	Paradigm for Evolutionary Change" at the International Symposium on
		Drosophila Evolution: Taxonomy, Systematics, Phylogenetics and their
		Relationships to Drosophila Biology. Univ. California at San Diego,
		Birch Aquarium.
February	2010	Invited Speaker – "Sustainability science and STEM education, a new paradigm
		in light of changing environment and climate", at Sustainability Workshop
		sponsored by College of Engineering, UH Manoa, Workshop held at Honolulu
Eshmom	2010	Community College. Feb. 20, 2010.
February	2010	Invited Speaker to International Symposium on Island Sustainability: Challenges and Opportunities for the Pacific Islands in a Globalized World – Focusing on
		the Transfer of Okinawa and Hawaii's Sustainable Island Technologies and
		Innovations to the Pacific Islands – Meio University, Nago City, Okinawa, Japan.
		Presentation titled: "Renewable energy and Biochar Carbon Sequestration"
September	2010	Invited Speaker to University of Guam Conference on Island Sustainability;
-		Sept. 2-3, 2010; Agana, Guam
September	2012	Invited Poster Presentation at 2012 World Conservation Congress, Jeju Island, S.
		Korea. "A Systems Approach Towards Energy, Food and Environmental
N7 1	2012	Security: The Biochar Story".
November	2012	Invited participant – Innovation Working Group: "Designing Resilient Native
		Communities" Sunrise Springs Resort, Santa Fe, New Mexico. Nov. 1-4, 2012.

April	2016	Invited Presentation: Pacific Branch of Entomological Society of America; April
-		4-6, 2016; Honolulu, Hawaii – "The Dynamics of Sexual Selection and the
		Evolutionary Processes of Adaptive Shifts".
September	2016	Steering Committee on IUCN World Conservation Congress held in Honolulu,
_		Hawaii, September 1-10, 2016.
September	2016	Organizer of Workshop to "Restore a Mosquito Free Hawaii" September 6-7,
•		2016; Kilauea Military Camp, Hawaii Volcanoes National Park.

## **List of Publications: (refereed)**

- Hardy, D. E. and K. Y. Kaneshiro. 1968. New picture-winged *Drosophila* from Hawaii. Univ. of Texas Publ.No. 6818:171-262.
- Hardy, D. E. and K. Y. Kaneshiro. 1969. Descriptions of new Hawaiian *Drosophila*. Univ. Texas Publ. No. 6918:39-54.
- Kaneshiro, K. Y. 1969. A study of the relationships of Hawaiian *Drosophila* species based on external Male genitalia. Univ. Texas Publ. No. 6918:55-7.
