THE LIFE OF WATER CURRENT AND SUCKER-BELLY LOACH

Content

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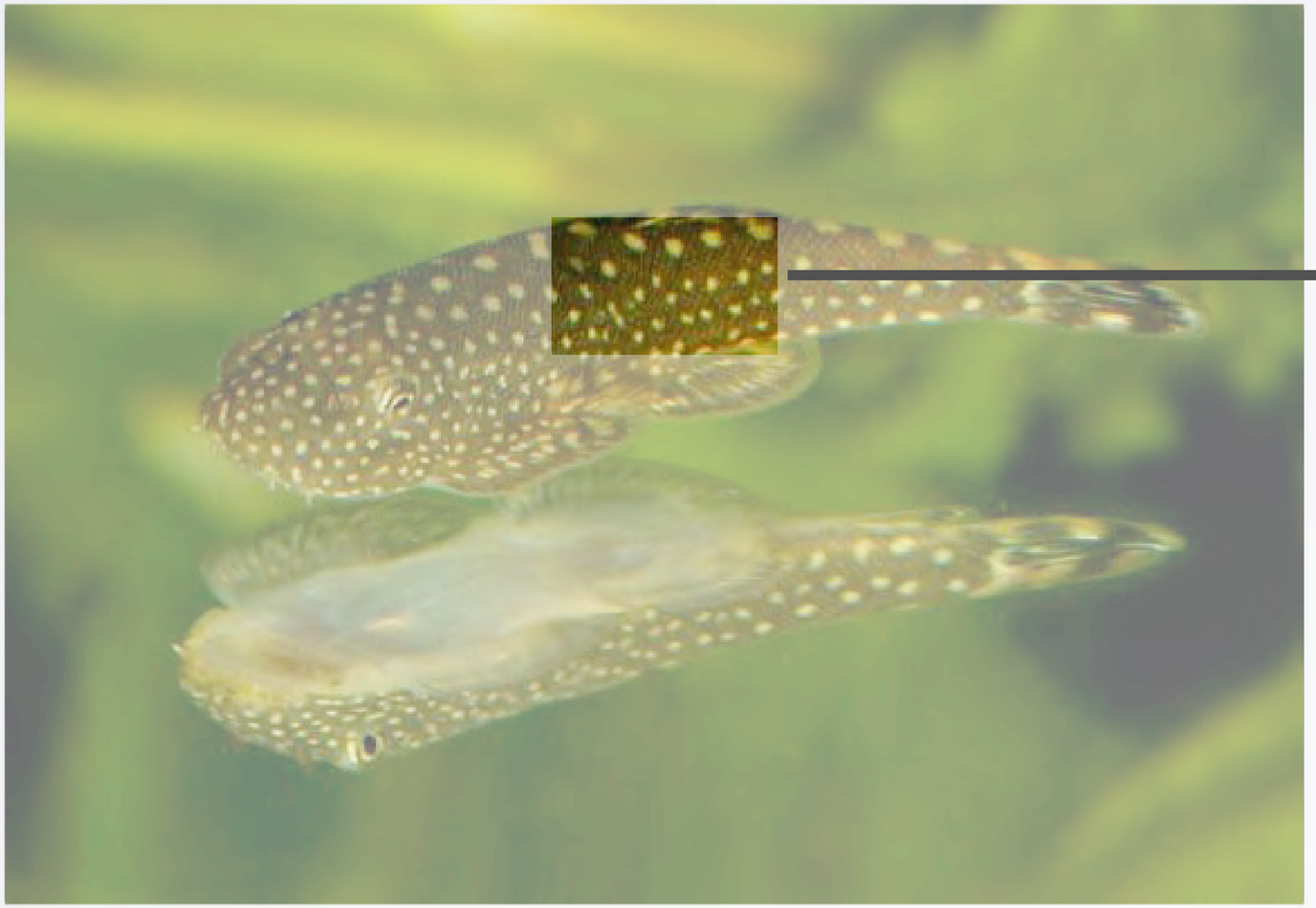
- The effect of water quality on the amount of Sucker-Belly Loach
- The adaptive feature of Sucker-Belly Loach in water current
- Other observation about Sucker-Belly Loach

