

# Fisheries Science

Volume 75 · Number 4 · July 2009

## OBITUARY

In Memoriam: Professor Tamotsu Tamura (1917–2009) 817

## REVIEW ARTICLE

In search of the Kumamoto oyster *Crassostrea sikamea* (Amemiya, 1928) based on molecular markers: is the natural resource at stake?

M. Sekino 819

## ORIGINAL ARTICLES

### *Fisheries*

The effect of Danish seine selectivity and retention on growth estimates of tiger flathead *Platycephalus richardsoni*

V.S. Troynikov · M.T. Koopman 833

Modelling of common European cockle *Cerastoderma edule* fishing grounds aimed at sustainable management of traditional harvesting

A. Ponsero · L. Dabouineau · J. Allain 839

Reproductive potential and recruitment of sand lance *Ammodytes personatus* in Ise Bay, central Japan

H. Yamada 851

Longline hook selectivity for red tilefish *Branchiostegus japonicus* in the East China Sea

H. Yamashita · D. Shiode · T. Tokai 863

### *Biology*

Interannual variation in quantitative relationships among egg production and densities of larvae and juveniles of the Japanese mantis shrimp *Oratosquilla oratoria* in Tokyo Bay, Japan

K. Kodama · M. Oyama · J.-H. Lee · Y. Akaba · Y. Tajima · T. Shimizu · H. Shiraishi · T. Horiguchi 875

In vivo and in vitro effect of recombinant salmon growth hormone treatment on IGF-I and IGFBPs in yellowtail *Seriola quinqueradiata*

E.L. Pedroso · H. Fukada · T. Masumoto 887

Age and growth of the lizardfish *Saurida elongata* from the Tsushima/Korea Strait

T. Sakai · M. Yoneda · T. Shiraishi · M. Tokimura · H. Horikawa · M. Matsuyama 895

Phylogeography of the Japanese eight-barbel loach *Lefua echigonia* from the Yamagata area of the Tohoku district, Japan

H. Aiki · K. Takayama · T. Tamaru · N. Mano · M. Shimada · H. Komaki · H. Hirose 903

Wild stock structure of *Girella punctata* in Japan revealed shallow genetic differentiation but subtle substructure in subsidiary distributions

T. Umino · T. Kajihara · H. Shiozaki · T. Ohkawa · D.-S. Jeong · K. Ohara 909

Temperature characteristics in seed germination and growth of *Zostera japonica* Ascherson & Graebner from Ago Bay, Mie Prefecture, central Japan

M. Abe · K. Yokota · A. Kurashima · M. Maegawa 921

Changes in growth of marbled sole *Pseudopleuronectes yokohamae* between high and low stock-size periods in Tokyo Bay, Japan

J.-H. Lee · K. Kodama · M. Oyama · G. Kume · Y. Takao · H. Shiraishi · T. Horiguchi 929

Small-scale variation in feeding environments for the Manila clam *Ruditapes philippinarum* in a tidal flat in Tokyo Bay

S. Watanabe · S. Katayama · M. Kodama · N. Cho · K. Nakata · M. Fukuda 937

Swimming depths of the giant jellyfish *Nemopilema nomurai* investigated using pop-up archival transmitting tags and ultrasonic pingers

N. Honda · T. Watanabe · Y. Matsushita 947

**Spatiotemporal change in growth of two populations of Asian chum salmon in relation to intraspecific interaction**

H. Seo · H. Kudo · M. Kaeriyama 957

**Aquaculture**

**Utilization of genetically modified soybean meal in Nile tilapia *Oreochromis niloticus* diets**

I. Suharman · S. Satoh · Y. Haga · T. Takeuchi · M. Endo · I. Hiroto · T. Aoki 967

**Effect of cultivation methods on nutritional enrichment of euryhaline rotifer *Brachionus plicatilis***

T. Kotani · T. Genka · H. Fushima · M. Hayashi · K. Dierckens · P. Sorgeloos 975

**Estimation of the period sensitive for the development of abnormal morphology in brown sole**

***Pseudopleuronectes herzensteini* fed live food enriched with docosahexaenoic acid**

N. Satoh · T. Takeuchi 985

**Artificially induced tetraploid masu salmon have the ability to form primordial germ cells**

S. Sakao · T. Fujimoto · T. Kobayashi · G. Yoshizaki · E. Yamaha · K. Arai 993

**The effect of docosahexaenoic and eicosapentaenoic acids in live food on the development of abnormal morphology in hatchery-reared brown sole**

***Pseudopleuronectes herzensteini***

N. Satoh · Y. Takaya · T. Takeuchi 1001

**Environment**

**Marine mucilage in Ariake Sound, Japan, is composed of transparent exopolymer particles produced by the diatom *Coscinodiscus granii***

T. Fukao · K. Kimoto · T. Yamatogi · K. Yamamoto · Y. Yoshida · Y. Kotani 1007

**Chemistry and Biochemistry**

**Isolation and characterization of the *rbcS* genes from a sterile mutant of *Ulva pertusa* (Ulvales, Chlorophyta) and transient gene expression using the *rbcS* gene promoter**

M. Kakinuma · M. Ikeda · D.A. Coury · H. Tominaga · I. Kobayashi · H. Amano 1015

**Thermal stability of the synthetic peptides with the sequence of fish fast skeletal muscle tropomyosin**  
H. Ozawa · S. Watabe · Y. Ochiai 1029

**Liquid-chromatographic hybrid triple-quadrupole linear-ion-trap MS/MS analysis of fatty-acid esters of dinophysistoxin-1 in bivalves and toxic dinoflagellates in Japan**

T. Suzuki · T. Kamiyama · Y. Okumura · K. Ishihara · R. Matsushima · M. Kaneniwa 1039

**Characterization of a new hemolytic protein toxin from the sea anemone *Anthopleura asiatica***

Y. Kohno · H. Satoh · A. Iguchi · H. Nagai 1049

**Food Science and Technology**

**Lipid characteristics of coastal migratory *Sarda orientalis* tissues**

K. Osako · H. Saito · W. Weng · K. Kuwahara · M. Tanaka 1055

**Influence of re-cooking on volatile and non-volatile compounds found in silver carp *Hypophthalmichthys molitrix***

J.-K. Liu · S.-M. Zhao · S.-B. Xiong · S.-H. Zhang 1067

Forthcoming articles are available at [springerlink.com](http://springerlink.com)

Indexed in Current Contents

Instructions for Authors for *Fish Sci* are available at <http://www.springer.com/12562>.