

Why difficult? – Make it easy!

When you go to a pet shop you won't be surprised from what you see. They are often part of franchise so when you see "Zoo & Co" (a famous German pet shop chain) you already know what you will get there – as in huge grocery stores too. So when you finally passed the racks with useless accessories for pet owners, you'll directly get to the monotone stock of ornamental fish.

As a seasoned fish keeper I shake my head in disbelief. Where are the good old days of serious fish keeping gone? With small crooked shops, the talk with the owner (who wasn't interested in his profit only) and last but not least the fish rarities, which were coddled up by a local breeder in hard work.

I don't write these lines only in melancholy, but I keep beautiful planted tanks with healthy fish in it for many years with sanity and reason, without the

inventions of the last years. I want to share some of my experiences with you.

Light

I still use the good old T8 tube on all five display aquariums, a Philips or Osram 840 (???? K) in the back and a Hagen Power-Glo (18000 K) with reflectors in the front. My tanks are all custom-made dimensions so the light does not reach every corner and this has many pros, I think.

Many rainbows don't want to get stressed by too much light. As we all heard in many speeches, the natural habitats are mostly shaded by plants so every fish can hide in darker areas of the water. In my aquariums they do the same, they display their nicest colors exactly there. Therefore I planted *Cryptocoryne* and *Anubias* in the dimly parts. Most pet shops offer plants with high-intensity light request stipe- and in-vitro-plants, some of the traditional



My 450 l aquarium in autumn 2012. All photos: Harald Hildebrandt.



My 450 liter aquarium in January 2017.

Cryptocoryne and *Echinodorus* species (like *Echinodorus horizontalis*) are almost gone.

Let's get back to my record. I change the tubes only when they flicker and that happens mostly after more than five years. You can see different growth of the plants when the yield sinks, a typical sign is when the internodiums, the part between two leafs, grow longer. On the other side it's positive when I see my favorite *Echinodorus* spec. "Regine Hildebrandt" grows bigger than stated in literature and produces offshoot in addition. My guests ask how plants can grow this huge in a tank of 450 liter with only 2 x 36 watt on it. This has also to do with the next chapter.

Fertilization

I used to fertilize my aquariums with products from the companies Femanga and easyLife. But for many years I had also the adding of acidulated water in my mind, from stories an older hobbyist told me.

After reading Takashi Amano's "Aquarium Plant Paradise" I was encouraged to try this approach in one of my aquariums. Amano wrote on page 54 (German issue!) "On a day I read on the label of a acidulated water bottle: water, carbon dioxide, sodium chloride. That's it, the beginning of an experiment. (...) I would have stopped aquaristics, without this discovery."



I don't want to suggest any dosage of use, it depends on hardness and acidity of the water, the illumination, the fish density and the general biological balance of the tank. Try a low dose on the beginning, for example 0,5 liter on a 200 liter aquarium in the middle of the light time, to let the CO₂ do it's job. You added too way much when the fishes suffer on breathlessness. But when you see bubbles of assimilation or tiny bubbles under the leafs after some minutes, you're on the right way. You can rate the real effect after some weeks. Keep in mind the growth of some selected plants by taking pictures of them every couple of days.

This is the only way I fertilize my tanks for many years. With this method I can

offer various plants on auctions to make other people happy with well grown plants. Despite the ancient lightning I often have an overage of red plants which normally grow on high intense lightning. Hands-on experience is better than dull theory.

Filtering

All my tanks are equipped with internal filters. That saves me from being disregardful with the filter sponges. I wring them out them every two weeks (exactly between two water-changes) under tempered water. Don't be too dainty clean, bacteria are very useful and grow better in natural conditions.

Echinodorus spec. "Regine Hildebrand" grows about 20 cm in my tanks.



The filter's water-outlet is generally five centimeters (2") under the water surface to hold the surface movement low. Otherwise too much CO₂ will be expelled. The recommendations of the pump have changed massively on the last years. Years ago the power-suggestions were on 1 liter/h per liter aquarium volume (a pump of 100 l/h for a 100 l aquarium) But nowadays it's "more power, more complicated, more money" and so there are pumps sold that are too powerful in my opinion. I always bought pumps of half that suggestion and was always fine with that.

Heating

My major aquarium is in the living-room at a temperature of over 20 °C (68°F), add

the heat of the light-tubes and it's about 25 °C (77°F) water-temperature. If you want to use a heater in addition please link it to the light to let the temperature sink in the night. Constant temperatures are real poison for the fishes.

Water-exchange and life cycle

I change 1/3 of the water every two weeks. I use a detritus suction cleaner for the ground. But as I said before, don't clean too much. The biological balance is the key for healthy fish and well-growing plants.

I refill my tanks with cold tap water. I do the same in my raising tanks and never made bad experiences. If you change only few factors at a time, the change of light-

View of my 350 l aquarium. On the left: a huge *Cryptocoryne spec. "Rosanervig"* (pink-vein).



tube or filter-sponges (what I do step-by-step) a tank can run smoothly for years without “deep-cleansing”, mine run like that for more than ten years.

Feeding

“Who wants a steak every day of the week?” For that reason I have many different foods of different manufacturers for my fishes. Dry food (granulate and flakes) change with frozen foods. I keep the dry food in my refrigerator and I share bigger packages with my fish-friends. I feed my fishes erratically with one day off a week. I ask a friend to feed my fishes when I am not at home for at least 3-4 days. I realize

more activity of my fosterlings, more mating and spawning.

Final remark

I don't want you to think that I'm not interested in any news and technical improvements. For sure I tried the new LED-lamps, but I returned them after short time. Only in one of my raising-tanks there is one LED-lamp left. But that is no reason for me to change my old habits.

Literature

Takashi Amano: Pflanzenparadiese unter Wasser (Aquarium Plant Paradise). Naturbuch Verlag (German issue).



This paper has been published in:



Regenbogenfisch
Jahrgang 32 Heft 2/2017

INHALT

44 Editorial

45  Expedition:
Ein Bad im warmen Sumpf
Hans-Georg Evers 

53  Aquaristik:
Warum kompliziert, wenn es auch einfach geht?
Harald Hildebrandt

59 Glossolepis:
Erfahrungen mit dem Ramu-Regenbogenfisch
Michael Wagner 

66 Aquaristik:
Meine Aquaristik und die Regenbogenfische
Jan-Willem Heerink

75 Impressum

 = PDF-file in English available for download on www.irg-online.de/rfe

Titelbild:
Fischarten des Ramu-Regenbogenfisches *Glossolepis ramuensis* im Aquarium.
Foto: Michael Wagner

The publication is under copyright. You may download the PDF for private purposes, print out personal copies and link to www.irg-online.de/rfe in print or communication. For other use please contact info@irg-online.de.

Regenbogenfisch is the quarterly journal of the IRG, published in German and Dutch and included in the membership fee. Some of the content is additionally provided in English as PDF files.

IRG - Internationale Gesellschaft für Regenbogenfische e.V. (International Rainbowfish Association), founded in 1986, is a community of fishkeepers with special interest in rainbowfishes, blue-eyes, and other freshwater species from Australia, New Guinea and the close-by islands. Most of our 500+ members live in Europe. 100+ species and varieties are kept and homebred in our aquaria. In regional meetings fish and information are exchanged. Our transnational, annual convention brings together many members and sees presentations of experts and the world's largest rainbowfish sale. The date is fixed each year to the second weekend of June.

Do you want to know more?
Just browse to www.irg-online.de.