- Kaneshiro, K. Y. 1969. The *Drosophila crassifemur* group of species in a new subgenus. Univ. Texas Publ. No. 6918:79-84.
- Kaneshiro, K. Y. and M. R. Wheeler. 1970. Preliminary report on the species of ananassae subgroup. Dros. Info. Serv. 45:143.
- Hardy, D. E. and K. Y. Kaneshiro. 1971. New picture-winged *Drosophila* from Hawaii. Part II. Univ. Texas Publ. No. 7103:151-170.
- Kaneshiro, K. Y. 1972. Phylogenetic relationship of Hawaiian Drosophilidae based on morphology and ecology. Abstr. 14th Intern. Cong. of Ent. p.52.
- Hardy, D. E. and K. Y. Kaneshiro. 1972. New picture-winged *Drosophila* from Hawaii. Part III. Univ. Texas Publ. No.7213:155-161.
- Kaneshiro, K. Y., H. L. Carson, F. E. Clayton, and W. B. Heed. 1973. Niche separation in a pair of homosequential *Drosophila* species from the Island of Hawaii. Amer. Nat. 107(958):766-774.
- Ahearn, J. N., H. L. Carson, Th. Dobzhansky, and K. Y. Kaneshiro. 1974. Ethological isolation among three species of the planitibia subgroup of Hawaiian *Drosophila*. Proc. Nat. Acad. Sci. 71(3):901-903.
- Kaneshiro, K. Y. 1974. Phylogenetic relationships of Hawaiian Drosophilidae based on morphology. In <u>Genetic Analysis of Speciation Mechanisms in Insects</u>. M.J.D. White, Ed., Melbourne, Australia. pp. 102-110.
- Johnson, W. E., H. L. Carson, K. Y. Kaneshiro, W. W. Steiner, and M. M. Cooper. 1975. Genetic variation in Hawaiian *Drosophila*. II. Allozymic differentiation in the *D. planitibia* subgroup. In <u>Isozymes Vol.4</u>, <u>Genetics and Evolution</u>. C. L. Markert, Ed. Academic Press, New York.
- Hardy, D. E. and K. Y. Kaneshiro. 1975. Studies in Hawaiian *Drosophila*. Modified mouthparts species. No. 1. mitchelli subgroup. Proc. Haw. Ent. Soc. 22(1):51-55.
- Hardy, D. E. and K. Y. Kaneshiro. 1975. Studies in Hawaiian *Drosophila*. Miscellaneous new species. No.1. Proc. Haw. Ent. Soc. 22(2):56-64.
- Kaneshiro, K. Y. 1976. A revision of generic concepts in the biosystematics of Hawaiian Drosophilidae. Proc. Haw. Ent. Soc. 22(2):255-278.
- Kaneshiro, K. Y. 1976. Ethological isolation and phylogeny in the planitibia subgroup of Hawaiian *Drosophila*. Evolution 30:740-745.
- Carson, H. L. and K. Y. Kaneshiro. 1976. *Drosophila* of Hawaii: Systematics and ecological genetics. Ann. Rev. Ecol. Syst. 7:311-345.