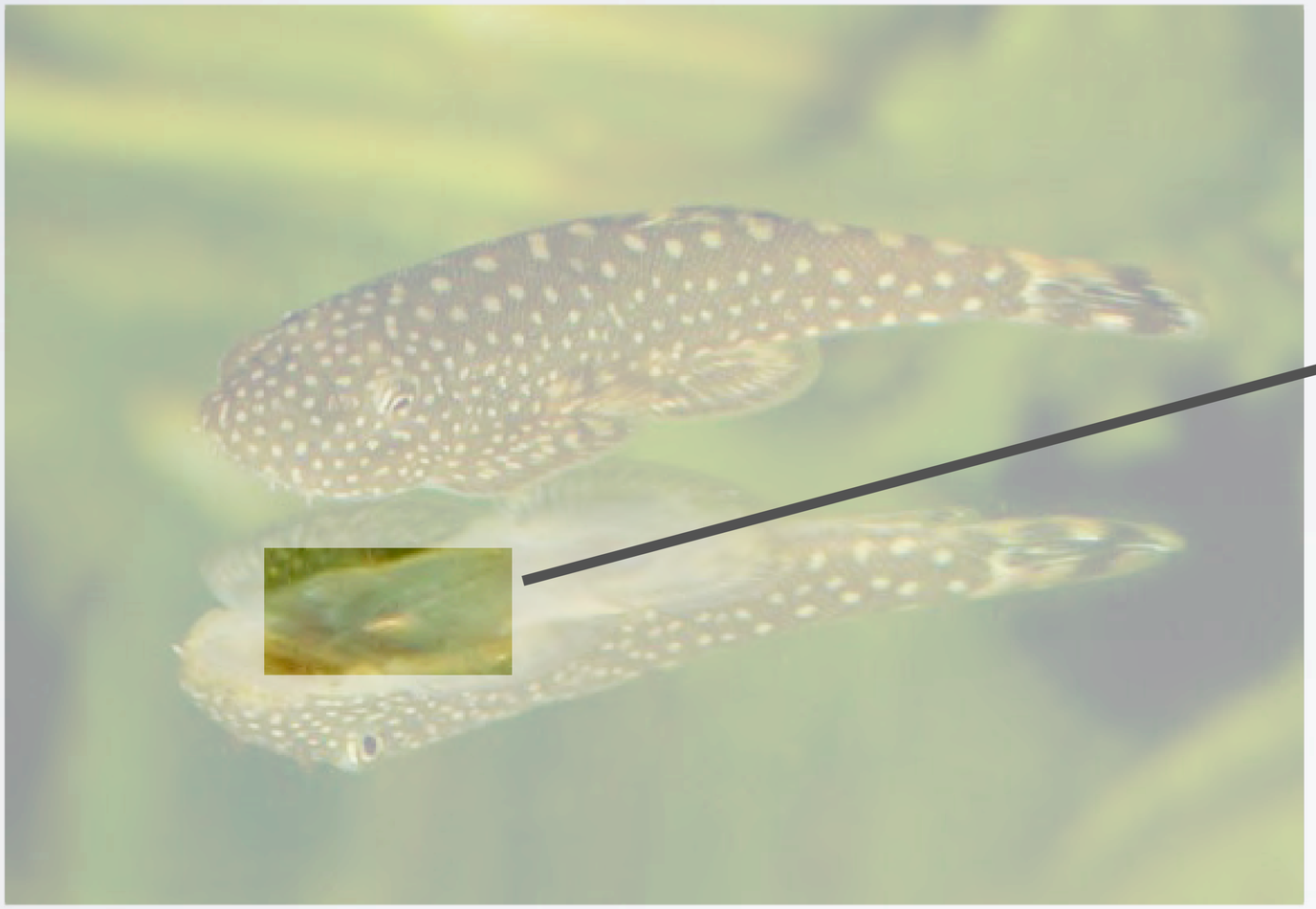
The identification of Sucker-Belly Loach



