

A LIST OF PUBLICATIONS SENT FROM JAPANESE AQUACULTURE PANEL, UJNR, TO U.S. PANEL AS AN INFORMATION EXCHANGE FOR 1983.

1. Oshiro, T. and T. Hibiya. 1982. Protease secretion of ovarian follicles in the loach *Misgurnees anguillicaudatus*, suggesting the presence of ovulation-inducing enzymes. *Bull. Japan. Soc. Sci. Fish.*, 48: 623-628.
2. Oshiro, T. 1983. Preparation of a proper medium for in vitro preservation of unfertilized loach eggs. *Bull. Natl. Res. Inst. Aquaculture*, 4: 139-141.
3. Murai, T., Y. Hirasawa, T. Akiyama and T. Nose. 1983. Effects of previous dietary history on the mortality and changes in body compositions of chum salmon fry during starvation in seawater. *Bull. Natl. Res. Inst. Aquaculture*, 4: 79-86.
4. Arai, S. and T. Nose. 1983. Dietary protein requirement of young ayu, *Plecoglossus altivelis*. *Bull. Natl. Res. Inst., Aquaculture* 4: 99-105.
5. Shimma, H. and A. Tsujigado. 1981. Some biochemical qualities of bre scorpenoid fish, *Sebastes marmoratus*, and activities of their larvae. *Bull. Natl. Res. Inst. Aquaculture*, 2: 11-20.
6. Miyanoana, Y., K. Ishii and M. Furusawa. 1983. Dorsal-aspect target strength on five species of fish. *Natl. Res. Inst. Fish. Engineering*, 4: 95-105.
7. Akiyama, T., T. Murai and T. Nose. 1983. Flucuations in some body components of fingerling chum salmon after release. *Bull. Natl. Res. Inst. Aquaculture*, 4: 107-112.
8. Noma, T. 1983. Enhancement of seaweed and sea urchin by utilization of wave energy. *Natl. Res. Inst. Fish. Engineering*, 4: 1-10.
9. Tanaka, N., M. Sugiyama and K. Ohwada. 1983. Ecological studies of phytoplankton in Ago Bay with special reference to the relation between growth and salinity. *Bull. Plank. Soc. Japan*, 30: 1-10.
10. Tanaka, N. and K. Ohwada. 1983.
11. Ohwada, K., N. Tanaka and M. Sugiyama. 1983. Penetration of microorganisms into deposited fish scales in the sediment of a coastal finfish culture grounds. *Bull. Japan. Soc. Sci. Fish.*, 49: 657.
12. Ishii, K., M. Furusawa and Y. Miyanoana. 1983. The design of a progrmmable

- multi-frequency transmitter-receiver for measurements of target strength of fish and attenuation of sound by schooling fish. Bull. Natl. Res. Inst. Fish. Engineering, 4: 135-162.
13. Imarari and A. Ikeda. 1983. Study on drifting-type data collection buoy. Bull. Natl. Res. Inst. Fish. Engineering, 4: 115-133.
  14. Shimma, H. and A. Tsujigado. 1983. Lipids of brood scorpionfish *Sebastes marmoratus* and their larvae. Bull. Natl. Res. Inst. Aquaculture, 4: 9-19.
  15. Shimma, H. and H. Shimma. 1983. Plasma constituents of adult female amago salmon, *Oncorhynchus rhodurus*. Bull. Natl. Res. Inst. Aquaculture, 4: 21-29.
  16. Shimma, Y., R. Suzuki and M. Yamaguchi. 1983. Growth performance and body compositions of F1 hybrid between Yamato and mirror carp reared with four kinds of practical diets. Bull. Natl. Res. Inst. Aquaculture, 4: 1-8.
  17. Murai, T., Y. Hirasawa, T. Akiyama and T. Nose. 1982. Free ninhydrin reactive substances in the white muscle, dark muscle, and liver of cultured and wild bluefin tuna juvenile *Thunnus thynnus orientalis*. Bull. Japan. Soc. Sci. Fish., 48: 1633-1637.
  18. Ouchi, K. 1983. Salinity tolerance and histological changes of chloride cell of the fry of masu salmon, *Oncorhynchus masou*. Bull. Natl. Res. Inst. Aquaculture, 4: 31-39.
  19. Tanaka, Y. and M. Kumeta. 1981. Successful artificial breeding of the silver-lip pearl oyster, *Pinctada maxima* (Jameson). Bull. Natl. Res. Inst. Aquaculture, 2: 21-28.
  20. Tanaka, Y. 1982. On the culture of ark shell, *Anadara broughtonii* in Mikawa Bay. Report of Gyogyoshigen-kenkyukai, 23: 45-49.
  21. Yanaka, Y. 1982. The thermotolerant unicellular diatom, *Chaetoceros ceratosporum* Ostenfeld, as a useful feed to bivalve larvae. Bull. Natl. Res. Inst. Aquaculture, 3: 31-36.
  22. Fukusho, K. and M. Okauchi. 1983. Sympatry in natural distribution of the two strains of a rotifer, *Brachionus plicatilis*. Bull. Natl. Res. Inst. Aquaculture, 4: 135-138.
  23. Fukusho, K. and M. Okauchi. 1982. Strain and size of rotifer, *Brachionus plicatilis* being cultured in southeast Asian countries. Bull. Natl. Res. Inst. Aquaculture, 3: 107-109.
  24. Fukusho, K. and H. Iwamoto. 1981. Polymorphism in size of rotifer, *Brachionus plicatilis* cultured with various feeds. Bull. Natl. Res. Inst. Aquaculture, 2: 1-10.

