

日本で公表されたサケ科魚類に関連する文献集 (17): 2002 (英文)

メタデータ	言語: English 出版者: さけ・ます資源管理センター 公開日: 2024-04-05 キーワード (Ja): キーワード (En): 作成者: 浦和, 茂彦 メールアドレス: 所属:
URL	https://fra.repo.nii.ac.jp/records/2001602

This work is licensed under a Creative Commons
Attribution 4.0 International License.



INFORMATION

Bibliography of Salmonids published in Japan (17): 2002

Edited by Shigehiko Urawa

*Research Division, National Salmon Resources Center
2-2 Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan
(urawa@salmon.affrc.go.jp)*

This current salmonid bibliography, distributed yearly since 1988, covers scientific publications in Japan. The former sixteen issues were published in Technical Reports of Hokkaido Salmon Hatchery (Fish and Eggs), No. 157-163, Scientific Reports of Hokkaido Salmon Hatchery, No. 49-50, and Bulletin of National Salmon Resources Center, No. 1-5. Titles are given in English for all articles. A reprint of article may be available from the author. An author's address is shown in square brackets following the citation. This 17th issue has covered literature published in 2002. The bibliography is divided into the following sections:

Aquaculture and Propagation -----	23
Ecology-General -----	23
Distribution and Migrations -----	24
Breeding and Reproduction -----	24
Feeding, Diets, and Growth -----	24
Population and Management -----	25
Morphology, Taxonomy and Phylogeny -----	25
Physiology and Endocrinology -----	25
Biochemistry -----	26
Genetics -----	26
Diseases and Parasites -----	27
Water Quality and Environment -----	28
Toxicology -----	28
Economy -----	28
Author Index -----	29

Key words : salmonid fish, bibliography, Japan

Aquaculture and Propagation

02-001 Experimental release of the sea run form amago, the Japanese native salmon, *Oncorhynchus masou ishikawae* Jordan et McGregor, at the Abu River in Yamaguchi Prefecture. Ohhashi, Y., T. Hatama, H. Fujimura, and A. Yasunari. 2002. Bull. Yamaguchi Pref. Fish. Res. Ctr., 1: 73-81. In Japanese. [Yamaguchi Prefectural Fisheries Research Center, Aiofutajima, Yamaguchi 854-0893, Japan]

Ecology-General

02-002 Ecological studies on the dispersal of newly emerged masu salmon fry, *Oncorhynchus masou*. Nagata, M. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 1-87. [Hokkaido Fish Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433, Japan (nagatam@fishexp.pref.hokkaido.jp)]

02-003 Replacement of white-spotted charr *Salvelinus leucomaenis* by brown trout *Salmo trutta* in a branch of the Chitose River, Hokkaido. Takami, T., T. Yoshihara, Y. Miyakoshi, and R. Kuwabara. 2002. Nippon Suisan Gakkaishi, 68: 24-28. In Japanese with English summary. [Hokkaido Fish

Hatchery, Mashike Research Branch, Hokkaido 077-0216, Japan (ttakami@cocoa.ocn.ne.jp)]

Distribution and Migrations

02-004 Migratory history of fishes: present status and perspectives of the analytical methods. Arai, T. 2002. Japan. J. Ichthyol., 49: 1-23. In Japanese with English summary. [Otsuchi Marine Research Center, Ocean Research Institute, University of Tokyo, 2-106-1 Akahama, Otsuchi, Iwate 028-1102, Japan (arai@wakame.ori.u-tokyo.ac.jp)]

02-005 Identifying sea-run brown trout, *Salmo trutta*, using Sr:Ca ratios of otolith. Arai, T., A. Kotake, T. Aoyama, H. Hayano, and N. Miyazaki. 2002. Ichthyol. Res., 49: 380-383. [Otsuchi Marine Research Center, Ocean Research Institute, University of Tokyo, 2-106-1 Akahama, Otsuchi, Iwate 028-1102, Japan (arai@wakame.ori.u-tokyo.ac.jp)]

02-006 Analysis of otolith microchemistry of chum salmon, *Oncorhynchus keta*, collected in Otsuchi Bay, northeastern Japan. Arai, T., and N. Miyazaki. 2002. Otsuchi Marine Sci., 27: 13-16. [Otsuchi Marine Research Center, Ocean Research Institute, University of Tokyo, 2-106-1 Akahama, Otsuchi, Iwate 028-1102, Japan (arai@wakame.ori.u-tokyo.ac.jp)]