The feature of Sucker-Belly Loach:

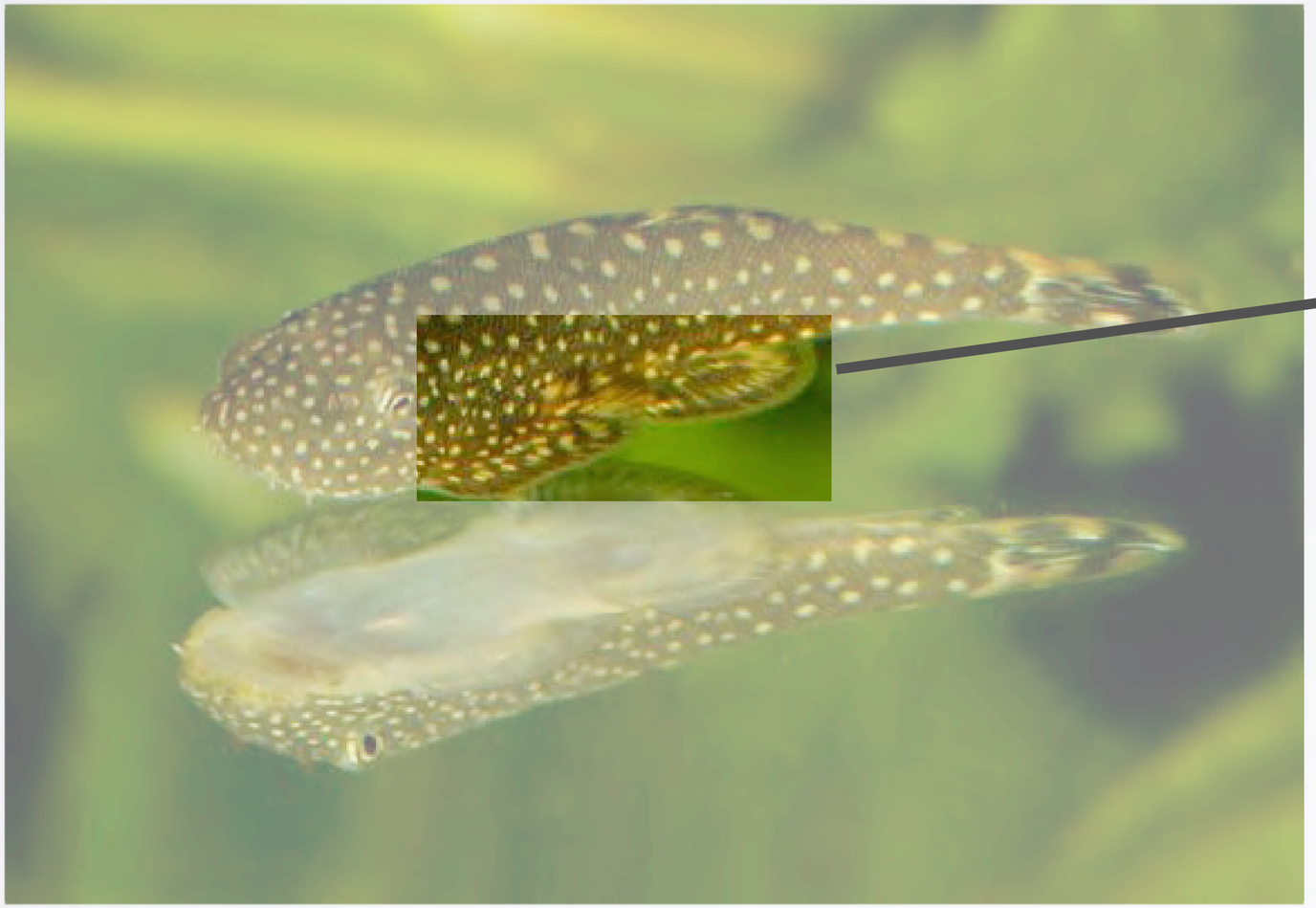
Yellow spot and blackish brown blotches on its back.