- Kaneshiro, K. Y. 1976. Evolutionary studies of two *Drosophila* species from Hawaii: A multidisciplinary approach. Proc. 1st. Ann. Conf. in Natural Sciences. pp.115-119. Hawaii Volcanoes Nat'l. Park.
- Kaneshiro, K. Y., A. T. Ohta and H. T. Spieth. 1977. Mushrooms as bait for *Drosophila*. Dros. Info. Serv. 52:85.
- Kaneshiro, K. Y. and F. C. Val. 1977. Natural hybridization between a sympatric pair of Hawaiian Drosophila. Amer. Nat. 111:897-902.
- Arita, L. and K. Y. Kaneshiro. 1978. Ethological isolation between two stocks of *D. adiastola* Hardy. Proc. Haw. Ent. Soc. 23(1):31-34.
- Hardy, D. E. and K. Y. Kaneshiro. 1979. A review of the modified tarsus species group of Hawaiian *Drosophila* (Drosophilidae: Diptera) I. the "split-tarsus" subgroup. Proc. Haw. Ent. Soc. 23(1):71-90.
- Kaneshiro, K. Y. 1980. Sexual selection, speciation, and the direction of evolution. Evolution 34(3):437-444.
- Kaneshiro, K. Y. 1980. Sexual behavior and phylogeny of Hawaiian *Drosophila*. Abstr. 2nd Intern. Cong. Syst. and Evol. Bio. p.114. Vancouver, Can.
- Arita, L. H., K. Y. Kaneshiro, and A. T. Ohta. 1981. Male-mimicking behavior in females of the Mediterranean fruit fly. Genetics suppl. 97(1):3.
- Hardy, D. E. and K. Y. Kaneshiro. 1981. Drosophilidae of Pacific Oceania. In the <u>Genetics and Biology of Drosophila</u>. J. Thompson, H. L. Carson, and M. Ashburner Eds. Acad. Press, New York.
- Kaneshiro, K. Y. and J. S. Kurihara. 1981. Sequential differentiation of sexual behavior in populations of *Drosophila silvestris*. Pacific Science 35(3):177-183.
- Kaneshiro, K. Y. and H. L. Carson. 1982. Selection experiments on mating behavior in *Drosophila* silvestris. Genetics 100:s34.
- Kaneshiro, K. Y. and A. T. Ohta. 1982. The flies fan out. Natural History Magazine 91:54-59.
- Kaneshiro, K.Y. 1983. *Drosophila (Sophophora) suzukii* (Matsumura). Proc. Hawaiian Entomol. Soc. 157-204
- Kaneshiro, K. Y. 1983. Sexual selection, direction of evolution and the biosystematics of Hawaiian Drosophilidae. Ann. Rev. of Ent. 28:161-178.
- Moy, J. H., K. Y. Kaneshiro, A. T. Ohta, and N. Nagai. 1983. Radiation disinfestation of California stone fruits infested by medfly Effectiveness and fruit quality. Journal of Food Science 48:928-934.
- Montague, J. R. and K. Y. Kaneshiro. 1983. Flower-breeding species of Hawaiian drosophilids in an early stage of sympatry. Pacific Insects 24(3-4): 209-213.
- Kaneshiro, K. Y., A. T. Ohta, J. S. Kurihara, K. M. Kanegawa, and L. R. Nagamine. 1983. Gamma radiation treatment for disinfestation of the medfly in California fruits. I. Stone fruits. Proc. Haw. Ent. Soc.24(2-3): 245-260.
- Arita, L. H. and K. Y. Kaneshiro. 1983. Pseudomale courtship behavior of the female Mediterranean fruit fly, *Ceratitis capitata* (Wied.) Proc. Haw. Ent. Soc. 24(2-3):205-210.
- Arita, L. H. and K. Y. Kaneshiro. 1984. The dynamics of the lek system and mating success in males of The Mediterranean fruit fly, *Ceratitis capitata* (Wiedemann). Proc. Haw'n. Entomol. Soc. 25:39-48.
- Kaneshiro, K. Y., A. T. Ohta, J. S. Kurihara, K. M. Kanegawa, and L.R. Nagamine. 1985. Gamma radiation treatment for disinfestation of the medfly in 35 varieties of California grown fruits in <u>Radiation Disinfestation of Food and Agricultural Products</u>. J. H. Moy (Ed.). pp. 98-110.
- Ohta, A. T., K. Y. Kaneshiro, J. S. Kurihara, K. M. Kanegawa, and L. R. Nagamine. 1985. Is the probit 9 security level appropriate for disinfestation using gamma radiation? In <u>Radiation Disinfestation of Food and Agricultural Products</u>. J. H. Moy (ed.). pp. 111-115.
- Arita, L. H. and K. Y.Kaneshiro. 1986. The structure and function of the anal glands during mating behavior of the Mediterranean fruit fly, *Ceratitis Capitata* (Wiedemann). Proc. Haw'n. Entomol.