02-007 Fishing strategy and properties of upstream migration for masu salmon, *Oncorhynchus masou*, adults in the Miomote River. Koike, T., and T. Satoh. 2002. Bull. Niigata Pref. Inland Water Fish. Exp. Stat., 26: 5-14. In Japanese with English summary. [Niigata Prefectural Inland Water Fisheries Experiment Station, Nagaoka, Niigata 940-1137, Japan]

02-008 Diurnal variations in the upstream migration of adult masu salmon (*Oncorhynchus masou*) in rivers of Hokkaido during the spawning season. Mayama, H. 2002. Bull. Natl. Salmon Resources Center, 5: 21-26. In Japanese with English summary. [Research Division, National Salmon Resources Center, 2-2 Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan (mayama@salmon.affrc.go.jp)]

02-009 Landlocking of anadromous white-spotted charr *Salvelinus leucomaenis* by damming. Shimoda, K., S. Nakano, and S. Yamamoto. 2002. Japan. J.

Ichthyol., 49: 25-32. In Japanese with English summary. [Hokkaido Fish Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433, Japan (shimodak@fishexp.pref.hokkaido.jp)]

02-010 Occurrence of red spotted masu salmon in the Jinzu River inhabited by masu salmon. Tago, Y. 2002. Suisanzoshoku, 50: 137-142. In Japanese with English summary. [Toyama Prefectural Fisheries Research Institute, Takatsuka, Namerikawa, Toyama 936-8536, Japan]

Breeding and Reproduction

02-011 Comparison of spawning ecology of three salmonids in the inlet streams of Lake Chuzenji, central Japan. Wakabayashi, T., T. Nakamura, H. Kubota, and T. Maruyama. 2002. Japan. J. Ichthyol., 49: 133-141. In Japanese with English summary. [Freshwater Fisheries and Environment Division, National Research Institute of Fisheries Science, Fishery Research Agency, Komaki 1088, Ueda, Nagano 386-0031, Japan (ntomo@fra.affrc.go.jp)]

Feeding, Diets, and Growth

02-012 Age, growth and sexual maturity of brown trout, *Salmo trutta*, in Hokkaido, Japan. Aoyama, T., T. Takami, K. Shimoda, and T. Koyama. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 115-123. In Japanese with English summary. [Hokkaido Fish Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433, Japan]

02-013 Growth retardation in late autumn and stimulation of the growth by photoperiod control in Biwa salmon *Oncorhynchus masou* subsp. Fujioka, Y. 2002. Bull. Shiga Pref. Fish. Exp. Stat., 49: 57-65. In Japanese with English summary. [Shiga Prefectural Fisheries Experiment Station, Hikone, Shiga 522-0057, Japan]

02-014 Recent decrease in mean body weight of adult masu salmon caught in the Jinzu River. Tago, Y. 2002. Suisanzoshoku, 50: 387-391. In Japanese with English summary. [Toyama Prefectural Fisheries Research Institute, Takatsuka, Namerikawa, Toyama 936-8536, Japan]

02-015 Individual growth and phase differentiation of lacustrine masu salmon, *Oncorhynchus masou*, under

artificial rearing conditions. Tamate, T., and K. Maekawa. 2002. Ichthyol. Res., 49: 397-400. [Laboratory of Conservation Biology, Field Science Center for Northern Biosphere, Hokkaido University, Sapporo 060-0809, Japan (tamate@exfor.agr.hokudai.ac.jp)]

Population and Management

02-016 Size of juvenile masu salmon *Oncorhynchus masou* caught by recreational fishing. Ando, D., Y. Miyakoshi, K. Takeuchi, M. Nagata, T. Sato, and S. Yanai. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 143-147. In Japanese with English summary. [Hokkaido Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433, Japan (andod@fishexp.pref.hokkaido.jp)]