25. Fukusho, K. 1983. Morphology and variation. pp. 35-51, in "The rotifer *Brachionus plicatilis* biology and mass culture" (Symposium of the Japanese Scientific Society of Fisheries), ed. by Japan. Sci. Soc. Fish., Koseisha-Koseikaku, Tokyo.
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29. Koshiishi, Y., T. Nakanishi, T. Akamine, K. Tanaka and N. Naganuma. 1982. Basic studies of problems on the propagation of sinistral flounder, *Paralichthys olivaceus*. III. Diurnal feeding periodicity of 0-group flounder. Bull. Jap. Sea Reg. Fish. Res. Lab., 33: 67-80.
30. Nakanishi, T. and T. Nishiyama. 1982. Effects of high temperature and slit on cardiac and scaphognathite activity of pink shrimp (*Pandalus hypsinotus*) and side striped shrimp (*Pandalopsis dispar*). Bull. Jap. Sea. Reg. Fish. Res. Lab., 33: 105-115.
31. Nakanishi, T., Y. Koshiishi, K. Tanaka and T. Akamine. 1982. Mortality and distribution of prawn larvae, *Penaeus japonicus*, after release. I. The distribution of larvae compared with the frozen mysid. Bull. Jap. Sea. Reg. Fish. Res. Lab., 33: 95-104.
32. Toda, S. 1983. On the characteristics of water exchange in the Wake (II). Non dimensional expression of coefficient of exchange. Bull. Natl. Res. Inst. Fish. Engineering, 4: 43-57.
33. Yasunaga, Y. 1983. A consideration of the bottom condition and the benthos fauna in the shallow water area of the sandy beach. Bull. Natl. Res. Inst. Fish. Engineering, 4: 1-41.
34. Fukuhara, O. and T. Fushimi. 1982. Development of Fins and Squamation in the percichthyid fish, *Lateolabrax japonicus*. Japan. Jour. Ichthyol., 29: 173-178.
35. Kuhlmann, D., Fukuhara and H. Rosenthal. 1982. Bull. Nansei. Reg. Fish. Res.

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36. Fukuhara, O., H. Yukawa and T. Nishimura. 1982. Culture of rotifer, *Brachionus plicatilis* (Müller), in an air lift aquarium using alcohol fermentation slops. Bull. Nansei Reg. Fish. Res. Lab., 14: 1-11.
37. Ishioka, H. 1980. Stress reactions induced by environmental salinity changes in red sea bream. Bull. Japan. Soc. Sci. Fish., 46: 1323-1331.
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39. Ishioka, H. 1980. Stress reactions in the marine fish - 1. Stress reactions induced by temperature changes. Bull. Japan. Soc. Sci. Fish., 46: 523-531.