

2011 Annual Meeting Program

Papers to be presented at the 44th Annual Meeting of the Ichthyological Society of Japan
at **Hirosaki University** in Hirosaki, Aomori, September 30 – October 2, 2011

Oral Presentations

(Each presentation has been allowed 15 min, i. e. 12 min for presentation and 3 min for questions; *speaker)

Oral Presentation Room # 1 (Lecture Room 401, General Education Building) September 30 (Friday)

Systematics

- 1 9:15- Taxonomic status of Onefin catshark *Pentanchus profundicolus*. Junro KAWAUCHI*, Kazuhiro NAKAYA and Mamoru YABE.
- 2 9:30- Validity of *Muraenichthys aoki* (Anguilliformes: Ophichthidae). Yusuke HIBINO*, Seishi KIMURA, Kiyotaka HATOOKA and John E. MCCOSKER.
- 3 9:45- Geographic variation of *Biwia zezera* (Ishikawa, 1895). Seigo KAWASE* and Kazumi HOSOYA.
- 4 10:00- An undescribed species of the genus *Hypoatherina* (Atherinidae) from Yaeyama Islands, Japan. Daichi SASAKI* and Seishi KIMURA.
- 5 10:15- An undescribed species of the genus *Astronesthes* (Stomiidae) collected from the Indian Ocean, off Indonesia. Mitsumi YAMAMOTO*, Hisashi IMAMURA and Mamoru YABE.
- 6 10:30- Revision of the grenadier genus *Pseudonezumia* Okamura, 1970, with comments on a new genus and two new species (Gadiformes: Macrouridae). Naohide NAKAYAMA* and Hiromitsu ENDO.
- 7 10:45- Significance of the Langsdorff Collection in the Museum für Naturkunde, Berlin, in the History of Ichthyology. Yuko TAKIGAWA* and Tetsuo YOSHINO.

<Lunch Break>

Systematics

- 8 14:00- Taxonomic revision of the family Hoplichthyidae around Japanese waters. Yuki NAGANO*, Hisashi IMAMURA and Mamoru YABE.
- 9 14:15- Reexamination of the scorpaenid genus *Plectrogenium* from Tosa Bay and Kyusyu-Palau Ridge. Takeshi YAMAKAWA* and Hiromitsu ENDO.
- 10 14:30- Taxonomic review of *Sebastes ijimae* (Scorpaeniformes: Scorpaenidae). Nozomu MUTO*, Yoshiaki KAI, Tsutomu NODA and Tetsuji NAKABO.
- 11 14:45- Undescribed species of genus *Artediellus* (Cottidae) from deep water off Cape Erimo, Hokkaido, Japan. Ryo INAGAWA* and Masaki ITO.
- 12 15:00- Review about “*Kyphosus sectatrix*.” Keiichi SAKAI* and Tetsuji NAKABO.

<Short Break>

Systematics and Phylogeny

- 13 15:30- Undescribed species of the eelpouts (Perciformes: Zoarcidae) with an unique organ, collected from Kagoshima, Japan. Gento SHINOHARA*.
- 14 15:45- Review of the *Acanthopagrus latus* complex (Sparidae) from the Indo-West Pacific. Yukio IWATSUKI*.
- 15 16:00- Reexamination of the phylogenetic relationships in the Hexanchiformes (Selachii: Squalomorphi). Kenta SUDA*, Kazuhiro NAKAYA and Mamoru YABE.
- 16 16:15- The systematic position of *Hemigrammocypripis rasborella* and *Aphyocypris chinensis* (Cyprinidae: Danioninae) based on morphological characters. Taiki ITO*, Kazuo HOSHINO, Hiroaki TAKEUCHI and Kazumi HOSOYA.
- 17 16:30- Interrelationships of Sinipercaidae (Teleostei: Perciformes) based on anatomical features. Daiki TANAKA*, Miho SASAKI, Hiroaki TAKEUCHI and Kazumi HOSOYA.
- 18 16:45- Phylogeny of the family Uranoscopidae. Veera VILASRI*, Hisashi IMAMURA and Mamoru YABE.

October 1 (Saturday)

Egg, Larva, Early Development, Distribution and Fish Fauna

- 19 9:00- Larvae and juveniles of *Lateolabrax* sp. occurring in the Kalong estuary, northernmost Vietnam. Minoru SASHIDA*, Izumi KINOSHITA, Tran D.HAU, Ta T.THUY and Kensaku AZUMA.
- 20 9:15- Occurrence of the ayu, *Plecoglossus altivelis* larvae in northern Vietnam. D. hau TRAN*, Izumi KINOSHITA, T. thuy TA and Kensaku AZUMA.
- 21 9:30- Geographic distribution and genetic differentiation of *Cobitis* sp. 'yamato' complex. Jun NAKAJIMA*, Tomofumi NAKAMURA, Daisuke INOUE and Norio ONIKURA.
- 22 9:45- Population structure of *Barbatula toni* estimated by means of ecological niche modeling. Ryota YOKOYAMA*, Hokuto SHIRAKAWA, Maya URANISHI and Akira GOTO.
- 23 10:00- Distribution and ecology of *Lethenteron* sp. in Sagami River system. Naoyuki SUGURO*, Yuji YAMAZAKI and Kazumi HOSOYA.