02-017 Estimates of numbers of juvenile masu salmon *Oncorhynchus masou* caught by recreational anglers in an urban stream. Ando, D., Y. Miyakoshi, K. Takeuchi, M. Nagata, T. Sato, S. Yanai, and S. Kitada. 2002. Nippon Suisan Gakkaishi, 68: 52-60. In Japanese with English summary. [Kumaishi Research Branch, Hokkaido Fish Hatchery, Hokkaido 043-0402, Japan (andod@fishexp.pref.hokkaido.jp)]

02-018 Population assessment of sockeye salmon *Oncorhynchus nerka* caught by recreational angling and commercial fishery in Lake Toya, Japan. Matsuiishi, T., A. Narita, and H. Ueda. 2002. Fish. Sci., 68: 1205-1211. [Graduate School of Fisheries Science, Hokkaido University, Hakodate, Hokkaido 041-8611, Japan (matsuisi@fish.hokudai.ac.jp)]

02-019 Effects of catch-and-release angling on growth, survival and catchability of white-spotted charr *Salvelinus leucomaenis* in wild streams. Tsuboi, J., K. Morita, and T. Matsuishi. 2002. Nippon Suisan Gakkaishi, 68: 180-185. In Japanese with English summary. [Graduate School of Fisheries Sciences, Hokkaido University, Hakodate, Hokkaido 041-8611, Japan (tsuboi@fish.hokudai.ac.jp)]

Morphology, Taxonomy and Phylogeny

02-020 Biological characteristics of fall-run chum salmon (*Oncorhynchus keta*) caught in the lower Amur River. Ohkuma, K., T. Suzuki, K. Yurano, S. F. Zolotukhin, and V. G. Markovtsev. 2002. Bull. Natl. Salmon Resources Center, 5: 33-36. [Research Division, National Salmon Resources Center, 2-2

Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan (ohkuma@salmon.affrc.go.jp)]

Physiology and Endocrinology

02-021 Profiles in growth, smoltification, immune function and swimming performance of 1-year-old masu salmon *Oncorhynchus masou masou* reared in water flow. Azuma, T., S. Noda, T. Yada, M. Ototake, H. Nagoya, S. Moriyama, H. Yamada, T. Nakanishi, and M. Iwata. 2002. Fish. Sci., 68: 1282-1294. [Nikko Branch, National Research Institute of Aquaculture, Nikko, Tochigi 321-1661, Japan (azuma@fra.affrc.go.jp)]

02-022 Effects of cortisol and growth hormone on the seawater tolerance of sockeye salmon (*Oncorhynchus nerka*). Ban, M. 2002. Bull. Natl. Salmon Resources Center, 5: 27-31. [Research Division, National Salmon Resources Center, 2-2 Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan (dukeban@salmon.affrc.go.jp)]

02-023 Effects of Rhizopus extract administration on somatic growth and sexual maturation in lacustrine sockeye salmon *Oncorhynchus nerka*. Bhandari, R. K., I. Ushikoshi, H. Fukuoka, N. Koide, K. Yamauchi, and H. Ueda. 2002. Fish. Sci., 68: 776-782. [Division of Marine Biosciences, Graduate School of Fisheries Science, Hokkaido University, Hakodate, Hokkaido 041-8611, Japan (hueda@fsc.hokudai.ac.jp)]

02-024 Size and season of smoltification and precocious sexual maturation in amago salmon. Fujioka, Y. 2002. Bull. Shiga Pref. Fish. Exp. Stat., 49: 51-55. In Japanese with English summary. [Shiga Prefectural Fisheries Experiment Station, Hikone, Shiga 522-0057, Japan]

02-025 Assessment for seawater adaptability of smolting masu salmon using juxtaglomerular cell number in the kidney. Mizuno, S., N. Misaka, Y. Sasaki, Y. Murakami, D. Ando, T. Kitamura, Y. Shinriki, and N. Kasahara. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 149-152. In Japanese with English summary. [Hokkaido Fish Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433, Japan]

02-026 Effects of growth rate and body size in spring season on 0+ smoltification in masu salmon

Oncorhynchus masou. Shimoda, K. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 97-105. In Japanese with English summary. [Hokkaido Fish Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433, Japan]

