

5. List of 105 Original Articles and Reviews Produced in This Project

1. Agatsuma T, Ito M. Isozyme study of *Onchocerca volvulus* and *Onchocerca gutturosa* in Guatemala. *J Parasitol* 1985; 71: 370–373.
2. Agatsuma T, Uemoto K, Ochoa JO. Biochemical genetics of blackfly isozymes. I. Isozyme variation among three species, *Simulium ochraceum*, *S. metallicum* and *S. horacioi* from Guatemala. *Jpn J Sanit Zool* 1986; 37: 1–9.
3. Akiyama T, Ushijima N, Anan S, Nonaka S, Yoshida H, Zea FGE. Immunological studies of onchocerciasis in Guatemala. *J Dermatol* 1981; 8: 43–46.
4. Aoki Y, Recinos MM, Hashiguchi Y. Life span and distribution of *Onchocerca volvulus* microfilariae in mice. *J Parasitol* 1980; 66: 797–801.
5. Aoki Y, Sakamoto M, Yoshimura T, Tada I, Recinos MM, Figueroa MH. Onchocercomas in Guatemala, with special reference to appearance of new nodules and parasite content. *Am J Trop Med Hyg* 1983; 32: 741–746.
6. Fukumoto S, Ito M, Kamiya M, Flores FZ. Diagnostic studies of human onchocerciasis in Guatemala; Investigation of incubation method for skin biopsy. *Jpn J Parasitol* 1983; 32(2): 88.
7. Hashiguchi Y, Kawabata M, Ito S, Recinos CMM. Limited fly load and development of *Onchocerca volvulus* microfilariae in Guatemalan *Simulium ochraceum*. *J Helminthol* 1981; 55: 189–196.
8. Hashiguchi Y, Kawabata M, Takaoka M, Flores CO. Microfilarial density in Guatemalan onchocerciasis patient's skin with special reference to the hourly intake by *Simulium ochraceum*. *Jpn J Trop Med Hyg* 1983; 11: 25–33.
9. Hashiguchi Y, Kawabata M, Takaoka M, Yoshimura T, Recinos CMM. The long-term absence of onchocerciasis in an area where the vectors, *Simulium* spp., are found. *Trans Royal Soc Trop Med Hyg* 1981; 75: 901.
10. Hashiguchi Y, Kawabata M, Tanaka I, Okazawa T, Flores CO, Recinos MM. Seasonal variation in the microfilarial skin density of *Onchocerca volvulus* and in the biting activity of *Simulium* spp. in Guatemala. *Trans Royal Soc Trop Med Hyg* 1981; 75: 839–845.
11. Hashiguchi Y, Kawabata M, Zea FG, Recinos CMM, Flores CO. The use of an *Onchocerca volvulus* microfilarial antigen skin test in an epidemiological survey of onchocerciasis in Guatemala. *Trans Royal Soc Trop Med Hyg* 1979; 73: 543–548.
12. Hashiguchi Y, Tada I, Ochoa AJO, Recinos CMM, Molina PA. Bovine and equine onchocerciasis in Guatemala, especially in San Vicente Pacaya. *J Parasitol* 1981; 67: 286–287.
13. Hashiguchi Y, Tada I, Flores CO, Takaoka H. Diurnal biting activity of four zoophilic species of *Simulium* in an area endemic for human onchocerciasis in Guatemala. *Jpn J Trop Med Hyg* 1982; 10: 239–244.
14. Hirai H, Sakaguchi Y, Tada I. Chromosomes of *Onchocerca volvulus* and *O. gutturosa*. *Z Parasitenkd* 1985; 71: 135–139.
15. Hirai H, Tada I, Takahashi H, Nwoke BEB, Ufomadu GO. Chromosomes of *Onchocerca volvulus* (Spirurida: Onchocercidae): A comparative study between Nigeria and Guatemala. *J Helminthol* 1987; 61: 43–46.
16. Ikeda T, Aoki Y, Tada I, Recinos CMM, Ochoa AJO, Molina PA. A sero-epidemiological study of onchocerciasis with the indirect hemagglutination test. *J Parasitol* 1979; 65: 855–861.