- Soc. 26:27-30.
- DeSalle, R., L. V. Giddings, and K. Y. Kaneshiro. 1986. Mitochondrial DNA variability in natural populations of Hawaiian *Drosophila*. II. Genetic and phylogenetic relationships of natural populations of *D. silvestris* and *D. heteroneura*. Heredity 56:87-97.
- Kaneshiro, K. Y. and L. V. Giddings. 1987. The Significance of asymmetrical sexual isolation and the formation of new species. In <u>Evolutionary Biology</u>. M. K. Hecht, B. Wallace, and G. Prance, Eds. Plenum Publishing Co. Vol. 21. pp. 29-43.
- Kaneshiro, K. Y. and C. R. B. Boake. 1987. Sexual selection and speciation: Issues raised by Hawaiian *Drosophila*. Trends in Ecol. and Evol. Biol. 2:207-212.
- Kaneshiro, K. Y. 1987. The Dynamics of sexual selection and its pleiotropic effects. Behav. Genetics 17:559-569.
- Kaneshiro, K. Y. 1987. Speciation via sexual selection versus adaptive evolution in Hawaiian *Drosophila*. Insect Science and its Application 8:447-552.
- Kaneshiro, K. Y. and H. L. Carson. 1987. Sexual selection and the pomace fly. The Nature Conservancy News 37:23-25.
- Hoikkala, A., R. Hoy, and K. Y. Kaneshiro. 1987. Courtship sounds of Hawaiian *Drosophila* flies. Abstr.10th European Drosophila Research Conference. Barcelona, Spain.
- Hoikkala, A., R. Hoy, and K. Y. Kaneshiro. 1987. Mysterious high-frequency clicking sounds of Hawaiian picture-winged *Drosophila* species. Abstr. Evolutionary Biology Conf. Basel, Switzerland.
- Kaneshiro, K. Y. 1988. Modes of speciation in Hawaiian *Drosophila*. Bioscience 38:258-263.
- Hoy, R. H., A. Hoikkala, and K. Y. Kaneshiro. 1988. Hawaiian lovesongs: Evolutionary Innovation in courtship songs of *Drosophila*. Science 240: 217-219.
- Arita, L. H. and K. Y. Kaneshiro. 1988. Body size and mating success in males of the Mediterranean fruit fly. Pacific Science 42:173-177.
- Kaneshiro, K. Y. 1989. Biological uniqueness of Hawaii's Biota. In <u>Conservation Biology in Hawaii</u>, C. P. Stone and D. B. Stone (Eds.), University of Hawaii Press, Honolulu. pp. 7-10.
- Carson, H.L., K. Y. Kaneshiro, and F. C. Val. 1989. Natural hybridization between the sympatric Hawaiian species *Drosophila silvestris* and *Drosophila heteroneura*. Evolution 43:190-203.
- Kaneshiro, K. Y. 1989. The dynamics of sexual selection and founder effects in species formation. In <u>Genetics, Speciation and the Founder Principle</u>, L.V. Giddings, K.Y. Kaneshiro, and W.W. Anderson, Eds. Oxford Press pp. 279-296.
- Hoikkala, A., R. H. Hoy, and K. Y. Kaneshiro. 1989. High-frequency clicking sounds of Hawaiian picture-winged *Drosophila* species. Animal Behavior 37:927-934.
- Ohta, A.T., K.Y.Kaneshiro. J.S. Kurihara, K.M. Kanegawa, and L.R. Nagamine. 1989. Gamma radiation and cold treatments for the disinfestation of the Mediterranean fruit fly in California-grown oranges and lemons. Pacific Science 43(1):17-26.
- Arita. L. H. and K. Y. Kaneshiro. 1989. Sexual selection and lek behavior in the Mediterranean fruit fly, *Ceratitis capitata* (Wiedemann): Tephritidae). Pacific Science 43:135-143.
- Val, F.C. and K. Y. Kaneshiro. 1989. Drosophilidae (Diptera) from the Estacao Biologica de Boraceia on the coastal range of the State of Sao Paulo, Brazil: Geographical distribution. Vanzolini, P. E. and W.R. Heyer, Eds. Proceedings of Workshop on Neotropical Distribution Patterns. Academia Brasileira de Ciencias: Rio de Janeiro.
- Kaneshiro, K. Y. 1990. Natural hybridization in *Drosophila* with special reference to species from Hawaii. Can. J. Zool. 68:1800-1805.
- Perreira, W.D. and K.Y. Kaneshiro. 1990. Three new species of picture-winged Drosophila from the Hawaiian Islands. Proc. Haw. Ent. Soc. 30:79-84.
- Whittier, T.S. and K. Y. Kaneshiro. 1991. Male mating success and female fitness in the Mediterranean