02-027 Circadian changes in serum concentrations of steroids in Japanese char *Salvelinus leucomaenis* at the stage of final maturation. Yamada, H., R. Satoh, M. Ogoh, K. Takaji, Y. Fujimoto, T. Hakuba, H. Chiba, A. Kambegawa, and M. Iwata. 2002. Zool. Sci., 19: 891-898. [School of Fisheries Sciences, Kitasato University, Sanriku, Iwate 022-0101, Japan (hyamada@kitasato-u.ac.jp)]

02-028 Telomerase activity detected in eyed embryos of rainbow trout *Oncorhynchus mykiss*. Yoda, M., K. G. Takahashi, and K. Mori. 2002. Fish. Sci., 68: 132-137. [Laboratory of Aquacultural Biology, Graduate School of Agricultural Science, Tohoku University, Sendai, Miyagi 981-8555, Japan (waradica@bios.tohoku.ac.jp)]

Biochemistry

02-029 Growth and efficiency of feed usage by Atlantic salmon (*Salmo salar*) fed diets with different dietary protein: Energy ratios at two feedings levels. Azevedo, P. A., D. P. Bureau, S. Leeson, and C. Y. Cho. 2002. Fish. Sci., 68: 878-888. [Fish Nutrition Research Laboratory, Department of Animal and Poultry Science, University of Guelph, Guelph, Ontario N1G2W1, Canada (pazevedo@uoguelph.ca)]

02-030 Effect of the addition of DHA-rich residual ethyl ester and used vegetable oil to extruded pellet on growth performance of rainbow trout. Matsuda, Y., K. Hata, and T. Takeuchi. 2002. Suisanzoshoku, 50: 341-346. In Japanese with English summary. [Central Research Laboratory, Nippon Suisan Kaisya, Ltd., Kitano, Hachioji, Tokyo 108-8477, Japan]

02-031 Effect of feeding fermented krill sauce residue containing extruded pellet on growth performance of rainbow trout and red sea bream. Matsuda, Y., I. Shioya, T. Hara, N. Doumoto, K. Hata, and T. Takeuchi. 2002. Suisanzoshoku, 50: 103-108. In Japanese with English summary. [Central Research Laboratory, Nippon Suisan Kaisya, Ltd., Kitano,

Hachioji, Tokyo 108-8477, Japan]

02-032 Biochemical differences between hatchery-reared and wild masu salmon *Oncorhynchus masou* smolts. Misaka, N., S. Mizuno, K. Shimoda, Y. Sasaki, K. Naito, D. Ando, T. Kitamura, and N. Kasahara. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 89-96. In Japanese with English summary. [Hokkaido Fish Hatchery, Kitakashiwagi-3-373, Eniwa, Hokkaido 061-1433, Japan]

02-033 Changes of phosphorus absorption from several feed ingredients in rainbow trout during growing stages and effect of extrusion of soybean meal. Satoh, S., M. Takanezawa, A. Akimoto, V. Kiron, and T. Watanabe. 2002. Fish. Sci., 68: 325-331. [Laboratory of Fish Nutrition, Tokyo University of Fisheries, Minato, Tokyo 108-8477, Japan (ssatoh@tokyo-u-fish.ac.jp)]

02-034 Isolation and characterization of L-rhamnose-binding lectins from chum salmon (*Oncorhynchus keta*) eggs. Shiina, N., H. Tateno, T. Ogawa, K. Muramoto, M. Saneyoshi, and H. Kamiya. 2002. Fish. Sci., 68: 1352-1366. [K. Muramoto: Department of Biological Resource Sciences, Graduate School of Agricultural Science, Tohoku University, Sendai, Miyagi 981-8555, Japan (muramoto@biochem.tohoku.ac.jp)]

Genetics

02-035 Current status and perspective of molecular cytogenetic studies in fish. Abe, S. 2002. Fish Genet. Breed. Sci., 32: 1-10. In Japanese with English summary. [Laboratory of Breeding Science, Division of Marine Biosciences, Graduate School of Fisheries Sciences, Hokkaido University, 3-1-1 Minato, Hakodate, Hokkaido 041-8611, Japan (abesyu@fish.hokudai.ac.jp)]

02-036 Fatness and growth rate of the broodstock of non-spotted rainbow trout, *Oncorhynchus mykiss* at Aichi Fisheries Research Institute. Hattori, K., M. Mizuno, M. Ochiai, and M. Uemura. 2002. Bull. Aichi Fish. Res. Inst., 9: 39-41. In Japanese with English summary. [Marine Resources Research Center, Aichi Fisheries Research Institute, Tyohama, Minamichita, Aichi 470-3412, Japan]