17. Ikeda T, Tada I, Aoki Y. The indirect hemagglutination test for onchocerciasis performed with blood collected on filter paper. *J Parasitol* 1978; 64: 786–789.
18. Ishida N, Nakayasu K, Mendez GEA, Yamada H. Aspects of onchocercal punctate opacities observed in Guatemala. 1., *Folia Ophthalmol Jpn* 1981; 32: 2145–2151.
19. Ito M, Kamiya M, Lujan TA. Fluctuation of ELISA and skin biopsy results in individual inhabitants re-examined after several months in the endemic area of Guatemalan onchocerciasis. *Ann Trop Med Parasitol* 1984; 78: 553–555.
20. Ito M, Lujan TA, Fukumoto S, Kamiya M. Enzyme-linked immunosorbent assay (ELISA) as a diagnostic tool for Guatemalan onchocerciasis using a bovine filaria (*Onchocerca gutturosa*) antigen and blood samples collected on filter paper. *Jpn J Vet Res* 1983; 31: 141–150.
21. Ito S, Tanaka I, Ochoa OA. Comparative studies on the affinities of two blackflies, *Simulium metallicum* and *S. ochraceum* for the larvae of *Onchocerca volvulus* in Guatemala. *Jpn J Sanit Zool* 1980; 31: 261–267.
22. Kamimura K, Suzuki T, Okazawa T, Inaoka T, Ochoa OA. Effect of temefos against the blackfly larvae in stream tests in Guatemala. *Jpn J Sanit Zool* 1985; 36: 189–195.
23. Kamiya M, Fukumoto S, Ito M, Lujan A. A simplified indirect haemagglutination test (IHA) for the diagnosis of onchocerciasis. *Jpn J Vet Res* 1983; 45(Suppl): 105.
24. Kawabata M, Hashiguchi Y, Zea FG. Distribution pattern of microfilariae in relation to sex and age in Guatemalan onchocerciasis. *Trans Royal Soc Trop Med Hyg* 1983; 77: 215–216.
25. Kawabata M, Hashiguchi Y, Zea FG, Yamada H, Aoki Y, Tada I, Recinos CMM, Flores CO. The distribution of microfilariae in the skin of Guatemalan onchocerciasis patients: an evaluation of diagnostic potentials. *J Helminthol* 1980; 54: 183–190.
26. Kawabata M, Izui S, Anan S, Kondo S, Fukumoto S, Zea

- FG, Kobayakawa T. Circulating immune complexes and their possible relevance to other immunological parameters in Guatemalan onchocerciasis. *Int Archs Allergy Appl Immun* 1983; 72: 128–133.
27. Kawabata M, Zea FG, Izui S, Kobayakawa T. IgM Rheumatoid factors in Guatemalan onchocerciasis. *Trans Royal Soc Trop Med Hyg* 1984; 78: 356–358.
 28. Korenaga M, Tada I, Hashiguchi Y, Takaoka H, Baba M, Castro JC, Zea FGE. Detection of specific IgE antibodies in Guatemalan onchocerciasis by enzyme-linked immunosorbent assay (ELISA). *Jpn J Parasitol* 1986; 35: 295–301.
 29. Korenaga M, Tada I, Mimori T, Sakamoto M, Lujan TA, Zea FGE, Castro JC, Yarzabal L. Enzyme-linked immunosorbent assay (ELISA) in the detection of IgG antibodies in onchocerciasis using blood collected on filter paper. *Jpn J Parasitol* 1983; 32: 347–355.
 30. Matsuo K. Aplicacion de larvicida solido de temefos en el control de la oncocercosis en Guatemala. *Bol Sanit Panamer* 1983; 95: 412–417.
 31. Matsuo K, Okazawa T, Onishi O, Ochoa AJO. Maintenance of the adults of Guatemalan blackfly, *Simulium ochraceum*, in the laboratory. *Jpn J Sanit Zool* 1978; 29: 251–254.
 32. Matsuo K, Ochoa AJO. Scanning electron microscopic studies on Guatemalan black flies. I. Abdominal dorsal hairs of larvae of 6 species. *Jpn J Sanit Zool* 1979; 30: 329–333.
 33. Matsuo K, Okazawa T, Onishi O, Ochoa AJO. Experimental observation of developmental period of *Onchocerca volvulus* in blackfly, *Simulium ochraceum*. *Jpn J Parasitol* 1980; 29: 13–17.
