

**[Debut of “Shirahime (white princess)” shrimp]**

When frozen shrimp is mentioned, one tends to think of imported products. Whiteleg shrimp, a popular shrimp for Japanese consumers, is now being stably raised at a land-based aquaculture facility.

Nippon Suisan Kaisha, Ltd. has been promoting the commercialization of the technology for raising the juvenile whiteleg shrimp to market size at an indoor land-based aquaculture facility. The SPF broodstock imported from Hawaii are used. Shrimp eggs are harvested and hatched at the facility in Saiki, Oita. Hatched juvenile shrimp are transferred to the facility in Minami-Kyushu in Kagoshima and raised to the harvest size of about 20 g. At present, the product is available on the online retail site.

[Environment- and shrimp-friendly Biofloc technology]

The biofloc farming technology is key for achieving a successful closed land-based aquaculture facility. This technique is characterized in that a floating microorganisms (biofloc) purifies the water quality in a tank to raise the shrimp. At the indoor land-based aquaculture facility, this technique provides an advantage. It can prevent infiltration of various pathogen from outside into the tank and achieves the minimum necessary water supply for cultivating shrimp. Whiteleg shrimp (Lower left photo supplied by Nippon Suisan Kaisha, Ltd.) has a habit of swimming in water; accordingly, they can swim and efficiently utilize the capacity of the tank. In some other countries, mangrove forests in the vicinity of a coast or a river’s mouth are cut down to dig a pond for aquaculture which could cause a significant impact on the environment. However, the biofloc technology that makes good use of seawater at a land-based aquaculture facility is a breakthrough sustainable production system with less burden on the environment.



Whiteleg shrimp swimming in the water



One of the dishes served at Izakaya (Japanese pub) “Miraizaka”

[Excellent freshness and quality]

Whiteleg shrimp harvested from the land-based aquaculture facility in Kagoshima are branded as “Shirahime Ebi” and transported with high freshness and quality to shops and homes to be served on dining tables. Whiteleg shrimp with high freshness and sweet taste are good for sashimi (sliced raw fish) and sushi. “Shirahime Ebi” had been served at several restaurant chain like one of the dishes (upper right photo) at Izakaya “Miraizaka” owned by Watami Co., Ltd. At present, frozen whiteleg shrimp products imported mainly from Southeast Asian countries dominate the market. However, in the near future, the spread of Japanese whiteleg shrimp with high freshness in the domestic market is no longer a dream.

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For more information on the “Episode Series,” please visit the URL:

<http://www.naro.affrc.go.jp/laboratory/brain/contents/fukyu/episode/index.html>

<Project name> The special project on advanced research and development for next-generation technology (commercialization promotion)

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<Title> Demonstration research on an efficient aquaculture technology with no requirement for water replenishment, thus aiming to produce high-freshness Japanese white-leg shrimp

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