WTFish?: L-Numbers and LDA-Numbers Explained

by Derek P.S. Tustin

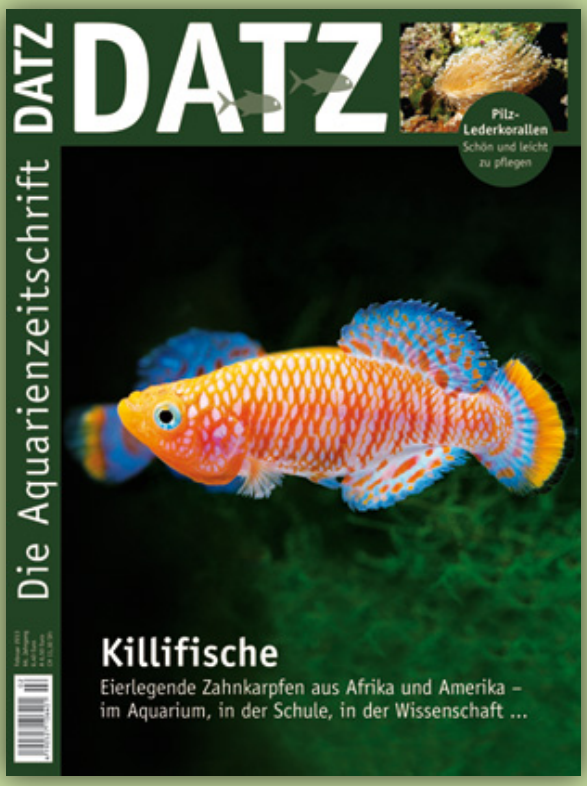
Squaliforma villarsi

If you take the opportunity to visit *planetcatfish.com*, if you read some of the different aquarium magazines, if you visit several of the various aquarium stores in the local area, or even if you see some of the different plecos at our various auctions throughout the year, you will often see *Loricariidae* listed not under a binomial name, but under an "L-Number".

As aquarists, we are very adaptable, and referring to these plecos by both a common name and L-Number has become accepted as standard practice. I was recently at Lucky Aquarium in the market Village Mall in Markham, Ontario and saw a tank containing several Blue Phantom Plecos, along with the label "L-128: *Hemiancistrus* sp." Just another day of spelunking through fish stores...

But where did the L-Number originate, and what does it mean? Most people don't give it a lot of thought, but there is actually a story behind it all.

As mentioned in my article on *Loricariidae* that appears in this month's edition of *Tank Talk*, the popularity of *Loricariidae* exploded in a relatively short period of time. As more and more regions of Central and South America were explored for the presence of different forms of plecos, more and more species were quickly discovered, exported and found their way into local aquarium stores. But this short period of time between discovery and exportation left no time for the newly discovered species to be scientifically described. Still, exporters needed to be able to describe the fish on their export sheets.



We all know that common names, while acceptable for most fish, can occasionally not be accurate enough to differentiate between different fish. Arthur Werner, the owner of Transfish (which was one of the first companies to import Loricariidae to Germany on a mass scale) and Rainer Stawikowski of *DATZ* (*Die Aquarien und Terrarienzeitschhrift* – translated as The Aquarium and Terrarium Magazine) saw this developing problem and created the L-Number system. It was hoped that as most species had not yet be scientifically described, yet still wanting to be able to provide a unique and specific name for the fish, they could identify each species by assigning an L-Number ("L" standing for *Loricariidae*). As new species of *Loricariidae* were featured in *DATZ*, they were given an L-Number starting at L-1 (now recorded as L-001) and progressing forward.

All well and good, right? Well not really. Business being what business is, another German aquarium magazine, *Das Aquarium* (The Aquarium) also wanted to feature newly discovered species. But if they used the L-Number system that had been introduced by *DATZ*,

they would essentially be promoting a competitor. So instead of using an L-Number, they instituted their own labeling system, going with the "LDA-Number". "L" again stood for *Loricariidae*, but they added "DA" (for *Das Aquarium*) to come up with the "LDA-Number". Again, the numbering started at LDA-001 and progressed onwards.

But two different and competing labeling systems wasn't the only problem. The reality was that the same fish was often caught at differing locations and exported at different times by different exporters. As we all know, fish that are genetically different can look very similar, and the same fish can look very different if from different locations or caught at different times. Therefore, instances occurred where the same fish was described under different L-Numbers and instances where different fish were described under the same L-Number.

So, we've got two systems where duplication was becoming common and problems with assigning a single number under either system to a single fish. Confusing. But the problems don't stop there either.

