Observations of Three Species of the Genus *Corydoras*

By Jim Makin

Returning to the hobby after a break of several years I was expecting to find many a new and interesting species, but a dwarf species resembling *C.barbatus*? this I would love to have. In the eighties I kept and bred some 20 species of corydoras, having particular success with barbatus (Sao Paulo type) but never having bred the larger barbatus (Rio de Janeiro type) until returning to the hobby in the mid nineties. In 1997/8 I managed to purchase eight *Corydoras lacerdai*, my first thoughts were how close they resembled *Corydoras barbatus*, which I had at home at this particular time. I have now kept and bred all three species but now felt it was time to collect all the information gathered during my spawning success.



1. *Corydoras barbatus* (Rio de Janeiro) 10cm/12cm. This is the largest of the three species both in actual size and stature. The finage is much larger, having longer pectoral and dorsal fins and the males sporting cheek bristles.



2. Corydoras barbatus (Sao Paulo) 9cm/10cm. This is now being sold as Corydoras kronei and is a finer looking species never attaining the size of the Rio de Janeiro type. The males do not appear to have cheek bristles (at least they are not visible by the naked eye). The females of these two barbatus forms are almost identical.



3. *Corydoras lacerdai* 5cm/6cm. In size this Cory resembles the genus *Aspidoras* but its body shape certainly resembles *C. barbatus* but having no apparent cheek bristles. When eight fish (4 males 4 females) were bought some *Aspidoras* were in the same shipment, which I had mistakenly caught as they so closely resembled the female *C. lacerdai*.

I believe there is a fourth type, *C. barbatus*, sp. (BAIANINHO 11) this type is caught in black water tributaries, totally different conditions from the other three types mentioned. I have not seen this fish, in the flesh so to speak, but in the photo's it does appears similar to the Sao Paulo type and appears to be a little smaller like *C. lacerdai*, but may have a different head shape, only time will tell.

Breeding *C. barbatus* (Sao Paulo). (Ref. Catfish Association GB. 1978) I have very recently bred these fish again (1999), on this occasion five fish, 2 males and 3 females were kept in a 72 x 24 x 15 aquarium with *Corydoras narcissus* and Cory. sp (Peru Blacks). Temp was low at 70F, pH 6.8 -7.5. DH was never checked, the tank was well filtered and plenty of water circulation. On this occasion some interesting observations were made with both males taking turns in spawning with the two females, the females would lay their eggs on the area where the respective males had cleaned.





Both females spawned with the two males. It would appear that the aquarium was large enough to accommodate territories for both males, the eggs were laid high near the water surface. The eggs were removed and hatched out in a small tank. The fry were moved on as they out-grew their container and they were finally reared on in 24 x 24 x 12 tanks. They were fed on brine shrimp, micro worm and grindle worm.

I found that you had to be very careful with the micro worm as they could easily infest the tank/container and eat the very small fry. I also found that one of the commercially made fry foods was the best until the fry could eat the grindleworm or brine shrimp.

Breeding C. barbatus (Rio de Janeiro)

Temp again was low at 70F and pH 7. This form was first kept in the late 80's but no serious attempt was ever made to breed them. It was not until the mid 90's that they were kept and bred. A group of six large fish were kept in a $40 \times 15 \times 15$ aquarium and the spawning occurred after they had been conditioned for several months. An apparent pecking order was observed. The alpha male had a richer colour and dominated the tank with his constant showing of to the females and subordinate males. The dominant male carried out the spawning, and as the females became ready he would entice her to the area he had prepared were they would lay the eggs in the normal Cory manner and then place them within an inch or so of the water surface. They hatched within four to five days and reared as previously described.

Breeding *Corydoras lacerdai*. Reproductive and feeding activities are similar to the other two. The eggs again being laid high and nearly out of the water, they did prefer higher water temperatures and out of 6 spawnings only three produced viable eggs and fry. The male would be so obsessive, chasing the other males away. The female he was spawning with would eventually strip herself of eggs. She could be seen coming out of the water laying the eggs as near to the water surface as possible. The eggs were collected and fry reared as *C. barbatus*. Some difficulty was encountered when spawning attempts were made as the males were more aggressive and would not tolerate any other males (similar aggression was observed in *C narcissus* and C.sp (Peru Blacks). In fact two males were lost which appeared to be caused by harassment from the alpha male. In later attempts with *C. lacerdai*, the fish were paired off and placed in a 12 x 10 x 10-inch tank with *C. Pygmaeus* and some young Cory's. This was not successful, as the fish did not seem to settle in this situation. Both the *C.barbatus* types were produced easily and in large quantities, but sadly not the *C. lacerdai*. After six spawning I lost all the parents and remaining juvenile fish after I moved them to the new fish house. I do believe some of the young I bred still survive around the UK today, and hopefully will be reproduced.

Drawings of fry growth.



Fry 7 days :

60 days :

6 months

C. lacerdai developed their adult colour patterns by nine months and they are sexually mature and would produce viable fry by one year. *C.lacerdi* colour will change to adult between 6/9 months while *C.barbatus* retains this colour till 18 mouths.

Conclusion.

We have here a group of *Corydoras* that are closely related. They're feeding behaviour, reproductive behaviour and day- to-day behaviour is very similar in the three types kept. The colour development of the fry in all three types are also alike. In *C.barbatus* it is not until the are 18 months old that the different types can be identified. The two male types were then easy to

identify but the females are almost identical in colour, eventually the larger size of Rio de Janeiro type was the only visual difference. Care should be taken not to mix these similar Cory's as the may inter- breed. As an aquarist we do not have the scientific knowledge to comment on the validity of these species. But in our hands we do have the oportunitity to make observations on their behaviour that will never be seen, which could shed some light on the true identification of such similar *Corydoras*.

References:

Corydoras barbatus. Rio de Janeiro Aqualog Page 97,98 (s18530-4) Corydoras barbatus, Sao Paulo Corydoras lecerdai, Aqualog, Page 100 (s19105-4) Corydoras sp (Baiananho11) Aqualog Page 100 (s20030-4) Breeding C barbatus (Qouy & Gainard 1824) www.scotcat.com/articles/article14.htm

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