<Short Break>

Distribution, Fish Fauna, Molecular Genetics and Molecular Analysis

- 24 10:30- Lake Biwa as a promoter of evolution and diversification of freshwater fishes in Japan. Ryouichi TABATA*, Ryo KAKIOKA, Takefumi KOMIYA, Koji TOMINAGA and Katsutoshi WATANABE.
- 25 10:45- Distribution of Capelin off the coast of Japan. Masaki KONISHI* and Kazumi HOSOYA.

- 26 11:00- Flatfish fauna in the waters around New Caledonia. Kunio AMAOKA*, Toshio KAWAI and Eiji MIHARA.
- 27 11:15- Fish fauna and phylogeography of marine fishes of the Zunan Islands located between the Izu and Ogasawara Islands. Kaoru KURIIWA*, Satoru CHIBA and Keiichi MATSUURA.
- 28 11:30- A hybrid population of *Hexagrammos* is maintained by backcross of hybridogen. Ayato IGARASHI, Miho HORITA, Takamasa UEMATSU and Hiroyuki MUNEHARA*.
- 29 11:45- Origin and formation process of *Hexagrammos* hybrid populations. Miho HORITA*, Motoko KIMURA and Hiroyuki MUNEHARA.

<Lunch Break>

Molecular Genetics and Molecular Analysis

- 30 14:00- Functional genomics for identifying local adaptation: genome-wide gene expression variation in natural populations of the Japanese freshwater threespine stickleback. Tomoyuki KOKITA*, Mayumi YAMAMOTO, Jun KITANO and Seiichi MORI.
- 31 14:15- Linkage mapping and QTL analysis using next-generation sequenced RAD markers to identify the genetic basis of an adaptation of *Gnathopogon* fishes to the limnetic environment. Ryo KAKIOKA*, Tomoyuki KOKITA, Hiroki KUMADA, Katsutoshi WATANABE and Noboru OKUDA.
- 32 14:30- DNA taxonomy of Japanese freshwater fishes: a trial. Katsutoshi WATANABE*, Ryoichi TABATA, Koji TOMINAGA and Hiroshi TAKAHASHI.
- 33 14:45- Development of versatile microsatellite markers using genome information. Ryo GOTOH* and Naoto HANZAWA.

<Short Break>

Session

Mitochondrial genomics for fish phylogeny: current results and future prospects

- 34 15:15- Evolutionary mitogenomics of fishes: A review. Masaki MIYA* and Mutsumi NISHIDA.
- 35 15:45- Phylogenetic analysis of syngnathoid fishes based on whole mitochondrial genome sequences: limits and intrarelationships of the Syngnathoidei. Hayeun SONG*, Kohji MABUCHI, Takashi p. SATOH, Masaki MIYA and Mutsumi NISHIDA.
- 36 16:00- Molecular phylogeny of the Gobioids inferred from whole mitochondrial genome sequences. Takeshi KON*, Masaki MIYA, Tetsuya SADO, Lukas RÜBER, Masanori NAKATANI, Takashi SATOH, Tetsuo YOSHINO and Mutsumi NISHIDA.
- 37 16:15- Phylogeny of Tetraodontiforms at various taxonomic levels based on whole mitogenome sequences. Yusuke YAMANOUE*, Masaki MIYA, Keiichi MATSUURA, Harumi SAKAI and Mutsumi NISHIDA.

- 38 16:30- Diversity and evolution of the gene arrangements for fish mitochondrial genome. Takashi P. SATOH*, Masaki MIYA, Kohji MABUCHI and Mutsumi NISHIDA.
- 39 16:45- Estimation of divergence times in fishes based on the whole mitochondrial genome sequences. Jun INOUE*, Masaki MIYA and Mutsumi NISHIDA.
- 40 17:00- Evolutionary mitogenomics of fishes: Future prospects. Mutsumi NISHIDA*, Hirohiko TAKESHIMA, Kohji MABUCHI and Masaki MIYA.