The identification of Sucker-Belly Loach



The feature of Sucker-Belly Loach:

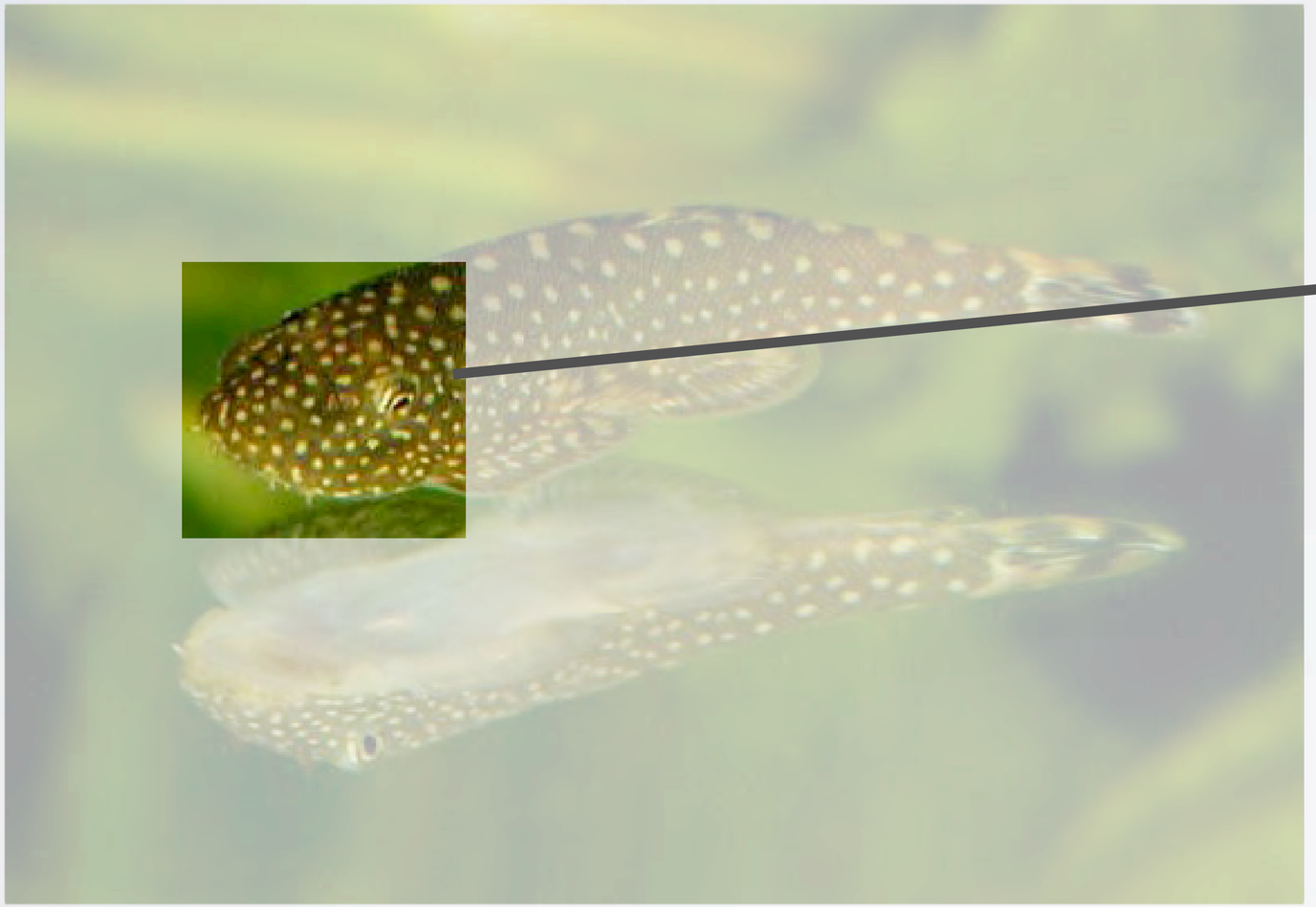
The identification of Sucker-Belly Loach



The feature of Sucker-Belly Loach:

Two layer of fins

The identification of Sucker-Belly Loach



The feature of Sucker-Belly Loach:

A depressed head and a ventral mouth.