02-037 Estimation of heritability of tolerance to low-

oxygen water in rainbow trout (*Oncorhynchus mykiss*). Kudo, H., N. Inoguchi, and A. Kijima. 2002. Suisanzoshoku, 50: 369-374. In Japanese with English summary. [Iwate Prefectural Inland Fisheries Technology Center, Yoriki, Matuo, Iwate 028-7302, Japan]

02-038 Estimation of heritability of parr mark numbers by correlation between masou trout (*Oncorhynchus masou*) parents and offspring. Kudo, H., N. Inoguchi, and A. Kijima. 2002. Fish Genet. Breed. Sci., 32: 11-18. In Japanese with English summary. [Iwate Prefectural Inland Fisheries Technology Center, Yoriki, Matuo, Iwate 028-7302, Japan]

02-039 Structure and functions of MHC class I gene in rainbow trout *Oncorhynchus mykiss*. Ototake, M., J. M. Dijkstra, I. Kiryu, Y. Yoshiura, A. Fujiwara, U. Fischer, and T. Nakanishi. 2002. Fish Genet. Breed. Sci., 32: 67-74. In Japanese with English summary. [Fisheries Research Agency, National Research Institute of Aquaculture, 224-1 Hiruta, Tamaki-cho, Watarai-gun, Mie 519-0423, Japan (ototake@affrc.go.jp)]

02-040 Reduction of jacking rates by artificial selection of masu salmon *Oncorhynchus masou*. Shimoda, K., H. Omori, and Y. Sasaki. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 153-155. In Japanese with English summary. [Hokkaido Fish Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433 Japan]

02-041 Biotechnological study of coho salmon, *Oncorhynchus kisutch* in Pref. Miyagi. Suto, A., S. Hasegawa, K. Chida, M. Saeki, and T. Fujiwara. 2002. Miyagi Pref. Rep. Fish. Sci., 2: 45-58. In Japanese. [Miyagi Prefectural Freshwater Fisheries Experimental Station, Yoshida, Taiwa-cho, Miyagi 981-3625, Japan]

02-042 Studies on the breeding of amago salmon, *Oncorhynchus masou ishikawae* - VIII: biological characteristics of the strain selected for smolt for twelve generations. Tokuhara, T. I., and T. Kuwada. 2002. Rep. Gifu Pref. Fresh Water Fish Res. Inst., 47: 1-4. In Japanese. [Gifu Prefectural Fresh Water Fish Research Institute, 2605 Hane, Hagiwara, Mashita-gun, Gifu 509-2592, Japan]

02-043 Haplo-diploid mosaic embryos in cutthroat

trout, *Oncorhynchus clarki*. Yamaha, E., S. Kimura, M. Tanaka, S. Sakao, T. Fujimoto, and K. Arai. 2002. Fish Genet. Breed. Sci., 32: 121-126. In Japanese with English summary. [Nanae Fresh-Water Laboratory, Field Science Center for Northern Biosphere, Hokkaido University, Hakodate, Hokkaido 061-8611, Japan]

02-044 Haploid-diploid mosaic amago salmon *Oncorhynchus masou ishikawae* appeared in the gynogenetic diploids produced by inhibition of the cleavage. Yamaki, M., and K. Arai. 2002. Fish Genet. Breed. Sci., 31: 91-96. In Japanese with English summary. [Ehime Prefectural Uwajima Fishery High School, 1-39 Meirin-cho, Uwajima, Ehime 798-0086, Japan]

02-045 Mosaicisms observed in various organs of the amago salmon *Oncorhynchus masou ishikawae* developing from eggs treated to inhibit cleavage. Yamaki, M., H. Satoh, S. Yamaguchi, and K. Arai. 2002. Fish Genet. Breed. Sci., 32: 93-101. In Japanese with English summary. [Ehime Prefectural Uwajima Fishery High School, 1-39 Meirin-cho, Uwajima, Ehime 798-0086, Japan]

