

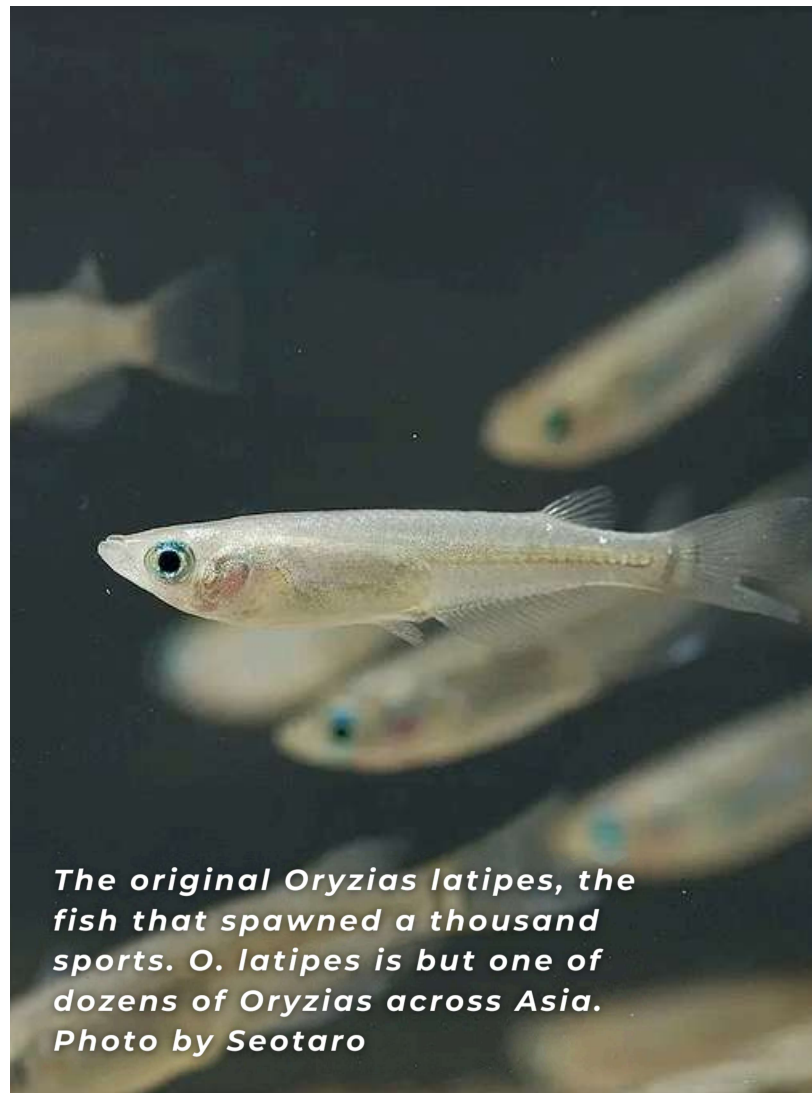
# Fairies of the Rice Fields

## 青鱈

**I**N ASIA: most languages are written right-to-left, vertically, or in symbolic pictograms. If we translate these names to literal English, we're presented with near-mythical sounding animals, places, and most importantly: a wholly foreign perspective on naming; if we're able to empathize with the sentimental, micro-conscious, Asian lens: the animals we keep take on a new light, and we appreciate them even more.

“めだか,” means Medaka, which translates in literal English to: “With High Eyes.” Angeleyes is a less-literal, more culturally competent, and historically-insightful translation of the Kanji sequence (Japanese Pictograms). It pays respect to the fish's olde slang name; the first little humans who saw the ricefish uttered... “Ningyo” (人魚). Fish People. “Fairy Fish.” Japan has a rich cultural history of exalting domesticated strains of flora and fauna. Just look at their Koi. Cherry Blossoms. Apples. Wasabi. Or, Wagyu Cattle. Japan is highly concerned with minute beauties—divine tiny pleasures to be enjoyed by all senses. Sushi, sake, hibachi, bonsai, etc. Medaka breeding falls into miniature fish farming for living jewels, treasures to be worked into perfect, shining forms over eons. Once the Japanese Empire tamed the Final Forest, where else to go? They looked around, and within.

