

Geneva forum 2018

On the tetra's trail!

Objectif Sciences International
12th Dec. 2018



François Lambert
French participant
Mobile : 07 68 03 58 89
E-mail: françois Lambert50@gmail.com



Summary

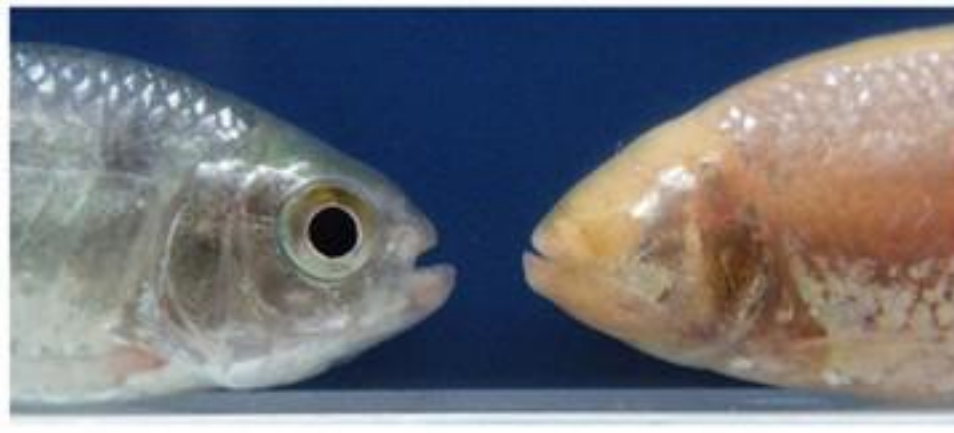
- I/ General setting of the research
- II/ Our protocol and equipment
- III/ What to improve
- IV/ Research perspectives



I/ General setting of the research



- What was the project?
- ✓ Studying *Astyanax mexicanus*, blind fish that have two morphotypes.



- ✓ We were in partnership with the CNRS. This partnership wasn't just symbolic, insofar as our actions were supervised by Stephane, an engineer who studied *Astyanax* for 3 years now



II/ Our protocol and equipment

- How did we proceed ?
- ✓ We caught around 200 of them in mexican caves and rivers, after what we freed them in their living place



- ✓ We also studied their environnement, by analysing the water, the mud and the air of each catching place. That was our evening ritual



- ✓ Results of our studies are used by the CNRS so as to understand the environnement and the genetic evolution of Astyanax populations



- Our equipment:

- speleology equipment
- masks for sanitary reasons



- ✓ Specific for the environnement's tests :

- calibrated pipettes
- containers for samples
- photometers to measure alkalinity, ammonium and phosphates
- colorimeters to measure nitrates, nitrites, etc... (at home)
- combo Hanna (pH meters)



- ✓ Specific for fishes :

- nets and buckets
- aquarium with a ruler
- Plexiglas plate and cloth
- scalpel blade, tweezers and lighter
- plastic boxes with numbered tubes (containing alcohol)
- camera

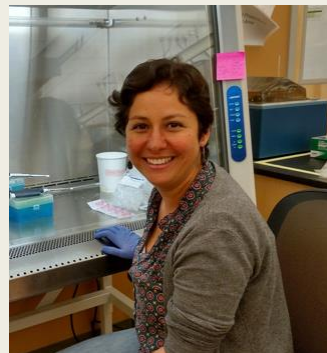


III/ What to improve and aim for the future of the project

- ✓ Even if there was a very appreciable organisation, an important improvement could be to emphasise our link with the mexican people



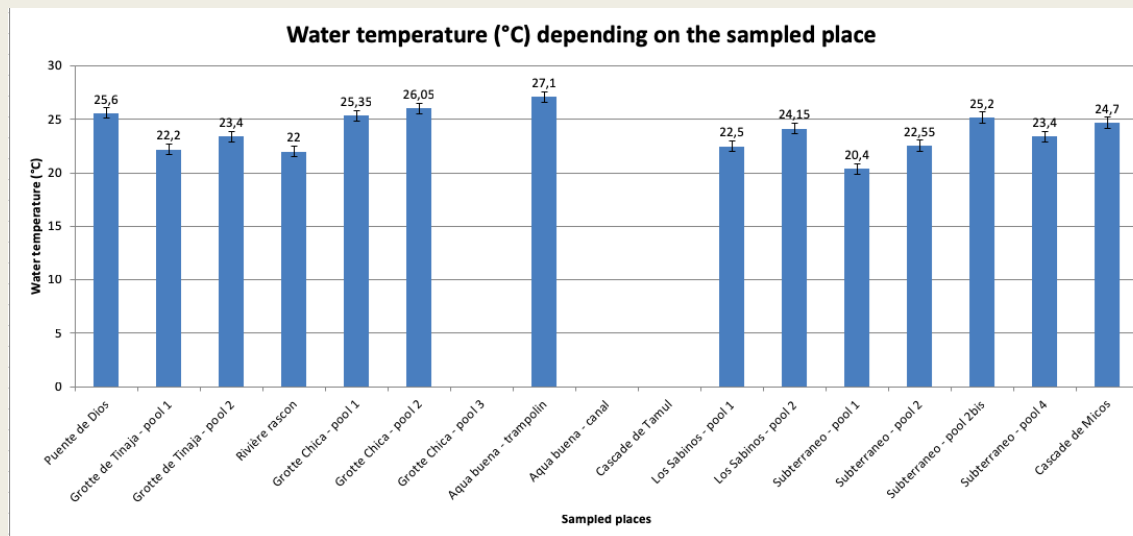
- ✓ We could then improve our partnership with mexican scientists like Patricia Ornela Garcia and Luis Espinas



« How improbable is the fact that I'm here, studying blinded fishes »

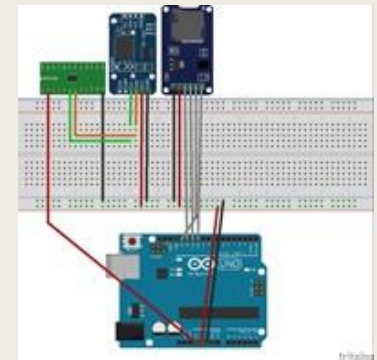
The thought each of us had when we arrived

✓ We could really improve the way we were fishing...

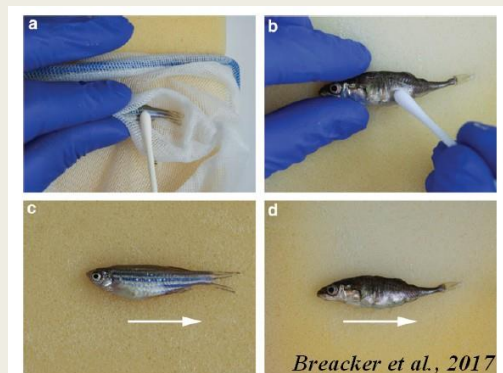


IV/ Research perspectives

- ✓ Other measures will be taken by OSI, within the context of the programme « puces sur le terrain ». More, some probes will be laid in mexican caves, to study the environnement on a long period



- ✓ It's important for us to improve the way we collect our results. Our point is the well-being of fishes. As such, we're trying to establish catching protocols that are less and less stressful for them



« Wow... I'd really like to go back there... »

The thought I had when searching for photos for the slide show

A photograph of a calm river or stream. Several large, weathered tree trunks and rocks are partially submerged in the water. The water is clear and reflects the surrounding green foliage and the structures in the water. The scene is peaceful and natural.

Thanks for listening !