Diseases and Parasites

02-046 Investigation of the transmission stage of the microsporidian *Kabatana takedai* in salmonids. Fujiyama, I., S. Urawa, H. Yokoyama, and K. Ogawa. 2002. Bull. Natl. Salmon Resources Center, 5: 1-6. [S. Urawa: Research Division, National Salmon Resources Center, 2-2 Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan (urawa@salmon.affrc.go.jp)]

02-047 Studies of the control of bacterial kidney disease (BKD) in salmonid fish: application of polymerase chain reaction (PCR) for BKD diagnosis. Kasuya, K., T. Satou, and M. Yoshimizu. 2002. Bull. Tochigi Pref. Fish. Exp. Stat., 45: 13-16. In Japanese with English summary. [Tochigi Prefectural Fisheries Experimental Station, Sarado-2599, Yuzukami, Nasu-gun, Tochigi 324-0404, Japan]

02-048 Lymphocytic apoptosis by infectious hematopoietic necrosis in host. Hatakeyama, M., and D. K. Sakai. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 125-130. [Hokkaido Fish Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433 Japan]

02-049 Cell apoptosis caused by recombinant protein from infectious hematopoietic necrosis virus genes. Hatakeyama, M., and D. K. Sakai. 2002. Sci. Rep. Hokkaido Fish Hatchery, 56: 131-138. [Hokkaido Fish Hatchery, Kitakashiwagi 3-373, Eniwa, Hokkaido 061-1433, Japan]

02-050 Pathogenicity of *Saprolegnia* species associated with outbreaks of salmonid saprolegniosis in Japan. Hussein, M. M. A., and K. Hatai. 2002. Fish. Sci., 68: 1067-1072. [Division of Fish Diseases, Nippon Veterinary and Animal Science University, Musashino, Tokyo 180-8602, Japan (hatai@scan-net.ne.jp)]

02-051 Infection of *Salmincola californiensis* (Copepoda: Lernaeopodidae) on juvenile masu salmon (*Oncorhynchus masou*) from a stream in Hokkaido. Nagasawa, K., and S. Urawa. 2002. Bull. Natl. Salmon Resources Center, 5: 7-12. [Southeast Asian Fisheries Development Center, Aquaculture Department, Tigbauan 5021, Iloilo, Philippines]

02-052 Susceptibility of *Flavobacterium psychrophilum* 4 strains and *Pseudomonas plecoglossicida* 1 strain to ultraviolet irradiation. Nakai, Y. 2002. Rep. Gifu Pref. Fresh Water Fish Res. Inst., 47: 13-15. In Japanese. [Gifu Prefectural Fresh Water Fish Research Institute, 2605 Hane, Hagiwara, Mashita-gun, Gifu 509-2592, Japan]

02-053 Isolation of *Aeromonas salmonicida*, causative agent of furunculosis, from chum salmon caught in the river or coast. Nomura, T., H. Honma, H. Kasai, and M. Yoshimizu. 2002. Bull. Fish. Sci. Hokkaido Univ., 53: 45-50. In Japanese with English summary. [Research Division, National Salmon Resources Center, 2-2 Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan (nomura.tetsuichi@salmon.affrc.go.jp)]

02-054 Quantitative trait loci (QTL) responsible for resistance to a viral disease in fish. Okamoto, N., T. Sakamoto, and A. Ozaki. 2002. Fish Genet. Breed. Sci., 32: 75-86. [Department of Aquatic Bioscience, Tokyo University of Fisheries, Minato, Tokyo 108-8477, Japan (nokamoto@tokyo-u-fish.ac.jp)]

02-055 A single cohort time delay model of the life-cycle of the salmon louse *Lepeophtheirus salmonis* on Atlantic salmon *Salmo salar*. Tucker, C. S., R.

