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Survival rates of larval Ryukyu-ayu *Plecoglossus altivelis ryukyuensis* under differing experimental conditions of temperature and salinity

Tei Kishino, Akihiko Shinomiya and Hiroyoshi Kotobuki

Abstract Fasting Ryukyu-ayu (*Plecoglossus altivelis ryukyuensis*) larvae (newly-hatched, 15−20 day old and 50 day old individuals) subjected to ranges of experimental water temperature and salinity ［15−21℃ (2 or 3 steps) and 0-30 psu (3 or 4 steps), respectively］ showed greatest survival rates in water temperatures of 15−18℃ and salinity of 5−15 psu. Such water temperature and salinity ranges paralleled those of brackish water in the Yakugachi River during the early life stages of Ryukyu-ayu, and supported a field investigation which indicated that Ryukyu-ayu larvae occurred mainly in brackish water. The experimental result is probably illustrates the limits of osmoregulatory adjustment in larvae of this species.

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Distribution and clone composition of triploid silver crucian carp, *Carassius* sp., in Gifu Prefecture, central Japan.

Kenya Furuta, Takahiko Mukai and Yasunori Koya

Abstract The distribution and clone composition of silver crucian carp, *Carassius* sp., a triploid species breeding clonally by gynogenesis, was investigated in Gifu Prefecture, central Japan, using RAPD-PCR together with scale transplants. From red

blood cell diameter measurements, 117 fish were demonstrated to be triploid silver crucian carp in a total of 237 crucian carp (*Carassius* spp.) collected from five branches of the Nagara River, the main stream of the Ibi River and one branch of the Shonai River. Sixty clonal lines could be identified from 115 triploid fish, the percentage of triploids, and number and size of clonal lines being different in each river system. Three clonal lines were confirmed across two or more branches. Apparently the presence of common clonal lines and differences in clone composition between river systems resulted from interchanges between fish populations and local environmental differences within each river system, respectively.

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Thamnaconus hypargyreus × _T. modestus_ hybrids (Monacanthidae) collected from the East China Sea

Keisuke Yamamoto

Abstract Trawl and market surveys of East China Sea fishes conducted between 1998 and 2001 disclosed seven specimens of *Thamnaconus* that could not be unequivocally allocated to any of the seven *Thamnaconus* species reported from the western Pacific Ocean. Because of their outward resemblance to both *T. hypargyreus* and *T. modestus*, the seven specimens, together with *T. hypargyreus* and *T. modestus* specimens taken in the East China Sea, were subjected to a detailed comparative morphological examination to investigate the possibility of the former being hybrids. These specimens displayed either a mosaic-like distribution of both *T. hypargyreus* and *T. modestus* features or features intermediate between the latter. They were clearly distinguishable from the other western Pacific *Thamnaconus* species. Accordingly, together with the trawl survey

showing an overlap between the distributions of *T. hypargyreus*, *T. modestus* and the seven specimens, it is very likely that the seven unidentifiable specimens were *T. hypargyreus*/*T. modestus* hybrids.

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Nest visiting behavior and nest change by male staghorn damselfish, *Amblyglyphidodon curacao*

Tsutomu Hanahara and Teppei Sagawa

Abstract Field observations of territorial male of staghorn damselfish *Amblyglyphidodon curacao* were conducted at Sesoko Island, Okinawa, Japan. Such males vacated territories temporarily to visit multiple nests, often picking at the surface of the latter with their mouth, but not eating eggs, if present. Visiting behavior was observed in both the breeding and non-breeding seasons, the manner and frequency of visits not differing between the two, and may have been search for a vacant better nest to which to move.

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Short Reports

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First record of palemargin grouper, *Epinephelus bontoides* (Perciformes:

Serranidae), from Japan

Kaoru Kuriiwa, Shigeru Harazaki, and Hiroshi Senou

Abstract A serranid fish, *Epinephelus bontoides*, was reported for the first time from Japan, on the basis of a specimen speared at the mouth of the Miyanoura River, Yaku-shima Island. The species has previously been recorded from New Britain, Indonesia, the Philippines and Taiwan, the specimen from Yaku-shima Island representing the northernmost record of the species.

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First record of armored searobin, *Satyrichthys adeni*, from Suruga Bay, Japan

Toshio Kawai and Fumihito Tashiro

Abstract A single peristediid specimen, NSMT-P 79556, was caught from Suruga Bay, Japan, and identified as *Satyrichthys adeni* (Lloyd, 1907) based on the following combination of characters: 16 dorsal and anal fin soft rays, respectively; 4 barbels on lip and 3 on chin; rostral projection length 9.9% SL; no straight sutured line formed by both frontals and parietals on posterior dorsal head; no black spots on dorsal fin; and pectoral fin pale yellow in alcohol. The present study represents the first record of this species in Japanese waters.

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