Oral Presentation Room # 2 (Lecture Room 301, General Education Building) September 30 (Friday)

Ecology

- 41 9:15- Genetic composition of crucian carp (*Carassius auratus*) populations in and around Lake Mikata. Hirohiko TAKESHIMA*, Shin-ichiro MATSUZAKI, Kohji KODAMA, Hideaki MAEDA and Mutsumi NISHIDA.
- 42 9:30- Observation of group spawning of topmouth gudgeon around Lake Izunuma-Uchinuma. Jun ASHIZAWA* and Yasufumi FUJIMOTO.
- 43 9:45- Habitat preference and requirement of the spinous loach *Cobitis shikokuensis*: importance of substrate interstices. Ryota KAWANISHI*, Ryota DOHI, Asuka FUJII and Mikio INOUE.
- 44 10:00- Ontogenetic changes in food item and intestinal morphology in *Rhodeus ocellatus kurumeus*. Takuya HASHIMOTO*, Hitomi YAMANO and Kazumi HOSOYA.
- 45 10:15- Bycatch, maturity and feeding habit of *Trachipterus* sp. off San'in coast, Sea of Japan. Toshifumi WADA* and Masami UNO.
- 46 10:30- Age, growth and maturity of *Parupeneus ciliatus* and *P. indicus* around Okinawa Island. Shota SAMEJIMA* and Katsunori TACHIHARA.
- 47 10:45- The reproductive ecology of the Brown Hakeleting *Physiculus maximowiczi*. Koji MATSUZAKI*, Mai HIBINO and Toshiaki MORI.

<Lunch Break>

Morphology, Physiology and Histology

- 48 14:00- Measurement of total length on whale sharks. Rui MATSUMOTO, Yosuke MATSUMOTO* and Senzo UCHIDA.
- 49 14:15- Description of retinal ganglion cells in the Japanese catshark, *Scyliorhinus torazame*. Kaori MUGURUMA* and Naoyuki YAMAMOTO.
- 50 14:30- A fluorescent dye-staining of neuromasts in live fishes. Masanori NAKAE*, Ryu ASAOKA, Hironori WADA and Kunio SASAKI.

- 51 14:45- Morphological peculiarity of Japanese ricefish, *Oryzias latipes*, Ryukyu Subpopulation. Toshinobu ASAI*, Hiroshi SENOU and Kazumi HOSOYA.
- 52 15:00- Reproductive cycle and morphological characteristics of a landlocked sculpin *Cottus reini* collected from the depths of Lake Biwa. Daisuke TAHARA* and Miwako IWASE.

<Short Break>

Egg, Larva and Early Development

- 53 15:30- Reproduction of *Coilia nasus* in control pond inside dike of Isahaya inlet, Ariake Bay. Izumi KINOSHITA*, Shinji FUJITA, Akira ISHIDA and Keigo TAKEUCHI.
- 54 15:45- Early developmental stages of *Lefua nikkonis* (Jordan and Fowler, 1903). Takumi MORISITA*, Tetsuro KITAGAWA and Kazumi HOSOYA.
- 55 16:00- An amphidromous *Luciogobius* sp. inhabiting in a stream on Okinawa Island. Ken MAEDA*, Masashi KONDO, Nozomi HANAHARA (YAMASAKI) and Katsunori TACHIHARA.
- 56 16:15- Development in larvae and juvenile of Indian threadfish, *Alectis indica*, in captivity. Shin-ichiro OKA* and Shuhei ODORIBA.
- 57 16:30- Distribution and feeding habits of *Doederleinia berycoides* settled juveniles in the northern coast of the Japan Sea. Yuta YAGI*, Tomoaki ISEKI, Naoto KAJIHARA, Kazuhisa UCHIKAWA, Shinji UEHARA and Tetsuo FUJII.
- 58 16:45- Fish larvae and juveniles appeared in the Honmyo estuary, Isahaya inlet, ca. 30 years ago. Keigo TAKEUCHI*, Izumi KINOSHITA, Yoshihiro SHIBASAKI, Yoshio KAWAMURA, Yuta YAGI, Daisuke AOYAMA and Shinji FUJITA.

October 1 (Saturday)

Ecology

- 59 9:00- Density dependent growth and competition of chum salmon fry in stream environment. Koh HASEGAWA*, Kazumasa OHKUMA, Yoshinobu HIRAMA and Tsutomu OHNUKI.
- 60 9:15- Age and growth of bluegill in southern basin of Lake Biwa. Yuji IKEDA, Taiga YODO* and Motoi YOSHIOKA.
- 61 9:30- Growth and maturation of *Pseudogobius javanicus* and *P. masago* in the Manko Wetland, Okinawa Island. Hirotooshi SAIMARU*, Ken MAEDA, Masashi KONDO and Katsunori TACHIHARA.
- 62 9:45- Diversity of *Rhinogobius giurinus* amphidromous migration pattern. Daisuke ISHIZAKI*, Takahiko MUKAI and Taiga YODO.
- 63 10:00- The fish who carry a spawning bed? Jiro SAKAUE*, Toshiyuki SUZUKI and Koichi SHIBUKAWA.