Norman, A. P. Shinn, J. E. Bron, C. Sommerville, and R. Wootten. 2002. Fish Pathol., 37: 107-118. [Institute of Aquaculture, University of Stirling, Stirling, FK9 4LA, UK (ran@maths.stir.ac.uk)]

02-056 Investigation of *Ichthyophonus hoferi* infections in rainbow trout *Oncorhynchus mykiss* at the trout farms in Shizuoka Prefecture. Yoshikawa, M., A. Watanabe, and N. Okamoto. 2002. Bull. Shizuoka Pref. Fish. Exp. Stn., 37: 13-17. In Japanese. [Shizuoka Prefectural Fisheries Experiment Station, Inogashira 579-2, Fujinomiya, Shizuoka, Japan]

02-057 Present status of infectious diseases of fish in Japan. Wakabayashi, H. 2002. Nippon Suisan Gakkaishi, 68: 815-824. In Japanese with English summary. [Fish Health Laboratory, 3-22-11-717 Sendagi, Bunkyo, Tokyo 113-0022, Japan (hisa718@alpha.ocn.ne.jp)]

Water Quality and Environment

02-058 Aggregative distribution of benthic animals in conjunction with environmental conditions below coho salmon culture-pen. Sasaki, R., A. Oshino, and R. Kikuchi. 2002. Miyagi Pref. Rep. Fish. Sci., 2: 16-26. In Japanese with English summary. [Kesennuma Miyagi Prefectural Fisheries Experimental Station, Hajikami, Kesennuma, Miyagi 988-0247, Japan]

Toxicology

02-059 Toxicity of agricultural chemicals to fish-XXV. Kuge, T., Y. Kobayashi, Y. Kakita, and H. Suzuki. 2002. Rep. Gunma Fish. Exp. Stat., 8: 1-2. In Japanese. [Gunma Fisheries Experiment Station, 13 Shikishima-cho, Maebashi, Gunma 371-0036, Japan]

Economy

02-060 Factors on short- and long- term changes in wholesale prices of salmon in Hokkaido. Shimizu, I. 2002. Bull. Natl. Salmon Resources Center, 5: 13-19. In Japanese with English summary. [Research Division, National Salmon Resources Center, 2-2 Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan (shimizu.ikutaro@salmon.affrc.go.jp)]