Aim :
Investigate the effect of water quality on the amount of Sucker-Belly Loach

Procedure of our experiment :

1. Packing a bottle of water sample
2. Set up a quadrat in water
3. Count the number of Sucker-Belly Loach by observation and take a record
4. Check the water quality and take a record
5. Analysis the final result
6. Repeat this experiment 3 times

Result

	Oxygen concentration	pH value	Total dissolved solid	The amount of Sucker-Belly Loach
Sample 1	4.59 mg / L	6.73	073 p.p.m.	20
Sample 2	4.37 mg / L	6.76	056 p.p.m.	5
Sample 3	3.02 mg / L	6.81	055 p.p.m.	4

Assumption : Other variables being constant.

Result Analysis

- Oxygen concentration and total dissolved solid in sample 1 is distinctively higher than the other two samples.
- The pH value remains constant in three samples.
- We conclude that the amount of Sucker-Belly Loach increase with oxygen concentration and total dissolved solid.

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Result Analysis

- Higher oxygen concentration is benefit to the growth of Sucker-belly Loach and algal which need oxygen to live.
- Higher total dissolved solid mean
  - there are more minerals for algal growth, and provide more food source to Sucker-belly Loach
  - there are more algal to trap the dissolved ions.

THE ADAPTIVE FEATURE OF SUCKER-BELLY LOACH IN WATER CURRENT

- Flattened in shape

THE ADAPT FEATURE OF SUCKER-BELLY LOACH IN WATER CURRENT

- Modify their fins into sucker-like structures

THE ADAPT FEATURE OF SUCKER-BELLY LOACH IN WATER CURRENT

- Two layer of fins which can against high speed water flow

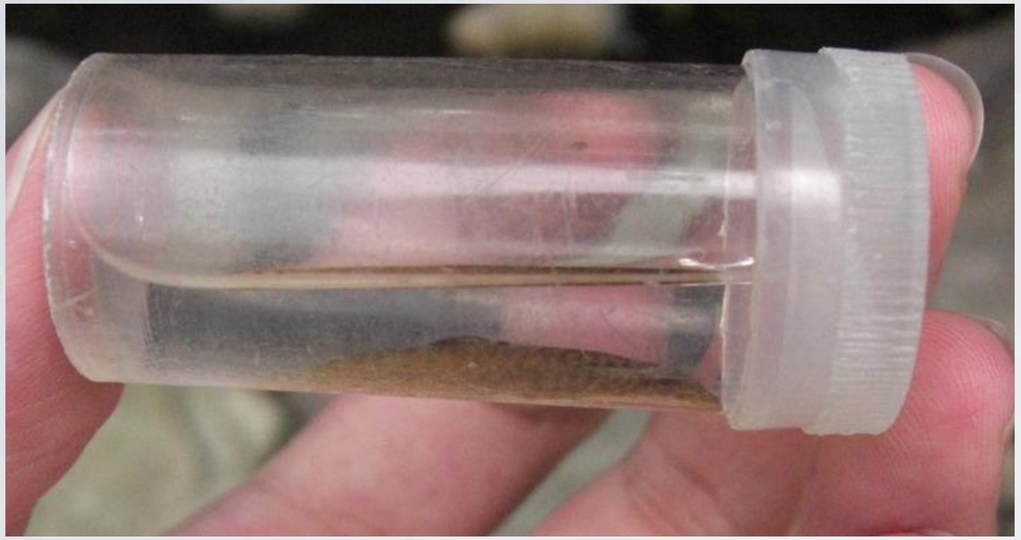
A SMALL CHALLENGE TO
Sucker-Belly Loach

THE ATTRACTION FORCE PRODUCED BY THE FIN OF SUCKER-BELLY LOACH

1. Catch a Sucker-Belly Loach carefully.

2. Put it into a small and transparent water bottle.

3. Rotate the water bottle with a certain angle and observe it.



with 0°

with 90°

with 180°

CONCLUSION

- Sucker-Belly Loach have a strong sucker-like structure !!!