- fruit fly (Diptera: Tephritidae). Ann. Ent. Soc. Am. 84:608-611.
- Shelly, T. and K. Y. Kaneshiro. 1991. Lek behavior of the Oriental fruit fly, *Dacus dorsalis*, in Hawaii (Diptera:Tephritidae). J. Insect Behav. 4:235-241.
- Kaneshiro, K. Y., L. H. Arita, K. M. Kanegawa, J. S. Kurihara, A. T. Ohta, and T. S. Whittier. 1991. Sexual selection in tephritid fruit fly species and its significance in the development of effective control methods. Proc. 1st Intern. Conf. on Trop. Fruit Flies. Kuala Lumpur, Malaysia. pp. 278-288.
- Whittier, T.S., K. Y. Kaneshiro, and L.D. Prescott. 1992. Mating behavior of Mediterranean fruit flies (Diptera: Tephritidae) in a natural environment. Ann. Ent. Soc. Am. 85:214-218.
- Kaneshiro, K. Y. 1992. Quality control for mass-reared strains of fruit flies. Proc. Intern. Symp. on The Biology and Control of Fruit flies. K. Kawasaki, O. Iwahashi, K. Y. Kaneshiro (Eds.). pp. 139-147.
- Kaneshiro, K. Y. 1992. The dynamics of sexual selection and the sterile insect technique. Proc. Intern. Symp. on the Biology and Control of Fruit Flies. K. Kawasaki, O. Iwahashi, K. Y. Kaneshiro (Eds.) . pp. 279-286.
- Kanmiya, K., K. Y. Kaneshiro, K. M. Kanegawa, and T.S. Whittier. 1992. Time domain acoustic analyses on the male melon fly mating songs between populations of Hawaii and Japan. Proc. Intern. Symp. of the Biology and Control of Fruit Flies. K. Kawasaki, O. Iwahashi, K. Y. Kaneshiro (Eds.). pp. 313-317.
- Moy, J.H., K.Y. Kaneshiro, K.H. Lee, N.Y. Nagai. 1992. Radiation disinfestation of fruits: Effectiveness and fruit quality. Proc. Final Research Co-ordination Meeting on Use of Irradiation as a Quarantine Treatment of Food and Agricultural Commodities. pp. 141-156. IAEA, Vienna.
- Van Steenwyk, R.A., K. Y. Kaneshiro, N.V. Hue, and T.S. Whittier. 1992. Rubidium as an internal physiological marker for Mediterranean fruit fly (Diptera: Tephritidae). J. Econ. Entomol. 85(6): 2357-2364.
- Kaneshiro, K. Y. 1993. Introduction, colonization, and establishment of exotic insect populations: Fruit flies in Hawaii and California. American Entomologist 39:23-29.
- Kaneshiro, K. Y., K. M. Kanegawa, and T. S. Whittier. 1993. Sexual selection in tephritid fruit flies and its implications in the Sterile Insect Release Method. In <u>Fruit Flies: Biology and Management</u>, M. Aluja and P. Liedo (eds.), pp. 177-179. Springer Verlag, New York, Inc.
- Kaneshiro, K. Y. 1993. Habitat-related variation and evolution by sexual selection, in <u>Evolution of Insect Pests</u> K.C. Kim and B.A. McPheron, eds., pp. 89-101, John Wiley Sons, Inc. Publ.
- Shelly, T.E., T.S. Whittier, W.D. Perreira, and K. Y. Kaneshiro. 1993. Behavioral responses of medflies to trimedlure baits: can leks be created artificially? Ann. Ent. Soc. Am. 86(3):341-351.
- Hoikkala, A. and K. Y. Kaneshiro. 1993. Change in the signal-response sequence responsible for asymmetric isolation between *Drosophila planitibia* and *D. silvestris*. Proc. Nat'l Acad. Sci. 90:5813-5817.
- Tompkins, L., S. P. McRoberts, and K. Y. Kaneshiro. 1993. Chemical communication in Hawaiian *Drosophila*. Evolution 47:1407-1419.
- Whittier, T.S., Frances Y. Nam, Todd E. Shelly, and K. Y. Kaneshiro. 1994. Male courtship success and female discrimination in the Mediterranean fruit fly (Diptera: Tephritidae). J. Insect Behav. 7:159-170.
- Shelly, T.E., T.S. Whittier, and K.Y. Kaneshiro. 1994. Sterile insect releases and the natural mating system of the Mediterranean fruit fly, *Ceratitis capitata* (Diptera: Tephritidae). Ann. Ent. Soc. Am. 87(4):470-481
- Hoikkala, A., K. Y. Kaneshiro, and R. R. Hoy. 1994. Courtship songs of the picture-winged *Drosophila planitibia* subgroup species. Animal Behavior 47:1363-1374.

