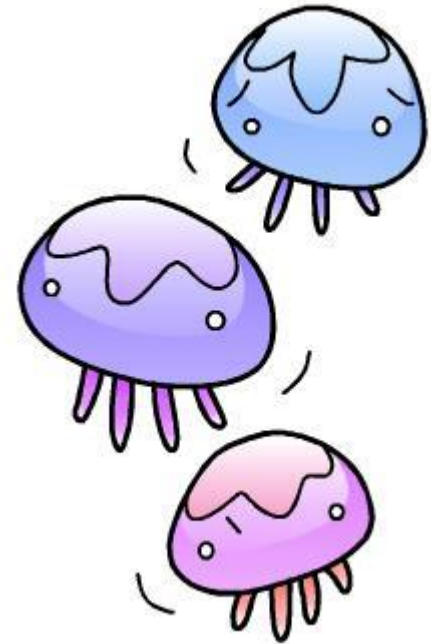


A Study About the Trigger of Feeding of *Aurelia Aurita*

Luna Yamamori

Kyoto University

Agriculture 1st grade



Outline

1. Introduction

2. Methods

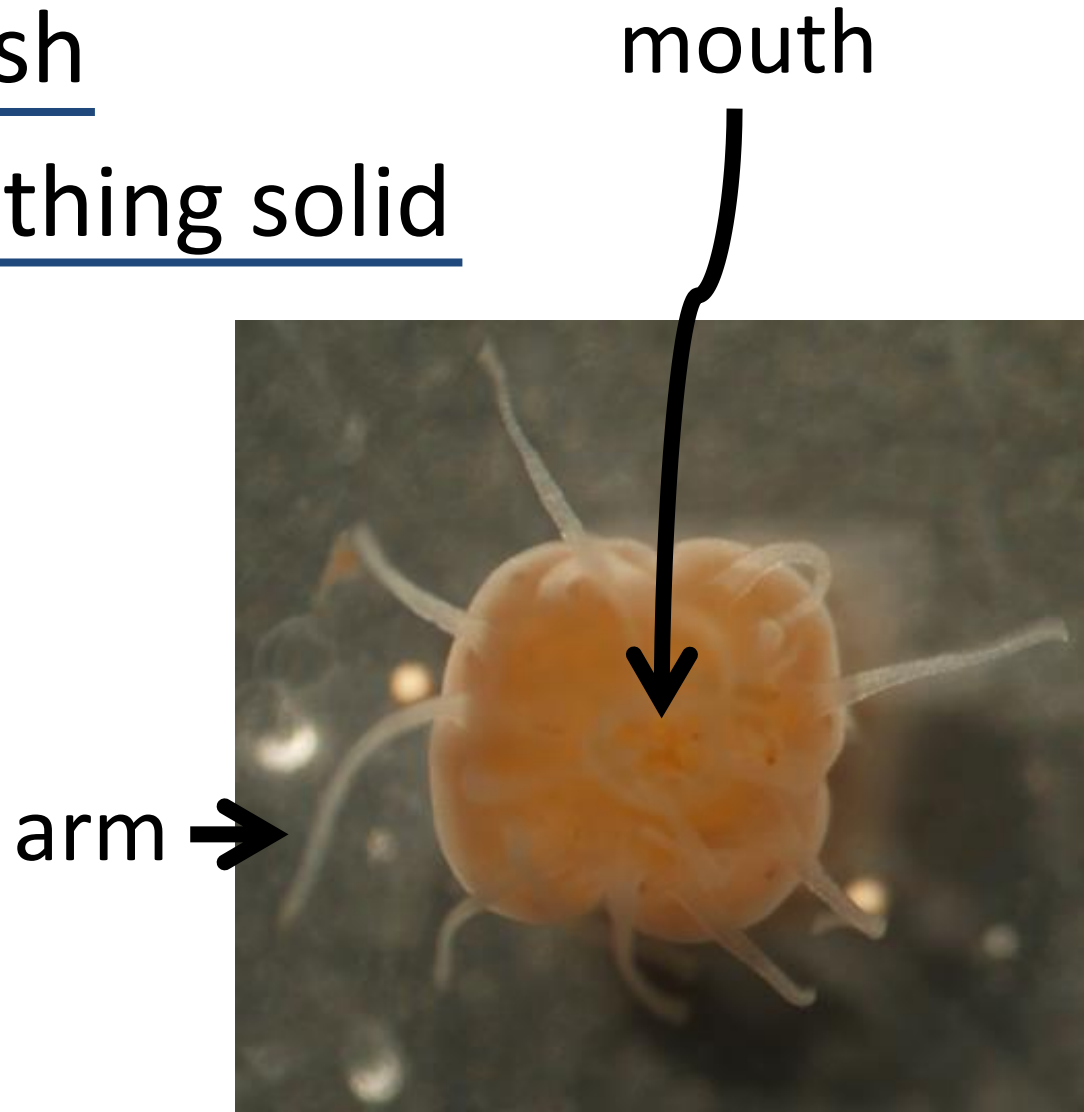
3. Results

] $\times 2$

4. Discussion

Polyp

- A form of jellyfish
- Attach to something solid
- Eat planktons





My big question

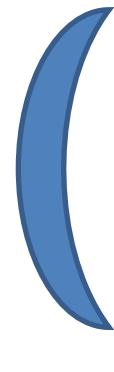
How do polyps distinguish food from uneatable things?

