SOUTHERN AFRICAN KILLIFISH SOCIETY *Letters*

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Nothbranchius jubbi “Warfa Blue”. Photo by Kenjiro Tanaka.

Contents

Greetings

Hello all

Christmas is around the corner and still no killies in the petshop. May be one day that will change but for now we will have to be satisfied with socks and other less exciting gifts.

The cover picture is of *Nothobranchius jubbi* “Warfa Blue” and was taken by Kenjiro Tanaka of Japan who has been maintaining this fish for at least 26 years! This strain comes from ponds along the Warfa River in Somalia. It occurs as two phenotypes: one with a red center to the caudal fin; and the other as pictured. I was sent some eggs by Kenjiro earlier this year and have two males of the red phenotype and one female. (I should have spare eggs soon!) This little fish is very productive and undemanding. The males don’t appear to be very aggressive towards each other.

In this fourth and final SAKS newsletter for 2003 there is an article on the fish coveted by most of us: *Fundulopanchax sjoestedti*. Currently there is only one person in the country battling to breed these fish but through his efforts there may be two more. Hopefully this article by Herman Meeus will be of some help and we will soon have the country inundated with these lovely giants.

You may notice my new address on the last page. I’ve recently moved which means I have just lugged around several hundred liters of fish tanks and countless fish. As part of the move I have given up on the non-annuals (space restrictions!) and will now only be working with annuals and semi-annuals. I have however put a lot of *Aphyosemion australe* and *Chromaphyosemion poliaki* Bolifamba out there. Hopefully someone will get to work breeding them. (Hint: with the *australe* it is best to breed one pair to a tank and don’t touch the eggs. Rather move the mop or the fish.)

You can look forward to the next newsletter in early February.

Merry Christmas and a Happy new killi-filled year!

Tyrone

Fish and Egg List

Please submit your list of fish/eggs that you have for sale or would like to acquire. The list can be sent to tgenade@freeshell.org.

Dirk Bellstedt

dub@sun.ac.za
4 Helderspruit Rd, Somerset West, 7130.
Ph: 021-855-3788.
Imported German foods and Discus. Brine shrimp eggs, flakes, frozen foods, etc. . . Best prices! Excellent quality! Phone/email for a complete list of available products. Shipping: anywhere in South Africa!

Errol Scholtz

Port Elizabeth.
Ph: 041-360-2503(H).
Looking to trade or buy.

Available eggs:
Fundulopanchax filamentosus
Available fish:
Aplocheilus lineatus, gold
Chromaphyosemion bitaeniatum “Lagos”
Scriptaphyosemion gearyi
Looking for:
Aphyosemion striatum

Rudolph Koubek

P.O. Box 147, Randvaal, 1873.
Ph: 084-335-0101
Gabon *Aphyosemion* and *Diapteron* species. Large variety. Phone for prices.

Ruth Warner

ruthwarner@earthlink.net
1512 Lilac Lane, Machesney Park, IL 61115, USA
Success with Killifish by Ed Warner, $10 excluding postage (≈$7.50).

Tyrone Genade
tgenade@freeshell.org
23 Hampstead Close, Parklands, 7441, South Africa.
Ph: 084-335-4977 (C).
Prices exclude shipping.

Fish and eggs available:

Fundulopanchax filamentosus	R50/wks
Nothobranchius lourensi “Narubungo TAN 02-24”	R60/wks
Nothobranchius luekei “Luhule River TAN 02-8”	R75/wks

Articles

Some like it big. . . *Fundulopanchax sjoestedti*

by Herman Meeus,BKV
herman.meeus@pi.be
translated (mostly) by Tyrone Genade from the article
Sommigen Houden van Groot. . . *Fundulopanchax sjoesdeti*,
Killi Kontakt, 2001, 29(2):28-34
(Footnotes by the translator.)

Fundulopanchax sjoestedti “Blue”. Photo by Kenjiro Tanaka.

For some people this species is the ultimate killifish, others find its more like a herring. . . Since a discussion about taste has no sense, this article only dealswith a giant among killifish, *Fundulopanchax sjoestedti*.