 34. Mimori T. A histological study of the skin and nodule during the course of diethylcarbamazine treatment in onchocerciasis. *Jpn J Parasitol* 1985; 34: 301–309.
 35. Mimori T, Tada I, Shiwaku K, Ufomadu GO, Nwoke BFB. A biometric study of *Onchocerca volvulus* microfilariae from Nigeria using the nuclear counting method. *Z Parasitenkd* 1986; 72: 835–836.
 36. Miura M, Sakamoto M, Aoki Y. Scanning electron microscopy of *Onchocerca volvulus* microfilaria from Guatemala. *Trop Med* 1985; 27: 141–146.
 37. Nakamura Y, Yamagata Y, Takaoka H, Takahashi M, Ochoa OA, Molina PA, Takahashi H. A control trial of the vector of onchocerciasis, *Simulium ochraceum* (Diptera: Simuliidae) in the Lavaderos Valley, Guatemala. *Jpn J Sanit Zool* 1981; 32: 51–58.
 38. Nakayasu K, Ishida N, Mendez G, Yamada EAH, Matsuki T. Ocular onchocerciasis in Guatemala—Follow-up survey of the clinical findings of anterior ocular lesions. *Folia Ophthalmol Jpn* 1982; 33: 1123–1130.
 39. Nogami S, Hayashi Y, Korenaga M, Tada I, Tanaka H. Monoclonal antibodies specific for *Onchocerca volvulus* as determined by immunofluorescence. *Internat J Parasitol* 1988; 18: 503–507.
 40. Nogami S, Hayashi Y, Tanaka M, Korenaga M, Tada I, Tanaka H. Antigenic similarity of *Onchocerca volvulus* to other helminths examined by monoclonal antibodies against *O. volvulus*. *Jpn J Exp Med* 1986; 56: 177–183.
 41. Nonaka S, Hashiguchi Y, Kawabata M, Aoki Y, Tada I, Figueroa MH, Zea FG. Dermatological survey of onchocerciasis in Guatemala. *J Dermatol* 1980; 7: 61–70.
 42. Nonaka S, Yoshimura T, Sakamoto M, Zea FG. Dermatological survey of onchocerciasis in Guatemala. II. Relationship between the prevalence rate of cutaneous changes and that of onchocerciasis. *J Dermatol* 1983; 10: 439–445.
 43. Ochoa AO. Studies on the anthropophilic blackfly species in Guatemala, with special reference to the transmission of onchocerciasis in the south-eastern endemic area. *Jpn J Sanit Zool* 1982; 33: 129–138.
 44. Ochoa AJO, Takaoka H. A new blackfly species of *Mayacnephia* from Guatemala (Diptera: Simuliidae). *Jpn J Trop Med Hyg* 1993; 21: 5–7.
 45. Ogata K. Preliminary report of Japan-Guatemala onchocerciasis control pilot project. In Laird M, ed. *Blackflies—the future for biological methods in integrated control*. 1981. pp 105–115.
 46. Okazawa T, Onishi O. Description of a new species of *Simulium* (*Simulium*) Latrelle and redescription of *Simulium* (*Simulium*) *metallicum* Bellradi from Guatemala (Diptera: Simuliidae). *Jpn J Sanit Zool* 1980; 31: 167–179.
 47. Okazawa T, Takahashi H. Blackflies (Diptera: Simuliidae) in highland streams in Guatemala, with special reference to the seasonal prevalence of immature stages and voltinism. *Jpn J Sanit Zool* 1981; 32: 301–308.
 48. Okazawa T, Nodasaka Y. Morphological observations on the first and the last-instar larvae of the genus *Gigantodax* (Diptera: Simuliidae). *Jpn J Sanit Zool* 1982; 33: 95–103.
 49. Okazawa T, Yamagata Y. Breeding streams of *Mayacnephia aguirrei* (Diptera: Simuliidae). *Jpn J Sanit Zool* 1985; 36: 349–351.
 50. Poinar Jr GO, Takaoka H. *Isomermis benevolus* sp. n. (Mermithidae, Nematoda), a parasite of *Simulium metallicum* (Diptera: Simuliidae) in Guatemala. *Jpn J Sanit Zool* 1979; 30: 305–307.