Author Index

- Abe, S. 02-035.
 Akimoto, A. 02-033.
 Ando, D. 02-016, 02-017, 02-025, 02-032.
 Aoyama, T. 02-005, 02-012.
 Arai, K. 02-043, 02-044, 02-045.
 Arai, T. 02-004, 02-005, 02-006.
 Azevedo, P. A. 02-029.
 Azuma, T. 02-021.
 Ban, M. 02-022.
 Bhandari, R. K. 02-023.
 Bron, J. E. 02-055.
 Bureau, D. P. 02-029.
 Chiba, H. 02-027.
 Chida, K. 02-041.
 Cho, C. Y. 02-029.
 Dijkstra, J. M. 02-039.
 Doumoto, N. 02-031.
 Fischer, U. 02-039.
 Fujimoto, T. 02-043.
 Fujimoto, Y. 02-027.
 Fujimura, H. 02-001.
 Fujioka, Y. 02-013, 02-024.
 Fujiyama, I. 02-046.
 Fujiwara, A. 02-039.
 Fujiwara, T. 02-041.
 Fukuoka, H. 02-023.
 Hakuba, T. 02-027.
 Hara, T. 02-031.
 Hasegawa, S. 02-041.
 Hata, K. 02-030, 02-031.
 Hatai, K. 02-050.
 Hatakeyama, M. 02-048, 02-049.
 Hatama, T. 02-001.
 Hattori, K. 02-036.
 Hayano, H. 02-005.
 Honma, H. 02-053.
 Hussein, M. M. A. 02-050.
 Inoguchi, N. 02-037, 02-038.
 Iwata, M. 02-021, 02-027.
 Kakita, Y. 02-059.
 Kambegawa, A. 02-027.
 Kamiya, H. 02-034.
 Kasahara, N. 02-025, 02-032.
 Kasai, H. 02-053.
 Kasuya, K. 02-047.
 Kijima, A. 02-037, 02-038.
 Kikuchi, R. 02-058.
 Kimura, S. 02-043.
 Kiron, V. 02-033.
 Kiryu, I. 02-039.
 Kitada, S. 02-017.
 Kitamura, T. 02-025, 02-032.
 Kobayashi, Y. 02-059.
 Koide, N. 02-023.
 Koike, T. 02-007.
 Kotake, A. 02-005.
 Koyama, T. 02-012.
 Kubota, H. 02-011.
 Kudo, H. 02-037, 02-038.
 Kuge, T. 02-059.
 Kuwabara, R. 02-003.
 Kuwada, T. 02-042.
 Leeson, S. 02-029.
 Maekawa, K. 02-015.
 Markovtsev, V. G. 02-020.
 Maruyama, T. 02-011.
 Matsuda, Y. 02-030, 02-031.
 Matsuishi, T. 02-018, 02-019.
 Mayama, H. 02-008.
 Misaka, N. 02-025, 02-032.
 Miyakoshi, Y. 02-003, 02-016, 02-017.
 Miyazaki, N. 02-005, 02-006.
 Mizuno, M. 02-036.
 Mizuno, S. 02-025, 02-032.
 Mori, K. 02-028.
 Morita, K. 02-019.
 Moriyama, S. 02-021.
 Murakami, Y. 02-025.
 Muramoto, K. 02-034.
 Nagasawa, K. 02-051.
 Nagata, M. 02-002, 02-016, 02-017.
 Nagoya, H. 02-021.
 Naito, K. 02-032.
 Nakai, Y. 02-052.
 Nakamura, T. 02-010.
 Nakanishi, T. 02-021, 02-039.
 Nakano, S. 02-009.
 Narita, A. 02-018.
 Noda, S. 02-021.
 Nomura, T. 02-053.
 Norman, R. 02-055.
 Ochiai, M. 02-036.
 Ogawa, K. 02-046.
 Ogawa, T. 02-034.
 Ogoh, M. 02-027.
 Ohhashi, Y. 02-001.
 Ohkuma, K. 02-020.
 Okamoto, N. 02-054, 02-056.
 Omori, H. 02-040.
 Oshino, A. 02-058.
 Ototake, M. 02-021, 02-039.
 Ozaki, A. 02-054.
 Saeki, M. 02-041.
 Sakai, D. K. 02-048, 02-049.
 Sakamoto, T. 02-054.
 Sakao, S. 02-043.
 Saneyoshi, M. 02-034.
 Sasaki, R. 02-058.
 Sasaki, Y. 02-025, 02-032, 02-040.
 Sato, T. 02-016, 02-017.
 Satoh, H. 02-045.
 Satoh, R. 02-027.
 Satoh, S. 02-033.
 Satoh, T. 02-007.
 Satou, T. 02-047.
 Shiina, N. 02-034.
 Shimizu, I. 02-060.
 Shimoda, K. 02-009, 02-012, 02-026, 02-032, 02-040.
 Shinn, A. P. 02-055.
 Shinriki, Y. 02-025.
 Shioya, I. 02-031.
 Sommerville, C. 02-055.
 Suto, A. 02-041.
 Suzuki, H. 02-059.
 Suzuki, T. 02-020.
 Tago, Y. 02-010, 02-014.
 Takahashi, K. G. 02-028.
 Takaji, K. 02-027.
 Takami, T. 02-003, 02-012.
 Takanezawa, M. 02-033.
 Takeuchi, K. 02-016, 02-017.
 Takeuchi, T. 02-030, 02-031.
 Tamate, T. 02-015.

Tanaka, M. 02-043.
Tateno, H. 02-034.
Tokuhara, T. I. 02-042.
Tsuboi, J. 02-019.
Tucker, C. S. 02-055.
Ueda, H. 02-018, 02-023.
Uemura, M. 02-036.
Urawa, S. 02-046, 02-051.
Ushikoshi, I. 02-023.
Yada, T. 02-021.
Yamada, H. 02-021, 02-027.

Yamaguchi, S. 02-045.
Yamaha, E. 02-043.
Yamaki, M. 02-044, 02-045.
Yamamoto, S. 02-009.
Yamauchi, K. 02-023.
Yanai, S. 02-016, 02-017.
Yasunari, A. 02-001.
Yoda, M. 02-028.
Yokoyama, H. 02-046.
Yoshihara, T. 02-003.

Yoshikawa, M. 02-056.
Yoshimizu, M. 02-047, 02-053.
Yoshiura, Y. 02-039.
Yurano, K. 02-020.
Wakabayashi, H. 02-057.
Wakabayashi, T. 02-011.
Watanabe, A. 02-056.
Watanabe, T. 02-033.
Wootten, R. 02-055.
Zolotukhin, S. F. 02-020.