<Short Break>

Ecology and Ethology

- 64 10:30- Specific function of fifth branchial arches in the respiration in batoids. Taketeru TOMITA, Minoru TODA*, Yushi YAMAMOTO, Keiichi UEDA, Senzo UCHIDA and Kazuhiro NAKAYA.
- 65 10:45- Comparison of the swimming layer between the Southern and Northern populations of *Oryzias latipes* in the Yura River system, Kyoto Prefecture. Takashi UONO*, Takao HAMAGUCHI and Kazumi HOSOYA.
- 66 11:00- Determinants of body size composition of groups: why are anemonefish protandrous? Akihisa HATTORI*.
- 67 11:15- Bidirectional sex change of the magenta dottyback *Pictichromis porphyrea*. Tetsuo KUWAMURA*, Tatsuru KADOTA and Shohei SUZUKI.
- 68 11:30- What kind of males establish the territory in *Hypoptychus dybowskii* in the different size groups? Hideki NARITA*, Izumi AKAGAWA and Hiroyuki MUNEHARA.
- 69 11:45- Diversity and distribution of Parrotfishes (Labridae: Scaridae) on a lek-like spawning aggregation site. Terry DONALDSON*.

<Lunch Break>

Ethology and Conservation

- 70 14:00- Observation of bioluminescence of demersal fish in captivity -a case study in *Physiculus maximowiczi*, *Chlorophthalmus borealis*. Chiharu FUJII*, Shinya YAMAUTI and Toshirou SARUWATARI.
- 71 14:15- The fish swimming performance and flow characteristics around the weir top in a pool-weir fishway. Keiko MURAOKA*, Satoru NAKANISHI and Junji MIWA.
- 72 14:30- Behavior of guarding the nest of Smallmouss bass *Micropterus dolomieu*. Yasushi AIZAWA* and Naoyuki SUGURO.
- 73 14:45- Eradication program focused on prevention of reproduction of largemouth bass *Micropterus salmoides* in Lake Izunuma-Uchinuma. Yasufumi FUJIMOTO*, Kiyotaka TAKAHASHI, Kentaro SHINDO, Takeshi FUJIWARA, Kouichi ARITA, Kenji SAITOH and Tetsuo SHIMADA.
- 74 15:00- Non-indigenous *Cottus pollux* small-egg type individuals detected from the rivers along the Sea of Japan in eastern Honshu Island. Hideharu TSUKAGOSHI*, Keiichi SAKAI, Kunihiro YAMAMOTO and Akira GOTO.
- 75 15:15- A proposal of management of riparian forest on food supply for charr and masu salmon. Tomoyuki NAKAMURA*.

<Short Break>

Conservation

- 76 15:45- Reproduction of the *Cobitis striata* complex Kyushu form (Teleostei: Cobitidae). Eun-jin KIM*, Jun NAKAJIMA and Norio ONIKURA.
- 77 16:00- The current status of protection on Nara population of *Rhodeus ocellatus kurumeus*. Masafumi IKEDA*, Tomotugu SUGIMOTO, Ryuya OKADA, Takuto KAWAKAMI, Yuusuke UMEKI, Keisuke TAKATA and Tadao KITAGAWA.
- 78 16:15- Genetic composition of the commercial strains of *Oryzias latipes* in Kyushu island. Koji NAKAI* and Tadao KITAGAWA.
- 79 16:30- Ecological effect on medaka caused by the difference in body color of orange-red variants (himedaka). Ryohei NAKAO*, Katsuhi IDA and Tadao KITAGAWA.

Poster Presentations

(Core-time: 12:45–14:00 on September 30 for odd-numbered papers and on October 1 for even-numbered papers; *corresponding author)

Poster Presentation Room

(Main Conference Room, Student Union Building 3F)

- 80 Osteology of cyprinid fish, *Zacco* and allied species. Shinya MIYATA*, Yoshitaka YABUMOTO and Hiromichi HIRANO.
- 81 Comparative anatomy of the suborder Torpedinoidei. Yushi YAMAMOTO* and Mamoru YABE.
- 82 Morphological characters and seasonal occurrence of larvae and juveniles of two gobiids collected at the littoral zone in Lake Kitaura. Wataru HYAKUNARI*, Seiji USUI, Kouki KANOU, Ryoji NAKAZATO and Kazunori ARAYAMA.
- 83 The lateral line system and its innervation in *Eleotris oxycephala* (Eleotridae): cheek rows and neuromast orientation. Ryu ASAOKA* and Kunio SASAKI.
- 84 Osteology of notacanthid fish, *Polyacanthonotus* and *Notacanthus*. Naoko KANEHIRA*, Hisashi IMAMURA and Mamoru YABE.
- 85 Breeding of *Siphonogobius nue* in captivity. Takayuki SONOYAMA*, Kazuki ARAO and Toshiaki ISHIBASHI.
- 86 Myology of pectoral fin in lizardfishes (Aulopiformes: Synodontidae). Monruedee CHAIYAPO*, Hisashi IMAMURA and Mamoru YABE.
- 87 Morphological variations of *Cobitis shikokuensis* in the Shigenobu River. Asuka FUJII*, Ryota KAWANISHI, Ryota DOHI, Mikio INOUE and Takaaki SHIMIZU.
- 88 Morphology and taxonomic review of the genus *Trachipterus* in Japanese waters. Keiichi SATO*, Kunio AMAOKA and Minoru TODA.