One of the difficulties with using either the L-Numbers or the LDA-Numbers in North America is that they originated in German publications that had little circulation outside of Europe, and back-issues that were hard to come by. So, even though fish were being exported to North American under both the L-Number and LDA-Number, the source for hobbyists to confirm the identity of the fish wasn't available. *Aqualog*, the publisher of multiple fish identification books, decided to publish a book, *Aqualog Loricariidae: All L-Numbers*, to present all *Loricariidae* species described by L-Numbers. But many of the fish described under one L-Number in the original *DATZ* publication were not the same fish under the corresponding L-Number in the *Aqualog* publication. So the L-Number in *DATZ* may describe a different fish than the same L-Number in *Aqualog*.

But... it still doesn't end there. In attempt to rectify the problem of different populations of the same species being identified under separate L-Numbers, *Aqualog* subsequently instituted an alphabetic suffix to the L-Number. So instead of just L-136 (an undescribed *Hypanscistrus* species), there is also L-136a, L-136b and L-136c, each identifying different populations of what is believed to be the same species.

And yet another problem. Currently, once the fish is described the corresponding L-Number/LDA-Number is "retired", and the scientific name takes precedence. But this wasn't always the case. During the early days of L-Number usage, once a fish was scientifically described it was known under the binomial name, but the corresponding L-Number was recycled, identifying a new fish. Since the hobby tends to hold on to certain things even after we shouldn't, this resulted in some L-Numbers identifying both a scientifically described fish, and a different undescribed one. Fortunately this practice has stopped, but there may still be legacy issues that affect certain fish, and definitely affect historical literature on some *Loricariidae* species.

So...

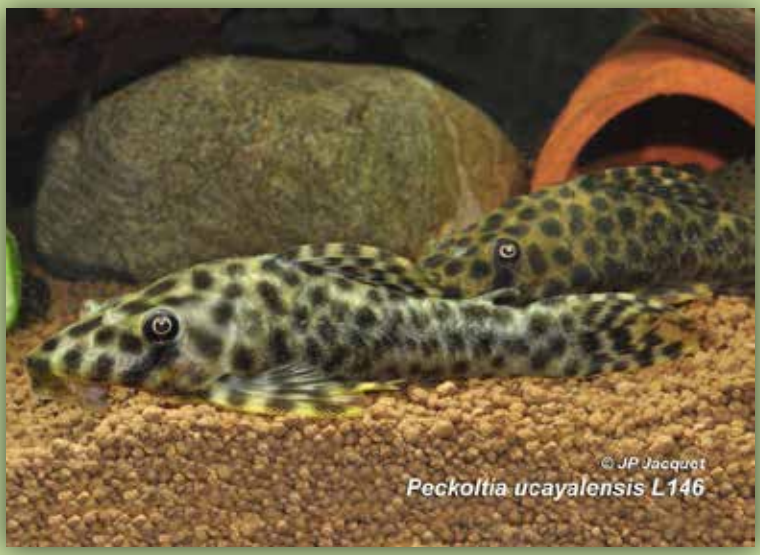
- L-Number vs. LDA-Number
- Multiple L-Numbers for the same fish
- The same L-Number for different species of fish
- *DATZ* L-Number vs. *Aqualog* L-Number
- Alphabetic suffix to an L-Number
- L-Numbers being recycled

To give an example of the confusion that the above can cause, let's take a quick look at *Parancistrus nudiventris*, also known as the Peppermint Pleco. This fish, native to the Rio Xingu in Brazil, was scientifically described in 2005. Prior to that it was known under L031, but also under L176, L300 and LDA004. So, three L-Numbers, one LDA-Number, one common name and one scientific name – all for just one fish...

How about the Zebra Pleco? Three L-Numbers (L-046, L-098 and L-173), the common name and *Hypancistrus zebra*.

Blue Fin Thresher Pleco? L-093, L-153 and L-195, common name and *Hypostomus villarsi*.

Peckoltia ucayalensis? Also known as the Bola Pleco, L-146, L232 and LDA30.



Peckoltia ucayalensis

The L-Number and LDA-Number systems, for all the duplication, error and confusion, have given at least some clarity to identifying a given fish. The concept is sound, but the execution was lacking. If the hobby had agreed to one numbering system rather than the two that seemed to originate from commercial competition, there would have been less conflicting duplication. If there had been some communication between *DATZ* and *Aqualog*, the erroneous and contradictory labeling of species between the two publications would have been avoided. If the numbering system had have been clearly though out before being instituted, the recycling of numbers would probably not have occurred.

So, with such a range of problems, is the system even useful? Well, at present there are 457 L-Numbers and 105 LDA-Numbers describing various *Loricariidae*. If not for they numbering system, these species would probably only have been identified by common name and/or collection locale.

Hypancistrus zebra

I'd have to say that the L-Number and LDA-Number systems are a useful tool, but should not be relied upon as the sole and definitive source for identifying *Loricariidae*. And looking back on it that is what these systems were designed to be, an interim tool to help with the acquisition and discussion of new species, not the end source.

So the next time you encounter a fish labeled with an L-Number, you'll have a better idea how it came to be identified as such, and realize that what you may acquire is likely a fish on the cutting edge of aquatic discovery.