 51. Poinar Jr GO, Takaoka H. Three new mermithids (Nematoda) from Guatemalan blackflies (diptera: Simuliidae). *Syst Parasit* 1981; 3: 13–19.
 52. Procnunier WS, Hirai H. The chromosomes of *Onchocerca volvulus*. *Parasitol Today* 1986; 2: 307–309.
 53. Sakamoto M, Zea FG. The change of blood picture of patients with onchocerciasis following administration of diethylcarbamazine. *Trop Med* 1983; 25: 47–50.
 54. Suzuki T. A guidebook for Guatemalan onchocerciasis (Robles disease)—with special reference to vector control. Tokyo: JICA; 1983.
 55. Suzuki T. Manual of onchocerciasis (Robles disease) control in Guatemala. Tokyo: JICA; 1983.
 56. Suzuki T. Glossary for technical terms on onchocerciasis (Robles disease) in Guatemala. Tokyo: JICA; 1983.
 57. Suzuki T, Mizutani K. Onchocerciasis vector control in Guatemala. *Jpn J Sanit Zool* 1992; 43: 273–286.

58. Suzuki T, Takaoka H, Tada I. Distribution, bionomics and control of vector of human onchocerciasis in Guatemala. WHO, ONCHO/EC/WP/ 1986; 86: 21.
59. Suzuki T, Mizutani K. Onchocerciasis control in Guatemala. *Med Entomol Zool* 1992; 43: 273–286.
60. Tabaru Y, Nakamura Y, Ochoa AJO, Molina PA, Takahashi H. Preliminary field study on larvicide formulations for onchocerciasis vector control in Guatemala. *Jpn J Sanit Zool* 1982; 33: 369–377.
61. Tada I. Comparison of onchocerciasis between Central and South Americas: A tragic tropical rainforest. *Fukuoka Acta Med* 1993; 84(2): 43–46.
62. Tada I. Onchocerciasis. *Progress of Medical Parasitology in Japan*. Tokyo: Meguro Parasitological Museum; 2003; 8: 557–570.
63. Tada I. International medical Cooperation: General view. *Progress of Medical Parasitology in Japan*. Tokyo: Meguro Parasitological Museum; 2003; 8: 585–590.
64. Tada I. Japanese medical aid programs in Latin America. *Progress of Medical Parasitology in Japan*. Tokyo: Meguro Parasitological Museum; 2003; 8: 631–645.
65. Tada I, Aoki Y, Rimola CE, Ikeda T, Matsuo K, Ochoa AJO, Recinos CM, Sato S, Godoy BHA, Orellana JJC, Takahashi H. Onchocerciasis in San Vicente Pacaya, Guatemala. WHO/ONCHO/77.140, 1–9.
66. Tada I, Aoki Y, Rimola CE, Ikeda T, Matsuo K, Ochoa AJO, Recinos CM, Sato S, Godoy BHA, Orellana JJC, Takahashi H. Onchocerciasis in San Vicente Pacaya, Guatemala. *Am J Trop Med Hyg* 1979; 28: 67–71.
67. Tada I, Figueroa MH. The density of *Onchocerca volvulus* microfilariae in the skin at different times of the day in Guatemala. *Jpn J Parasitol* 1974; 23: 220–225.
68. Tada I, Figueroa MH, Takaoka H. Epidemiological studies on Robles' disease (American onchocerciasis) in Guatemala. *Jpn J Trop Med Hyg* 1974; 2: 35–51.
69. Tada I, Korenaga M, Mimori T, Sakamoto M, Yoshimura T, Recinos CM, Flores OF, Lujan TA, Ochoa AJO, Castro JC, Zea FG. A comparative study of several diagnostic measures applied in Guatemalan onchocerciasis. *Jpn J Parasitol* 1985; 34: 261–271.
70. Tada I, Korenaga M, Shiwaku K, Ogunba EO, Ufomadu GO, Nwoke BEB. Specific serodiagnosis with adult *Onchocerca volvulus* antigen in an enzyme-linked immunosorbent assay. *Am J Trop Med Hyg* 1987; 36: 383–386.