- 89 A record of a rare ophidiid fish, *Barathrites iris* (Teleostei: Ophidiiformes), from the Pacific Ocean. Shinpei OHASHI*, Hisashi IMAMURA and Mamoru YABE.
- 90 The individuals with a saddle-shaped pattern on the head are whether young or other species of whitemargin moray, *Gymnothorax albimarginatus* ? -DNA determination and larval morphology-. Atsushi TAWA*, Ryouichi UTSUMI, Midori KOBAYAKAWA and Noritaka MOCHIOKA.
- 91 Morphological variations of *Crystallichthys matsushimae* (Liparidae). Akira TOHKAIRIN*, Yoshiaki KAI, Yuji UEDA and Tetsuji NAKABO.
- 92 Revision of the gurnard fish genus *Lepidotrigla* (family Triglidae) around Japanese water. Akihiro ONO*, Toshio KAWAI and Mamoru YABE.
- 93 An undescribed genus of the family Liparidae (Scorpaeniformes) from off the northern Japan. Akio INOUE* and Hiromitsu ENDO.
- 94 An undescribed liparids, *Paralipsris* sp. and Japan new record of *Careproctus ostentum*, collected by deep-sea water pump of Rausu in Shiretoko Peninsula. Keisuke MACHI*, Takahiro NOBETSU and Mamoru YABE.
- 95 The status of a forgotten platycephalid fish, *Platycephalus clavulatus*. Taichi NAGAO*, Hisashi IMAMURA and Mamoru YABE.
- 96 An undescribed species of the genus *Cabillus* (Gobiidae), and records of the Gobiidae species from Kochi Prefecture, Japan. Eri KATAYAMA*, Yuichiro NOGAWA and Hiromitsu ENDO.
- 97 An undescribed species of the genus *Suttonia* (Serranidae) collected from Okinoshima, Kochi Prefecture, Japan. Kenta KENMOTSU* and Hiromitsu ENDO.
- 98 Geographic variations of *Chromis notata* and taxonomic status of “Kihoshi-suzumedai”. Hiroki IWATSUBO*, Takeshi YAMAKAWA and Hiroyuki MOTOMURA.
- 99 Apogonid fishes (Teleostei: Perciformes) from Iou-jima and Take-shima Islands, Kagoshima Prefecture, southern Japan. Tomohiro YOSHIDA*, Shinichi DEWA, Kazuhiko FURUTA and Hiroyuki MOTOMURA.
- 100 An undescribed species of the gobiid fish genus *Psammogobius* from Palau. Koichi SHIBUKAWA, Toshiyuki SUZUKI* and Jiro SAKAUE.
- 101 Distribution of the genus *Pempheris* in Japan. Keita KOEDA*, Tetsuo YOSHINO, Hideyuki IMAI and Katsunori TACHIHARA.
- 102 Morphological characteristics of Pacific specimens of ipnoid Tripodfish, *Bathypterois grallator* (Goode and Bean, 1886). Hiromitsu ENDO*, Naohide NAKAYAMA and Takatomo MIYAKE.
- 103 An undescribed species of the genus *Pterois* (Scorpaenidae) from the Marqueses Islands. Mizuki MATSUNUMA* and Hiroyuki MOTOMURA.
- 104 First records of *Enneapterygius erythrosomus* (Tripteriigidae) from Japan. Masatoshi MEGURO* and Hiroyuki MOTOMURA.