This fish has been known for a long time. This species was described in 1895 by Lönnberg under the name *Fundulus sjoestedti*. This description was based on two specimens that were collected by Professor Sjoestedt in West Cameroon. Thereafter Myers changed the name to *Aphyosemion sjoestedti*, and shortly thereafter the name was changed to *Fundulopanchax sjoestedti* based on the article by Ruud Wildkamp and Jouke van der Zee.

Fish were first available for sale in 1905 and 1909 in Hamburg. No young were obtained from this first import. There was a long wait till 1981

Fundulopanchax sjoestedti “Loe”. Photo by David Ramsay.

when more fish were imported and since then they have been established in the hobby[1].

Fundulopanchax sjoestedti along with *F. gulare* (Boulenger, 1901), *F. schwoiseri* (Scheel & Radda, 1974) and *F. kribianum*[2] (Radda, 1975) belong to the genus *Fundulopanchax*.

With a length of 6 to 14 cm for the males and 5 to 10 for females this species is certainly one of the ‘big boys’. Within *F. sjoestedti* there are two colour variations known, the blue and the red phenotypes along with a range in between[3]. Wildekamp (1996) notes that the two colour forms occur sympatricly. Of the two, the blue gets the largest. The base colour of the male is brown-red with a brown back. From the head to midway down the body the fish possesses a red-brown to red colouration where upon there is white-silver, often blue flecks and lines. The rest of the body down to the tail is iridescent blue with red vertical bars.

The dorsal fin is orange with a some blue. In the lower half of the anal fin is orange with a blue edging. As well as in the dorsal there is also small to large red spots in the anal fin. The tail fin is divided in two by a broad orange stripe. The upper portion is blue as well as the bottom portion. The bottom blue is separated from the orange by a red stripe.

In the red form there is more orange/red in the rear body as well as the largest part of the tail and anal fin. The females of both forms are brownish grey with dark flecks and stripes on the body. The fins are transparent with drown flecks.

[1]Scheel reports in ROTOW that the *sjoestedti* strain identified as *Aphyosemion coeruleum* was established from a 1915 import collected at Warri, Nigeria and distributed via Akwarium Hamburg

[2]*kribianum* and *schwoiser* are considered junior synonyms of *F. fallax* by Huber and Lazara

[3]There is now a third type, the Loë phenotype which is vertically striated along the entire length of its body.

Fundulopanchax sjoestedti “Dwarf Red”. Photo by Kenjiro Tanaka.

The distribution area encompasses the rain forest along the coast from South Nigeria, the Niger Delta and South–Western Cameroon. There they are found in temporary swamps and pools, raffia swamps and swamp like flood plains (Wildekamp 1996). In this regard the article by Klaus Kluge (1960) is very remarkable. He mentions a population of *F. sjoestedti* in the Ashantie area of Ghana extending the range further West.This probably has to do with the fact that previously *Fundulopanchax occidentalis*[4] was confused with *F. sjoestedti*.

Karl Knaack (1979) describes the biotypes better as slow flowing rivers and vegetated flood-plain pools that dry up in the dry season. The substrate is composed of clay or sand with a layer of leaves. With the onset of the dry season the pools dry up rapidly and the fish have to retreat to other water else die. Often they are able to jump from pool to pool. When they reach an appropriate pool they immediately begin to reproduce. In April and May heavy rains fall in the Niger Delta and West Cameroon and the fry hatch out. The water parameters from the wild biotypes are 1 to 5°DH and pH 5.0 to 7.0. The temperature is mostly around 22°C.

It is obvious that a big fish does not belong in a small aquarium. One couple or one trio belong in at least an aquarium of 50 L. If the aquarium is to small, one will see the male but the females are condemned to a life hiding between the plants or in the mop.

It is possible to maintain more fish in a large community aquarium on condition that there is lots of plants and the other fish are not too small to swallow. Small fish disappear never to be seen again between the teeth of these giants.

The fish tank substrate should be course sand. This will enable the fishes to also eat all the food that has fallen to the bottom. The tank should be richly planted with for example horwort and Java Moss which is im-

[4]The correct taxon is *Callopanchax occidentalis*.

portant since the male is a virile guy and not very gentle. Hiding places are very important for the females. Apparently the aggressive behaviour is why many fans of this fish keep the sexes apart in different aquariums only bringing them together to breed. A side effect of this is that many top quality show fish are produced.They don't like to much light either. In conclusion the fish come out of shadowed pools.