- Kaneshiro, K. Y., R. G. Gillespie, and H. L. Carson. 1995. Chromosomes and male genitalia of Hawaiian Drosophila: Tools for interpreting phylogeny and geography. Pp. 57-71. In <u>Hawaiian Biogeography: Evolution on a Hot Spot Archipelago</u>, W. L. Wagner and E. Funk, eds. Smithsonian Institute Press.
- Kaneshiro, K. Y. 1995. Evolution, speciation, and the genetic structure of island populations. Pp. 23-34. In <u>Islands:Biological Diversity and Ecosystem Function</u>, P. Vitousek, H. Adsersen, and L. Loope, eds. Springer-Verlag, New York.
- Whittier, T.S. and K. Y. Kaneshiro. 1995. Intersexual selection in the Mediterranean fruit fly: does female choice enhance fitness? Evolution 49:990-996.
- Boake, C.R.B., T.E. Shelly, and K.Y. Kaneshiro. 1996. Sexual selection in relation to pest management strategies. Ann. Rev. of Entomology 41:211-230.
- Kaneshiro, K.Y. 1997. R.C.L. Perkins' legacy to evolutionary research on Hawaiian Drosophilidae (Diptera). Pac. Sci. 51:450-461.
- Hoikkala, A. and K.Y. Kaneshiro. 1997. Variation in male wing song characters in *Drosophila planitibia* (Hawaiian picture-winged *Drosophila* group). J. Insect Behavior 10(3):425-436.
- Nishida, R., T.E. Shelly, and K.Y. Kaneshiro. 1997. Acquisition of female-attracting fragrance by males of Oriental fruit fly from a Hawaiian lei flower, *Fagracea berteriana*. J. of Chemical Ecology 23:2275-2285.
- Kaneshiro, K.Y. and M. P. Kambysellis. 1999. Description of a new allopatric sibling species of Hawaiian *Drosophila*. Pacific Science 53:208-213.
- Sivinski, J., M. Aluja, G.N. Dodson, A. Friedberg, D. H. Headrick, K. Y. Kaneshiro, and P. J. Landolt. 1999. Topics in the evolution of sexual behavior in Tephritidae. . In M. Aluja and A. L. Norrbom (Eds.) Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior. Pp. 751-792. CRC Press, New York.
- Kaneshiro, K.Y. 1999. Sexual selection and speciation in Hawaiian *Drosophila* (Drosophilidae): A model system for research in Tephritidae. In M. Aluja and A. L. Norrbom (Eds.) Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior. Pp. 861-880. CRC Press, New York.
- Nishida, R., T.E. Shelly, T.S. Whittier, and K.Y. Kaneshiro. 2000. a-Copaene, a potential rendezvous cue for the Mediterranean fruit fly, *Ceratitis capitata*. J. Chemical Ecol. 26:87-100.
- Kambysellis, M.P., E.M. Craddock, S.L. Montgomery, K.Y. Kaneshiro, K. Edwards, and H.L. Carson. 2000. Ecology and evolution of *Drosophila ambochila*, a rare picture-winged species endemic to the Waianae Range of Oahu, Hawaiian Islands. Pac. Sci. 54:169-181.
- Edwards, K.A., L.T. Doescher, H.L. Carson, K.Y. Kaneshiro, and D. Yamamoto. 2000. Visible genetic markers for *Drosophila grimshawi*, a Hawaiian picture-winged fly. Pp. 325-341. A Report of the Yamamoto Behavior Genes Project. Mitsubishi Institute of Life Sciences. Tokyo, Japan.
- Hardy, D.E., K. Y. Kaneshiro, F.C. Val, P.M. O'Grady. 2001. Review of the haleakalae species group of Hawaiian Drosophila (Diptera: Drosophilidae). Bishop Museum Bulletin in Entomology 9. 88pp. Bishop Museum Press, Honolulu, Hawaii. USA.
- O'Grady, P.M., F.C. Val, D.E. Hardy, K.Y. Kaneshiro. 2001. The *rustica* species group of Hawaiian *Drosophila* (Diptera: Drosophilidae). Pan-Pacific Entomologist 77(4):254-260.
- Kondoh, Y., K.Y. Kaneshiro, K. Kimura, D. Yamamoto. 2003. Evolution of sexual dimorphism in the olfactory brain of Hawaiian Drosophila. Proc. R. Soc. Lond. 207:1005-1013.
- Kaneshiro, K.Y. 2003. Sexual selection. In V. Resh and R. Carde (Eds.) Encyclopedia of Insects. Pp. 1032-1038. Elsevier Science, Academic Press. London.
- Evenhuis, N.L. and K.Y. Kaneshiro (Editors). 2004. D. Elmo Hardy Memorial Volume: Contributions to the Systematics and Evolution of Diptera (Edited Volume) 222 pp. Bishop Museum Press. Honolulu.