- 105 The second report of *Polyipnus latirastrus* Last and Harold, 1994 (Stomiiformes: Sternoptychidae: Sternoptychinae). Naoki TATSUTA*, Hiromitsu ENDO and Mamoru YABE.
- 106 An undescribed species of the genus *Rhabdosargus* (Sparidae) from Indonesia. Fumiya TANAKA* and Yukio IWATSUKI.
- 107 A species of the genus *Myripristis* (Holocentridae) collected from the Hyuga Nada, southern Japan. Ryohei MIKI* and Yukio IWATSUKI.
- 108 Phylogenetic relationships of armored searobins (family Peristediidae). Toshio KAWAI*, Yohko TAKATA and Takashi SATOH.
- 109 Further exploration of major lineages in the *Carassius auratus*-complex. Mikumi TAKADA*, Harumi SAKAI, Hiroshi TAKAHASHI, Kei'ichiro IGUCHI, Ryota YOKOYAMA, Katsutoshi WATANABE, Ryo KAKIOKA, Sayaka ITO, Yuji YAMAZAKI, Chunguang ZHANG, Yahui ZHAO, Sergei f. SAFRONOV, Valentina g. SIDELEVA, Katsunori TACHIHARA, Akira GOTO and Mutsumi NISHIDA.
- 110 Phylogeography of Leuciscinae (Cyprinidae) based on mitogenome analyses. Junichi IMOTO*, Kenji SAITOH, Takeshi SASAKI, Jun ADACHI, Yuri KARTAVTSEV, Masaki MIYA, Mutsumi NISHIDA and Naoto HANZAWA.
- 111 Validity of the genus *Kaiwarinus* (Carangidae) and its phylogenetic relationship. Seishi KIMURA*, Shintaro YASUI and Kaoru KURIIWA.
- 112 Phylogenetical survey on the origin of freshwater fish species from the Kanto region. Kenzi TAKAMURA*.
- 113 Molecular phylogeny and biogeography of the genus *Gymnocanthus*. Aya YAMAZAKI*, Alexander MARKEVICH, Orio YAMAMURA and Hiroyuki MUNEHARA.
- 114 Use of SNPs located in microsatellite locus flanking regions for identifying Japanese wild strain of common carp. Kohji MABUCHI*, Hayeun SONG, Hirohiko TAKESHIMA, Katsuki NAKAI, Hiroshi SENOU and Mutsumi NISHIDA.
- 115 Genetic differences and PCR-based identification of *Acentrogobius pflaumi* complex. Shoko MATSUI*, Kouji NAKAYAMA, Yoshiaki KAI and Yoh YAMASHITA.
- 116 Genetic divergence of *Ditrema* (Embiotocidae) inferred from mitochondrial DNA sequences. Hiroshi KATAFUCHI*, Yoshiaki KAI and Tetsuji NAKABO.
- 117 Distribution and genetic diversity of *Gymnogobius castaneus* complex in Japan. Satoru n. CHIBA*, Koichi SHIBUKAWA, Takahiko MUKAI and Naoto HANZAWA.
- 118 Speciation and dispersion of the family Gerreidae. Nana HAYASHIDA*, Yukio IWATSUKI and Fumiya TANAKA.
- 119 Vicariance and dispersal across the Sea of Japan and Pacific Ocean in demersal fishes. Yoshiaki KAI*, Yuji UEDA, Kunihiro FUJIWARA, Masaki ITO and Tetsuji NAKABO.
- 120 Watershed characteristics associated with distribution patterns of endangered *Gymnogobius* species in Seto Inland Sea. Ryutei INUI*, Shion TAKEMURA, Norio ONIKURA and Mahito KAMADA.

- 121 Inconsistency between mtDNA phylogeny and morphological classification of *Rhinogobius* species in Nagara River, Gifu Prefecture, Japan. Takahiko MUKAI*.
- 122 Damselfishes (Teleostei: Perciformes) from the Osumi Islands, Kagoshima Prefecture, southern Japan. Hajime NISHIYAMA*, Hiroki IWATSUBO and Hiroyuki MOTOMURA.
- 123 Prediction of shift of suitable habitat for the Arctic lamprey larvae as an ecosystem engineer in accordance with environmental changes, based on ecological niche modeling. Hokuto SHIRAKAWA*, Maya URANISHI, Ryota YOKOYAMA and Akira GOTO.
- 124 Ichthyofauna of Lake Hinuma in the 1960s revealed by specimen survey. Seiya KANEKO*, Wataru HYAKUNARI, Seiji USUI, Kouki KANOU, Katsuo MASHIKO and Kouichi KAMATA.
- 125 Change of fish fauna in *Zostera* bed and sandy bottom of Shimoda, the Izu Peninsula. Naoko TAKEUCHI*, Hiroshi SENOU and Masakazu AOKI.
- 126 A preliminary checklist of marine fishes of Sabah, Malaysian Borneo, with a note on conservation issues and efforts. B. Mabel MANJAJI-MATSUMOTO, Hiroyuki MOTOMURA*, Gota OGIHARA and Rebecca JUMIN.
- 127 Field surveys and collection building of fishes in Mekong-Chao Phraya basins. Koichi SHIBUKAWA*, Prachya MUSIKASINTHORN, Chaiwut GRUDPAN, Bounthob PRAXAYSOMBATH, Nam SO, Dinh dac TRAN and Kenzo UTSUGI.
- 128 Effect of utilization of water in agriculture upon the distribution of freshwater fishes. Manami YAMAMOTO*, Takeshi KANDA and Yuuji FUJIKURA.
- 129 Occurrence and morphological development of larvae and juveniles in *Nematalosa japonica* - 'fresh fish' on the dining table in Okinawa Prefecture. Masato UEHARA* and Katsunori TACHIHARA.
- 130 Larval and juvenile ichthyofauna in the estuaries of the northern Vietnam. Ta T. THUY*, Tran D. HAU, Izumi KINOSHITA, Minoru SASHIDA and Kensaku AZUMA.
- 131 Eggs and larvae of four porcupine fish spawned in aquaria of the Shimonoseki Marine Science Museum. Hiroyuki DOI, Yuko YAMANOUCHE, Toshiaki ISHIBASHI, Yusuke YAMANOUE and Harumi SAKAI*.
- 132 Seasonal changes in reproductive and physical condition in the seaweed pipefish *Syngnathus schlegeli* in the Seto Inland Sea. Atsushi SOGABE*, Kie MOHRI and Jun SHOJI.
- 133 Stable carbon and nitrogen isotopes of the Japanese fluvial sculpin, *Cottus pollux* (large egg type), as indicator on aquatic trophodynamics in the Iwaki river system. Hiroko MURAMOTO*, Akihide KASAI and Nobuyuki AZUMA.
- 134 Food habits compared between two sympatric benthic fishes in danger. Takaharu NATSUMEDA*, Tetsuya TSURUTA, Satoshi AWATA, Hirohiko TAKESHIMA and Kei'ichiro IGUCHI.
- 135 The influence that food gives the nocturnal tactics of the Dolly Varden. Yuuki TANAKA* and Itsuro KOIZUMI.
- 136 Growth of the immature latid fish *Lates stappersii* in Lake Tanganyika. Yuta FUKUOKA* and Seishi KIMURA.