By *Samuel J. Fernald*



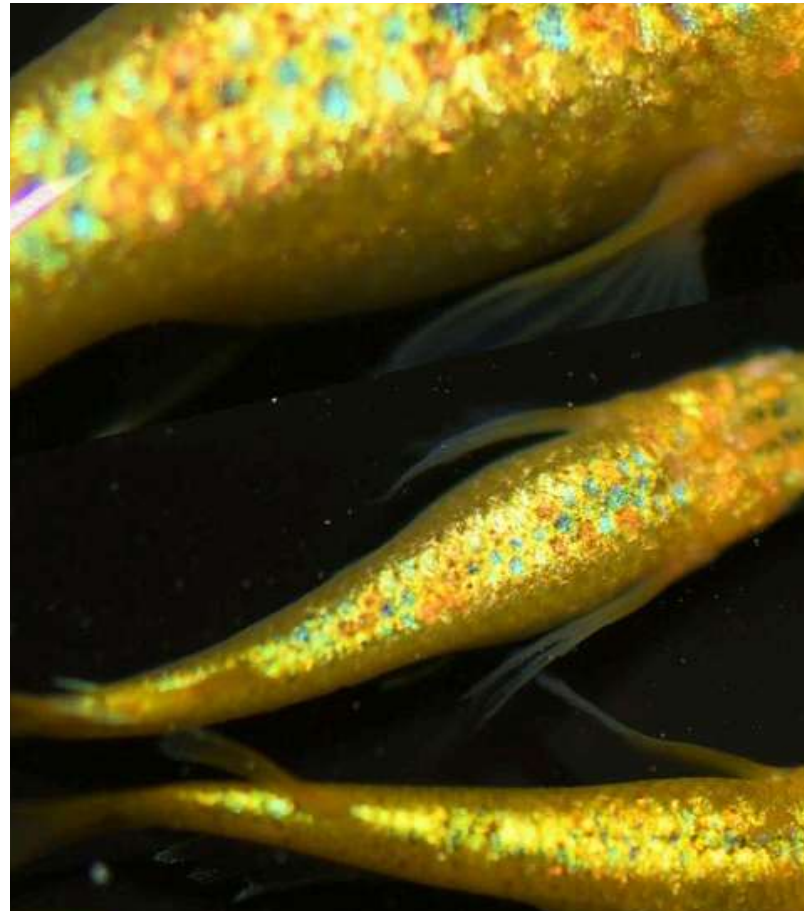
*The original **Oryzias latipes**, the fish that spawned a thousand sports. **O. latipes** is but one of dozens of **Oryzias** across Asia. Photo by Seotaro*



HUNDREDS AND HUNDREDS of years ago—before our age—in the time of Samurai, Shogunates, God Emperors and Geisha—groups of children in Japan (日本, Japan/Nihon/“Nippon”) played in their local creeks. Like how most rural American kids do today. Scrap-steel pail (likely welded by dad), straw rice-patty hat, fundoshi underwear, and a bamboo net would have been the youngster’s garb.

Clickity, clack! On hot summer days, village children would run on one and two-toed wooden geta sandals to their local watering hole. Like most kids do, across all times, they explored their surroundings and brought their tiny treasures home. In the primeval creeks, bogs, ponds, lakes, and hillstreams, the children found two species of what we call “Ricefish” now here in The States: *Oryzias latipes* (the “Japanese Ricefish”), a small amber-colored medaka; and *Oryzias sakaizumii*, a smoky-colored fairy fish with a larger, more robust frame.

Over the next hundreds of years, the little high-eyed pixies found homes in unused vases, pots, bowls, garden and temple ponds... even in the Imperial Tokyo Palace. Once they’d been spirited away from the wild, the *Oryzias* would develop, with the help of their caretakers, into extraordinary living works of art. The “cultivar” (“var.”; meaning man-made strain/breed) Medakas are some of the most striking aquarium fish, and only a scant handful of varieties are known to The American Hobby.



***The Japanese Medaka now comes in a dizzying variety of sports. The “sunset topaz” (above) is a metallic medaka variety. The metallic “emekin” (below left) has metallic, reflective scales in blue, silver, and gold, while the “vermilion special” (below right) is one of the “deep color” breeds derived from more common orange sports, like “Yang guifei.”***



EUROPE usually gets “the goodies” first; sometimes a highly sought-after strain will appear in Germany, Switzerland or England. Usually auctioned. First-time imported *Oryzias* var. from Japan fetch extraordinary prices. The *Oryzias* var. “Orange Frill” sold for €10,000.00 (directly equivalent \$10,000.00 USD) in the 2010’s. Now, you can get an Orange Frill Medaka pair for around \$150.00, after import fees, from a reputable Medaka dealer.

Domesticated *Oryzias* deserve their own scientific name, honestly, akin to domesticated dogs: *Canine lupis familiaris*. Given that all captive-strain *Oryzias* var. populations are a genetic combination of *O. latipes* and *O. sakaizumii*, they shouldn’t be referred to as “*Oryzias latipes*.”; per Japan’s Medaka Heritage webpage, there are over 40 unique populations of *Oryzias latipes* and *Oryzias sakaizumii* in Japan. Within these 40 populations, a large portion are hybrid populations. An ideal name for domesticated Medakas would be something akin to *Oryzias medaka*—a name sometimes mistakenly used in the Americas.