- Kaneshiro, K.Y. 2004. Sex, flies, and the genetic consequences of small population size. In D. Elmo Hardy Memorial Volume: Contributions to the Systematics and Evolution of Diptera, N. Evenhuis and K.Y. Kaneshiro Eds. Bishop Museum Bulletin in Entomology. 12: 43-51.
- Kaneshiro, K.Y., P. Chinn, K.N. Duin, A.P. Hood, K. Maly, and B. Wilcox. 2005. Hawaii's mountain-to-sea ecosystems: Social-ecological microcosms for sustainability science and practice. EcoHealth 2:349-360.
- Kaneshiro, K.Y. 2006. Dynamics of sexual selection in the Hawaiian Drosophilidae: A paradigm for evolutionary change. Proc. Hawaiian Entomol. Soc. (Invited Review) 38:1-19.
- Edwards KA, Doescher LT, Kaneshiro KY, Yamamoto D 2007 A database of wing diversity in the Hawaiian *Drosophila*. PLoS ONE 2(5): e487. doi:10.1371/journal.pone.0000487
- Handler, A.T., D.S. Gruner, W.P. Haines, M.W. Lange, and K.Y. Kaneshiro. 2007. Arthropod surveys on Palmyra Atoll, Line Islands, and insights into the decline of the native tree *Pisonia grandis* (Nyctaginaceae). Pacific Science 61(4): 485-502.
- Kido, M., C. Mundt, K. Montgomery, A. Asquith, D. Goodale, and K.Y. Kaneshiro. 2008. Integration of wireless sensor networks into cyberinfrastructure for monitoring Hawaiian "mountain-to-sea" environmentsl. Environmental Management 42(4):658-666.
- O'Grady, PM, Ashburner, M, Castrezana, S, DeSalle, R, Kaneshiro, KY, Lapoint, RT, Magnacca, KN, Markow, TA, McAllister, B, Ruíz, A, Vilela, CR, Val, FC 2008. Comment on the proposed conservation of usage of *Drosophila* Fallén, 1823 (Insecta, Diptera). Bulletin of Zoological Nomenclature 65(2): 141-144.
- Kaneshiro, K.Y. and R. Lapointe. 2009. Sexual Selection. In R. Gillespie and D. Clague (Eds.) Encyclopedia of Islands, University of California Press pp. 825-829.
- Kido, M.H., K.Y. Kaneshiro, K.N. Montgomery. 2010. Cyberinfrastructure for sustainability in coupled human-environment systems. In J.A. Roumasset, K.M. Burnett, and A.M. Baliscan (Eds.). Sustainability Science for Watershed Landscapes. Pp. 127-140.SE Asian Regional Center for Grad Study and Research in Agriculture, Laguna, Philippines.
- Pace, M. L., S.E. Hampton, K.E. Limburg, E.M. Bennett, E.M. Cook, A.E. Davis, J.M. Grove, K.Y. Kaneshiro, S.L. LaDeau, G.E. Likens, D.M. McKnight, D.C. Richardson, and D.L. Strayer. 2010. Communicating with the public: opportunities and rewards for individual ecologists. *Front. Ecol. Environm.* 8(6): 292-298.
- Yanagimachi, R., Y. Matsubara, T. Andoh, T. Harumi, G. Cherr, C. Vines, F. Griffin, Murali Pillai, H. Matsubara, T. Calvalho, Y. Naitoh, and K. Kaneshiro. 2013. Sperm attractant in the Micropyle Region of Fish and Insect Eggs. *Biol Reprod biolreprod. published January* 9, 2013, doi:10.109/biolreprod.112.105072
- Kuo, I., J. Saw, D. D. Kapan, S. Christensen, K.Y. Kaneshiro, and S. P. Donchie. 2012. *Flavobacterium akiainvivens*, sp. nov., from decaying *Wikstroemia oahuensis*, Hawaii. Intern. J. Systematic and Evolutionary Microbiology. Ijs.0.04217-0; published ahead of print 03/08/2013. Doi:10.1099/iys.0.047217-0.
- Wan, X., S. Hou, J.A. Saito, K.Y. Kaneshiro, and S.P. Donachie. 2015. Genome sequence of *Flavobacterium akiainvivens* IK-1<sup>T</sup>, isolated from decaying *Wikstroemia oahuensis*, an endemic Hawaiian shrub. Genome Announcements 3(5):1-2. e01222-15.
- Krushelnycky, P. D., C.S. Ogura-Yamada, K.M. Kanegawa, K.Y. Kaneshiro, K.N. Magnacca. 2017. Quantifying the effects of an invasive thief ant on the reproductive success of rare Hawaiian picture-winded flies. Biological Conservation 215: 254-259.
- Kaneshiro, K.Y., Y. L. Chan, and M. Kawatachi. 2017. Leaning science by doing science that matters: Nā Wai 'Ekolu and the Ala Wai Watershed Restoration Project. Smithsonian Anacostia Community Museum, Urban Waterways Newsletter: Issue #9, Summer/Fall 2017.