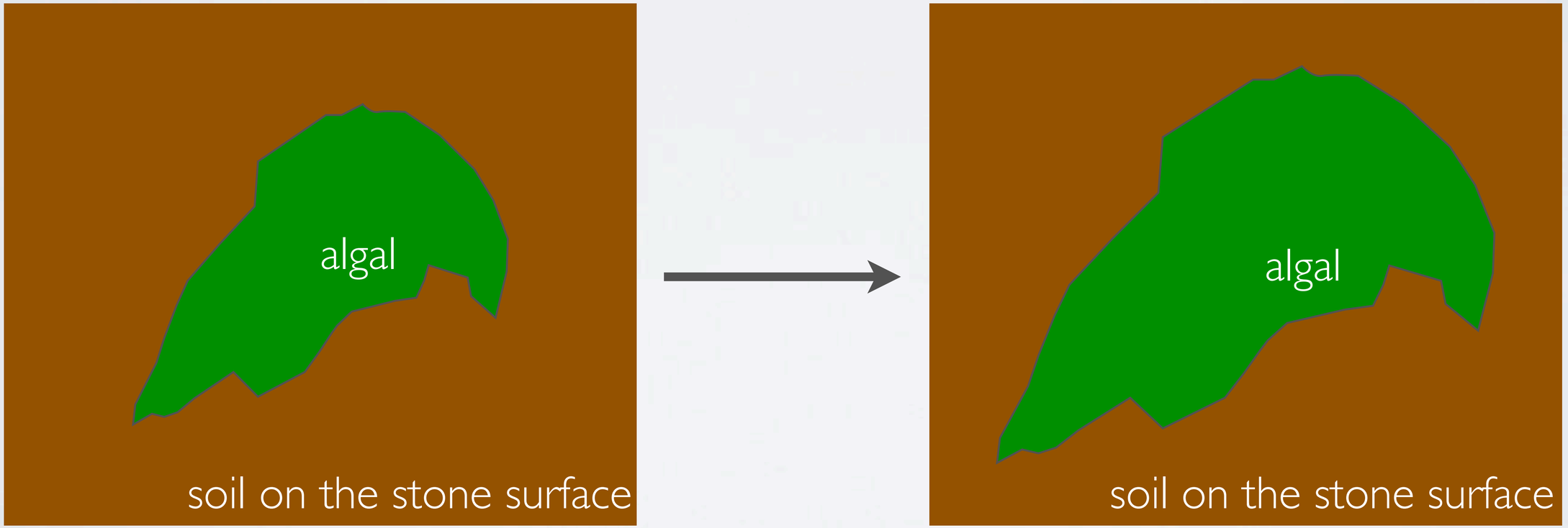
THE INGESTION OF SUCKER-BELLY LOACH

- They eat some algal which grow on the stone surface.

THE SUCKER-BELLY LOACH EXPAND THEIR LIVING REGION

- When they swim in the marginal region of stone surface with algal,

they use their tail to spread the soil surface and make it become compatible for predation.



THE CONSTRAIN

- We hope to know the performance of Sucker-belly Loach in difference water current speed originally.

- But we face three difficult in this test,

1. The water is not deep enough to measure the water current speed in a sensitive way.

2 . The water current speed in difference place has a distinctive difference.

3 . The Sucker-belly Loach may washed away in high water current speed.

- Eventually, we decide to perform "A small challenge to Sucker-belly Loach" instead of the initial one.

FUTURE EXPECTATION

- From the data we found, Sucker-belly Loach can live some brackish environment,we want to know whatever and what those Sucker-belly Loach have difference from Sucker-belly Loach in freshwater stream.

MEMBER

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- Chan Wun Sing Vincent
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THANK YOU !!!