71. Tada I, Mimori T, Nonaka S, Figueroa MH. Mazzotti reaction: Clinical and histological observation of onchocerciasis cases tested in Guatemala. *Jpn J Parasitol* 1981; 30: 501–507.
72. Tada I, Mimori T, Sakaguchi Y, Kusano M, Hashiguchi Y, Recinos CM. The use of aceto-orcein-stained squash preparations for enumeration of nuclei in microfilariae of various filarial parasites. *Am J Trop Med Hyg* 1981; 30: 593–597.
73. Takaoka H. Pathogens of blackfly larvae in Guatemala and their influence on natural populations of three species of onchocerciasis vectors. *Am J Trop Med Hyg* 1980; 29: 467–472.
74. Takaoka H. Seasonal occurrence of *Simulium ochraceum*, the principal vector of *Onchocerca volvulus*, in the south-eastern endemic area of Guatemala. *Am J Trop Med Hyg* 1981; 30: 1121–1132.
75. Takaoka H. Further studies of pathogens of blackfly larvae in Guatemala. Their influence on natural populations of three species of onchocerciasis vectors. In Laird M, Praeger NY, ed. *Biocontrol of medical and veterinary pests*. 1981. pp 78–104.
76. Takaoka H. Observations on the bionomics of larval and man-biting female populations of *Simulium horacioi*, a new potential vector of *Onchocerca volvulus* in Guatemala. *Jpn J Trop Med Hyg* 1982; 10: 49–62.
77. Takaoka H. Review on the biology and ecology of adult blackflies in relation to the transmission of onchocerciasis in Guatemala. *Jpn J Trop Med Hyg* 1982; 10: 1–22.
78. Takaoka H. Pathogens of blackflies in Guatemala and their influence on natural populations of the three onchocerciasis vectors. *Jpn J Trop Med Hyg* 1992; 20: 251–259.
79. Takaoka H, Hansen KM, Takahashi H, Ochoa JO, Juarez EL. Development of *Onchocerca volvulus* larvae in *Simulium ochraceum* at various altitudes in Guatemala with special reference to the ambient temperature. *Jpn J Trop Med Hyg* 1981; 9: 187–197.
80. Takaoka H, Ochoa JO, Takahashi M, Takahashi H. Evaluation of temephos as a larvicide against *Simulium ochraceum* (Diptera: Simuliidae) in Guatemala. *J Med Entomol* 1981; 18: 145–152.
81. Takaoka H, Ochoa JO, Juarez EL, Hansen KM. Effects of temperature on development of *Onchocerca volvulus* in *Simulium ochraceum* and longevity of the simuliid vector. *J Parasitol* 1982; 68: 478–483.
82. Takaoka H, Takahashi H. A new species of blackfly (Diptera: Simuliidae) from upland areas of Guatemala. *J Med Entomol* 1982; 19: 63–67.
83. Takaoka H, Suzuki T. Epidemiology and control of Guatemalan onchocerciasis. In Kim KC, Meritt RW, ed. *Blackflies: Ecology, population management and annotated world list*. The Pennsylvania State University Press; 1987. pp 374–386.
84. Takaoka M, Lujan TA, Hashiguchi Y, Kawabata M, Ito Y, Hayashi S. Evaluation of the double diffusion test for the serodiagnosis of onchocerciasis in Guatemala. *Jpn J Parasitol* 1983; 32: 451–457.
85. Tanaka I, Hashiguchi Y, Okazawa T, Ochoa AJO, Tada I. Duration of blood feeding of *Simulium ochraceum* in relation to intake of *Onchocerca volvulus* microfilariae. *Jpn J Sanit Zool* 1980; 31: 209–214.
86. Umino T, Suzuki T, Ochoa AJO. Insecticide studies in vector control of Guatemalan onchocerciasis. 1. Short carry of temephos in minute streamlets. *Jpn J Sanit Zool* 1983; 34: 213–219.
87. Umino T, Suzuki T, Juarez EL. Insecticide studies in vector control of Guatemalan onchocerciasis. 2. Efficacy of larvicides assessed by simulated tough tests. *Jpn J Sanit Zool* 1983; 34: 269–277.