Haiwang, Y., M. Jaime, M. Polihronakis, K. Kanegawa, T. Markow, K. Kaneshiro, and B. Oliver. 2018. Reannotation of eight *Drosophila* genomes. bioRxiv 350363; doi: <a href="https://doi.org/10.1101/350363">https://doi.org/10.1101/350363</a>

Sarikaya, D.P., S.H. Church, L.P. Lagomarsino, K.N. Magnacca, S. Montgomery, D.K. Price, K.Y.Kaneshiro, and C.G. Estavour. 2019. Reproductive capacity evolves in response to ecology through common developmental mechanisms in Hawaiian *Drosophila*. Current Biology, online https://doi.org/10.1016/j.cub.2019.04.063

#### **Recent and Current Research Awards:**

Kure Atoll Ecological Field Station. SoH DLNR – January 2013 thru March 2022; \$2,521874. Oahu Wildlife Habitat Restoration and Management. SoH DLNR – January 2013 thru December 2021; \$3,865,190.

Kauai Wildlife Habitat Restoration and Management. SoH DLNR – November 2016 thru September 2021; \$275,637.

Kauai Watershed Protection and Management. SoH DLNR – August 2016 thru April 2022; \$540,170.

Native Invertebrates: Captive Propagation. SoH DLNR – January 2016 thru December 2021; \$985,190. Hawaii Conservation Alliance. Federal Agencies: Defense, NRCS, FWS, USGS, USFS, NPS, NOAA, USDA. October 2012 thru June 2022; \$986,493.

Support for STEM Activities. Iolani School – September 2015 thru September 2020; \$252,252.

Native Invertebrate: Picture-Wing Flies. SoH DLNR – November 2015 thru April 2022; \$209,746.

Volcano Rare Plant Propagation Facility. SoH DLNR – May 2013 thru September 2022; \$1,464,629.

Olinda Rare Plant Propagation Facility. SoH DLNR – November 2012 thru September 2022; \$796,155.

Rare Plant Propagation. US Department of Defense (Army) September 2013 thru September 2022; \$363,203.

Project Support for the Snail Extinction Prevention Program – SoH DLNR- February 2019 thru July 2021; \$1,153,994

Support for STEM Activities in the Ala Wai Watershed. Iolani School – September 2015 – September 2022; \$361,332.

## **Awards of Recognition:**

2003 Distinguished Service in Conservation Biology Award by the Hawaii Conservation Alliance.
2005 Permanent exhibit in six Natural History Museums which "...features the work of scientists who are making leading discoveries about the evolution of life." <a href="http://explore-evolution.unl.edu/overview.html">http://explore-evolution.unl.edu/overview.html</a>