- 137 Life-history polymorphism in the Pacific Ocean form of threespine stickleback with reference to their divergence mechanism. Takefumi KITAMURA* and Akira GOTO.
- 138 Live prey first feeding examination for *Hippocampus mohnikei* -Rotifer and *Artemia*. Rie TAKAHASHI*, Wakaba NORITAKE, Tomoe HASEGAWA, Hiroyasu SUZUKI, Noriaki OTANI and Izumi AKAGAWA.
- 139 Migration path and swimming speed of upstream-migrating juveniles in *Cottus kazika* and *Cottus* sp. ME. Yusuke IWASAKI* and Daisuke TAHARA.
- 140 Habitat choice and translocation experiment on *Oncorhynchus masou ishikawae* in the Okura River. Tatsuya SAITO*, Taku NUMAZAWA, Kota AIHARA, Hirotaka NARASHIMA, Naomasa KAWASHIMA, Kunihiro SUZUKI and Izumi AKAGAWA.
- 141 Ecology of nonnative *Channa argus* in Shizuoka city - growth and maturity. Takuya SATOU*, Kai MOTOHASHI, Masashi FUKUI and Izumi AKAGAWA.
- 142 Use of otolith microchemistry and trace element concentrations of muscle tissue to estimate migratory history and habitat use of fishes in brackish Lake Jusan. Yusuke MOKONUMA*, Kunimitsu DEMURA, Tsuguo OTAKE, Izumi WATANABE and Nobuyuki AZUMA.
- 143 Seasonal use of hyporheic zone by *Cobitis shikokuensis*. Ryota DOHI*, Ryota KAWANISHI, Asuka FUJII, Mikio INOUE and Yo MIYAKE.
- 144 Hypoxic tolerance in freshwater fish: Toward the understanding of the fish assemblage process in the floodplain backwaters with different hydrological connectivity. Manabu KUME*, Shigeoya NAGAYAMA, Yukio ONODA, Terutaka MORI and Yuichi KAYABA.
- 145 Feeding behaviors of Japanese eel *Anguilla japonica* in captivity. Hirohumi GOTO*, Atsushi TSUKADA, Hiroto ISHIHARA, Jun NAGAKI and Izumi AKAGAWA.
- 146 Growth in the Stone Moroko underyearlings and hypoxia. Yuji SAWARA* and Nanako ISHIOKA.
- 147 Life history in deep-sea demersal fish inferred from otolith trace element. Kei SAKUMA*, Kotaro SHIRAI and Shigeaki KOJIMA.
- 148 Parker's sneak-guard model revisited: why do sneakers heavily invest in testes? Kazutaka OTA*, Masanori KOHDA, Michio HORI and Tetsu SATO.
- 149 Inheritance patterns of nest construction behavior in two sympatric ninespine sticklebacks. Hiroshi TAKAHASHI*.
- 150 Pairbond and behavioral sexual dimorphism of *Ptereleotris hanae*. Yoshiki OBANA, Shoko SUZUKI, Fumihito IWASE, Masao NAKANO and Izumi AKAGAWA*.
- 151 Tidal activity rhythm of the Japanese Medaka *Oryzias latipes* inhabiting estuarine environment. Takahiro INOUE* and Yuji SAWARA.
- 152 Host species preference and a interspecific competition in bitterlings. Akira TAKIGUCHI*.
- 153 Gripping behaviour experiment with models on *Hippocampus mohnikei*. Daiki ISHIZAKI, Taiki TAKAHASHI, Hiroyasu SUZUKI*, Akinori OTANI and Izumi AKAGAWA.