In America, there are indeed a few serious Fairy Fish hobbyists beginning to emerge, mostly Asian Americans with direct access to their ancestral lands. Should the US Hobby wish to play catchup, and participate in the global Medaka Trade, MASI has assembled the relevant information needed to track down, import, and share these living treasures from the Empire of The Rising Sun.

It took two atomic bombs and nearly a century of cultural exchange to learn of Japan’s tiniest genetic treasures. Let us also exalt the high-eyed Medakas here in the United States. The MASI Leadership Team is in possession of a mostly-completed list of current, cruelty-free, healthy, “S-Grade” (A+ Grade) Medaka strains. In addition to the cultivar *Oryzias* var. list, MASI also has respective lists for the wild *Oryzias spp.*, as well as the completed Beloniformes-family grouping (“Halfbeaks, Lampeyes and Ricefish”). Let us marvel at the creations of the master gene-shapers of The Far East!



***Ochiba shigure* (above) is one of the medaka varieties bred to resemble popular koi varieties. *Ochiba shigure* medaka and the similarly-colored koi are supposed to look like fall leaves floating on water. This semi-metallic variety below, with orange and white scales is modeled after the famous “kohaku” koi, one of the oldest koi varieties.**



MEDAKA FROM JAPAN aren't fussy fish, able to live outdoors in most of the lower Continental US. In the wild, *Oryzias sinensis* (a sibling of the Japanese species) has been introduced into the frigid Amur River in Russian Manchuria, as well as coastal Ukraine and the Crimea. More locations, likely newly evolved sub-species of *Oryzias cf. sinensis* stock, have been reported from the Poronay River's watershed on Sakhalin Island, where little ricefish can be found juxtaposed to submerged roots from giant, edible herbs of the primordial island. Thanks to an endless supply of heat from hydrothermal springs, the former Japanese island can support even the most exotic of life... an Arctic Eden! *Oryzias cf. sakaizumii*, related to the Aomori Population of ricefish, can be found on Hokkaido (Japan's large, northern island, once home of the Hokkaido wolves; *Canis lupus hattai*, now extinct, was eradicated as the land was settled). The northern populations of *Oryzias spp.* need to be further explored.

Likely, the ballast water of Russian, Korean, Chinese, and Japanese ships carried the little fairies far, far from their home rivers. Luckily for the little *Oryzias*: they are adorable, breedable, and collectable; they will be greeted with open arms wherever they manifest. Where introduced, wild *Oryzias cf. sinensis* usually end up becoming restricted to areas with dense riparian growth, or intertidal river-mouths and estuaries, due to their tiny size. Once established, they quickly become part of the food chain for larger fish and birds: their bright features make them easy prey. They also harbor an attractive trait, mosquito control, should you keep bowls of them outdoors during the warmer seasons. It has been proven that *Oryzias var. latipes x sakaizumii* do reduce the occurrence of Mosquito-related illnesses where present.

**The Chinese rice fish (*Oryzias sinensis*) (top) is an *Oryzias* native to mainland China, while *Oryzias curvinotus* (below) is found on the island of Hong Kong.**



OUTSIDE OF NORTH EAST EURASIA, *Oryzias spp.* naturally occur from East Timor (and the rest of Sundaland) all the way to India and Pakistan. The fairies can be found floating in ecstasy in “Mermaid Lagoons” (Atheriniformes’, rainbowfish, Mandarin name translates to: “Little Mermaids with the \_\_\_\_\_ Colored Hair [meaning fin color]”) in Sulawesi, questionably high-up on the Bolaven Plateau in Laos, down to the rapids in Hainan’s whitewater rivers.

*Oryzias* belong to a genetic lineage of animals called Beloniformes. Beloniformes relevant to the Freshwater Ornamental Aquarium Hobby are: Halfbeaks (*Dermogenys*, *Megarrahampus*, and *Nomorhampus*), Duckbills (*Adrianichthys*), and Ricefish (*Oryzias*). Marine Beloniformes include: flying fishes, needlefish, and pike-mackerel sauries. Think of the Beloniformes as the “Flying Fish Family.” Some of the halfbeaks, like the *Nomorhampus*spp., retain large pectoral fins like their saltwater Exocoetidae (“Marine Flying Fishes”) cousins

*Oryzias spp.* also have cousins in Africa: the *Procatopodini*-lineage “Lampeyes.” Or as some are beginning to call them: “False-Killifish.” All the fish discussed in this introductory overview of “Medaka Ricefish” are listed in MASP’s Fishes of Atlantis spreadsheet (available link by scanning QR code below) —a Living Document which has been Peer-Reviewed and is updated with new entries regularly. A lot of aquarists will be putting these Beloniformes on their Christmas Lists!



**Fishes of Atlantis**



**The halfbeaks are a unique group of species. They are livebearers evolved for unique lifestyles, and have just started entering the hobby.**



**The Tanganyikan killifish (*Lamprichthys tanganicus*) is another beautiful member of the broader group that includes the Asian *Oryzias* .**

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