The ideal temperature is between 18 and 21°C. Higher temperatures lead to stress and has a negative effect on breeding. At higher temperatures the colour becomes less intense and the fish become listless and stop eating. Temperatures as high as 24°C will not impact the fish too seriously but it will shorten the life span of the fish. J. Palikĉka (1990) indicates that a short time at 15° is tolerated well. The fish then appear more lively and with better colour. This fish is a good candidate to spend summers outside[5].

Filtering isn't really necessary provided that there is regular water changes. Changing one quarter of the water every 14 days is a good routine. For this purpose normal tap water can be used. Some people find that mature tap water mixed with filtered rain water is better.

F. sjoestedti eats anything and is a big eater. This should be taken into account if one wants to get some eggs when breeding them. Live food is preferable. Such a menu can consist of all types of mosquito larvae, ants and thSuch a menu can consist of all types of mosquito larvae, ants and their eggs, earth worms, daphnia, cooked lean fish, fresh water shrimps, mysis, white worms and beef heart. . . Even here the adage that only as much food as what can be consumed in a few minutes be adhered to. Fatty foods should be varied with lean foods in order to prevent the fishes from getting too fat. A lot of food also means a lot of waste. It is a good idea to monitor water quality at least once a week.

F. sjoestedti is an antisocial fish where the males will attack each other with pleasure causing much fin damage as well as much harm to females. They are not active swimmers and can hang motionless under floating plants for long periods. Normally they do not jump from tanks but some safety is always a good idea.

This is a semi-annual fish. The eggs can develop normally in water as well as kept in a moist environment. To obtain the eggs there are two strategies. Some people keep the sexes apart and only put them together to spawn. As the males can be very brutal this leads to violent chases from the moment the female is put into the aquarium. Using a trio is not good either since it can result in the non-spawning female gobbling up the

[5]And so also winters outside in many places in South Africa.

Fundulopanchax sjoestedti sport produced from a brood of the blue strain. This sport has not yet been fixed. Photo by David Ramsay.

eggs after the spawn pair. With two females there are also fewer fertilized eggs, since the male displays such an eagerness to spawn.

The breeding aquarium should be furnished with two to three spawning mops to serve as shelter for the females and much peat. This can be put on the bottom in a large plastic ice-cream tub (17×17×10 cm) will be used for spawning. There is a 5×3 cm hole in the lid of the ice-cream tub. The eggs are buried peat in an abrupt movement of the male's tail. During the first day 10 to 15 eggs/day are laid in the peat. After that the quantity diminishes and there is a resting period. It is especially then that the hiding places for the females are extremely important.

[J. Paliĉka keeps the sexes separated in the same tank with a volume of 12 L. On the bottom he has a wire netting (grid). The mesh size of this wire netting is 3 mm. At spawning the eggs are put in the meshes and stick there. Some of them fall through the wire netting. Thereafter the eggs are gathered and the placed in shallow containers and treated gently with acriflavine[6] for fungus after one week all the water is thrown away and the eggs go into one plastic bag. The eggs are monitored for four to six weeks.

G Lammertijn (1976) incubates the eggs for 40 to 45 days at a temperature of 25 to 28°C. The eggs in peat are hatched with soft water of a temperature of 22 to 24°C. After three to four hours the fry have hatched and can take baby brine shrimp immediately. They are then already 6 mm long. After six days they can already take cyclops and small daphnia. The

[6]Acriflavine is a strong mutagen and may cause deformed fry and/or sterilize adults—Duijn, C van. (1967) Diseases of Fishes, 3rd edition. Butterworth Group.

growth is rapid and after one month the fry are can already be 3 cm long. With regular water changes and with the passing of time the fry will need to be moved to a larger tank where they can grow better. After five to six weeks the males begin to develop colour. After two months the young fish are 5 to 6cm long. Only the dominant male will be recognizable while the others will look like females.

Even here day after day the eggs can be sought and incubated in water with some acriflavine. In this event the eggs hatch out sooner and fry of various sizes are produced which causes rearing problems.

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[5] Wildekamp, Rudolf H. (1996) A world of Killies—Atlas of Oviparous Cyprinopdontiform Fishes of the World, Volume III. *American Killifish Association*.

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