- 154 Case where effect of bottom raw fish living environment creation is verified by confirmation that uses individual identification by photograph. Yasushi MIYAJIMA*, Yoshihiro AGATA, Futoshi MIYAZAKI, Taiki HOTTA, Masafumi NAKAYAMA, Keiko MURAOKA and Shingo YAMASHITA.
- 155 Promotion to the protection of the *Lefua echigonia* in the Naka-ikemi wetland, Fukui Prefecture. Tetsuro KITAGAWA*, Takumi MORISHITA, Shigeru MASUDA and Kazumi HOSOYA.
- 156 Effects of water use on the ecology of ayu in the Yahagi River (preliminary study). Toshiya YAMAMOTO*.
- 157 A forgotten and endangered local population, “Hinuma Herring”-a review of available information. Toshiro SARUWATARI*, Kazuya KOFUJI and Katsuo MASHIKO.
- 158 Effect of temperature in winter on gonadal development of *Pseudorasbora pumila* subsp. sensu Nakamura (1963). Tadashi KITANO*, Tomoki OHNAKA and Yasunori KOYA.
- 159 Effect of weirs on population numbers of *Pseudobagrus tokiensis*. Tomoko ARAKI* and Masahiro FUJIOKA.
- 160 Habitat use patterns of larval and juvenile fishes in reed belts in Lake Kitaura. Seiji USUI*, Kouki KANOU, Wataru HYAKUNAR and Kazunori ARAYAMA.
- 161 Spatial distribution of freshwater fishes at temporary lentic habitats in the Shubuto River floodplain, southwestern Hokkaido. Yusuke MIYAZAKI*, Akira TERUI, Akira YOSHIOKA and Izumi WASHITANI.
- 162 Distribution of Japanese lates and *Zostera* bed in Kitagawa estuary in Miyazaki prefecture. Takeshi KANDA, Ryosuke FUKUOKA* and Yohei YAMAMOTO.
- 163 Effectiveness of paddy field as an initial growth environment for larvae and juvenile Gengorobuna *Carassius cuvieri*. Takeshi KIKKO*, Morihito NEMOTO, Yasuhiro FUJIOKA and Yoshiaki KAI.
- 164 Transfer of the URM specimens to Ocean Expo. Research Center and establishment of a new management system. Kei MIYAMOTO*, Tetsuo YOSHINO, Shin-ichiro OKA and Minoru TODA.

Lecture of the Awardees

Oral Presentation Room # 1 (Lecture Room 401, General Education Building)

September 30 (Friday) 12:00-12:30

Taxonomic studies on tropical and subtropical fishes in the Indo-Pacific Ocean

Hiroyuki MOTOMURA

Symposia

October 2 (Sunday)

Oral Presentation Room # 1 (Lecture Room 401, General Education Building)

Behavioral ecology of fishes: recent studies and future perspective

Conveners: Satoshi AWATA and Tetsuo KUWAMUEA.

Commentator: Takeshi TAKEGAKI, Tomoyuki KOKITA and Satoshi AWATA.

- 1 10:00-10:15 Behavioral ecology of fishes.
Satoshi AWATA*
- 2 10:15-10:45 Mating system and sexual selection in syngnathids.
Atsushi SOGABE*
- 3 10:45-11:15 Causes of highly skewed distribution of male mating success in the barred-chin blenny — male reproductive phase depending on androgen levels and female mate choice copying —.
Yukio MATSUMOTO*
- 4 11:15-11:45 Sexual selection in the guppy: female reproductive strategy before and after copulation.
Aya SATO*
- 11:45-13:00 <Lunch Break>
- 5 13:00-13:30 Parasite-host interactions between a brood parasitic fish *Pungtungia herzi* and its hosts.
Hideyuki YAMANE*, Katsutoshi WATANABE and Yoshikazu NAGATA.
- 6 13:30-14:00 Cooperation and conflict among group members over mating and parental care in cooperatively breeding cichlids.
Satoshi AWATA*
- 7 14:00-14:30 Competition for fertilization in a cichlid with alternative male reproductive tactics.
Kazutaka OTA*
- 8 14:30-15:00 Laterality of cichlids affects the predator-prey interaction.
Yuichi Takeuchi*
- 15:00-15:10 <Short Break>
- 9 15:10-16:00 Discussion

Meeting Venue

Hirosaki University (Bunkyo-cho Campus)