88. Umino T, Suzuki T. Insecticide studies in vector control

- of Guatemalan onchocerciasis. 3. Laboratory tests on adsorption of larvicides to soil. *Jpn J Sanit Zool* 1984; 35: 1–6.
89. Undeen AH, Takaoka H, Hansen K. A test of *Bacillus thuringiensis* var. *israelensis* de Barjac as a larvicide for *Simulium ochraceum*, the Central American vector of onchocerciasis. *Mosquito News* 1981; 41: 37–40.
 90. Wada Y. Theoretical approach to the epidemiology of onchocerciasis in Guatemala. *Jpn J Med Sci Biol* 1982; 35: 183–196.
 91. Watanabe M, Tanaka I, Okazawa T, Yamagata Y, Ochoa AJO. Notes on the age determination, ovariole changes and gonotrophic cycle of *Simulium ochraceum* in Guatemala. *Jpn J Sanit Zool* 1980; 31: 215–222.
 92. Yamada H. Onchocerciasis (Robles disease, River-blindness) in Guatemala and Ghana—Clinical features and epidemiological research—Folia. *Ophthalmol Jpn* 1978; 29: 1817–1837.
 93. Yamada H. Fluorescein angiographic findings in ocular onchocerciasis in Guatemala—with reference to findings of ERG of Ghanaian patients. *Acta Soc Ophthalm Jap* 1979; 83: 874–886.
 94. Yamada H. Ocular onchocerciasis in Guatemala. *Folia Ophthalmol Jpn* 1981; 32: 1012–1024.
 95. Yamada H, Oikawa T. Ocular onchocerciasis in heavily endemic focus in Guatemala. *Folia. Ophthalmol Jpn* 1980; 31: 1637–1647.
 96. Yamagata Y. Effect of channel slope and stream discharge on the distribution of blackfly larvae in Guatemala. *Jpn J Sanit Zool* 1984; 35: 293–300.
 97. Yamagata Y. Crawling movement of larvae of *Mayacnephia aguirrei* (Diptera: Simuliidae). *Jpn J Sanit Zool* 1985; 36: 227–231.
 98. Yamagata Y. Movement response of larvae of *Simulium ochraceum* Walker and *S. horacioi* Okazawa et Onishi (Diptera: Simuliidae) to water depth and current velocity in a trough. *Jpn J Sanit Zool* 1986; 37: 11–16.
 99. Yamagata Y, Kanayama A. Micro-distribution of *Simulium ochraceum* Walker (Diptera: Simuliidae) larvae in relation to stream depth and current velocity. *Jpn J Sanit Zool* 1985; 36: 227–231.
 100. Yamagata Y. Seasonal change of discharge rate in streams infested with *Simulium ochraceum* Walker (Diptera: simuliidae) in Guatemala. *Jpn J Sanit Zool* 1986; 37: 91–94.
 101. Yamagata Y, Okazawa T, Molina PO. Geologic and geomorphological studies on distribution of *Simulium ochraceum* (Diptera: Simuliidae) larvae in Guatemala. *Jpn J Sanit Zool* 1984; 35: 95–102.
 102. Yamagata Y, Ochoa AJO, Molina PA, Sato H, Uemoto K, Suzuki T. Chemical control of *Simulium ochraceum* Walker (Diptera: Simuliidae) larvae in an onchocerciasis endemic area of Guatemala. *Trop Med Parasit* 1987; 38: 205–210.
 103. Yanagawa T, Kasagi F, Yoshimura T. A method for estimating incidence rates of onchocerciasis from skin-snip biopsies with consideration of false negatives. *Biometrics* 1984; 40: 301–311.
 104. Yoshimura T, Hashiguchi Y, Kawabata M, Flores COF, Gudiel OO, Mazariegos LEC. Prevalence and incidence of onchocerciasis as baseline data for evaluation of vector control in San Vicente Pacaya, Guatemala. *Trans Royal Soc Trop Med Hyg* 1982; 76: 48–53.
 105. Zea FG, Hashiguchi Y, Kawabata M, Tada I, Yoshimura T, Flores CO, Recinos CMM. Guatemalan onchocerciasis: Skin snipping methods and microfilarial densities in a given minute area of the skin. *Jpn J Trop Med Hyg* 1980; 8: 23–32.