Previous research: *Cordylophora*
distinguish food by particular
amino acid

→ Do polyps really distinguish
food only by amino acid?

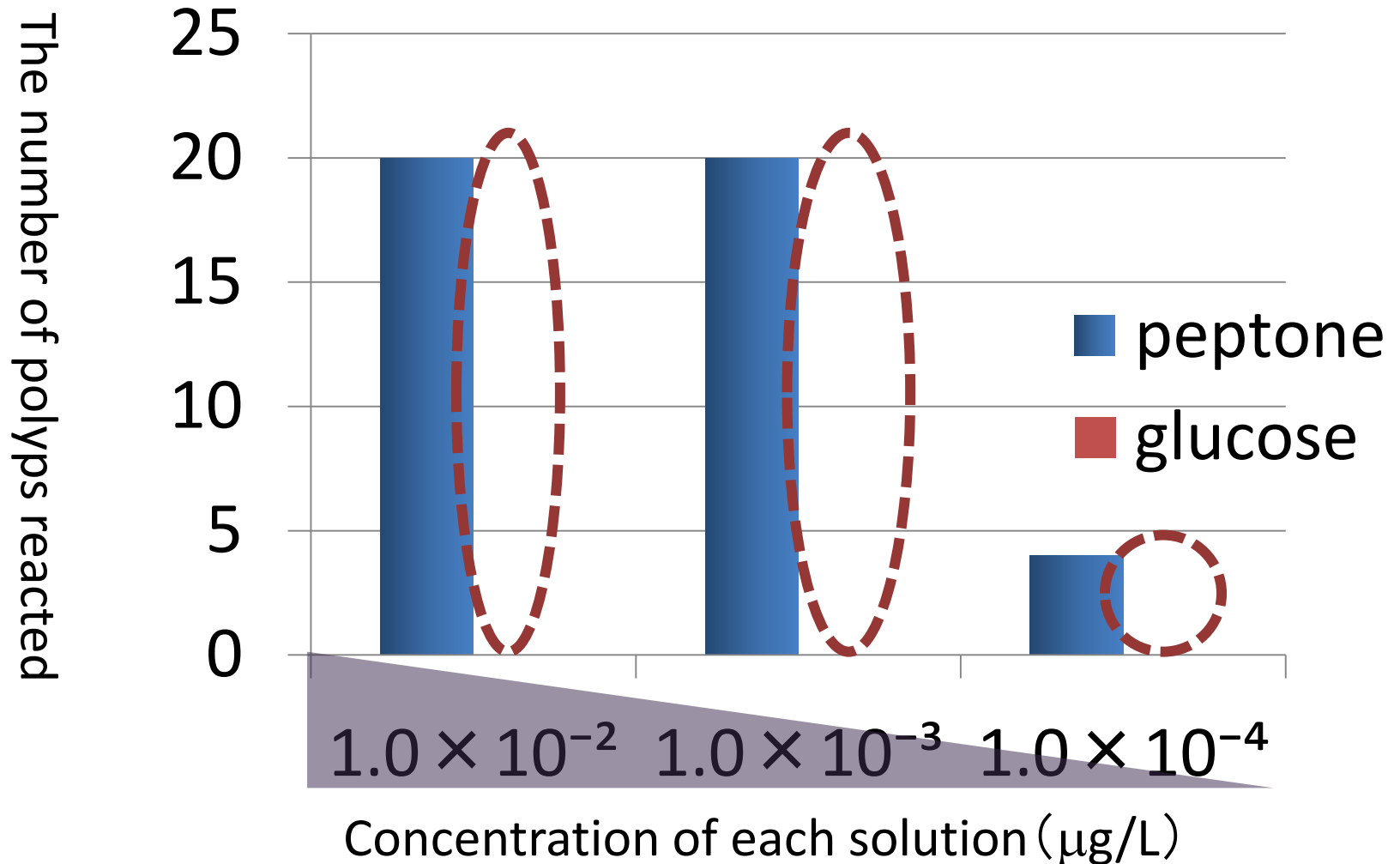


1. Do polyps really distinguish food only by amino acid?

- 
- Peptone : fragment of protein
 - Glucose : sugar

→ Expose to 20 polyps

Reactions of polyyps



How do polyps distinguish food from uneatable things?

Do polyps really distinguish food only by amino acid?

→ Yes.

Amino acid

sugar

Is the key amino acid only one kind?

Is the key amino acid only one kind?

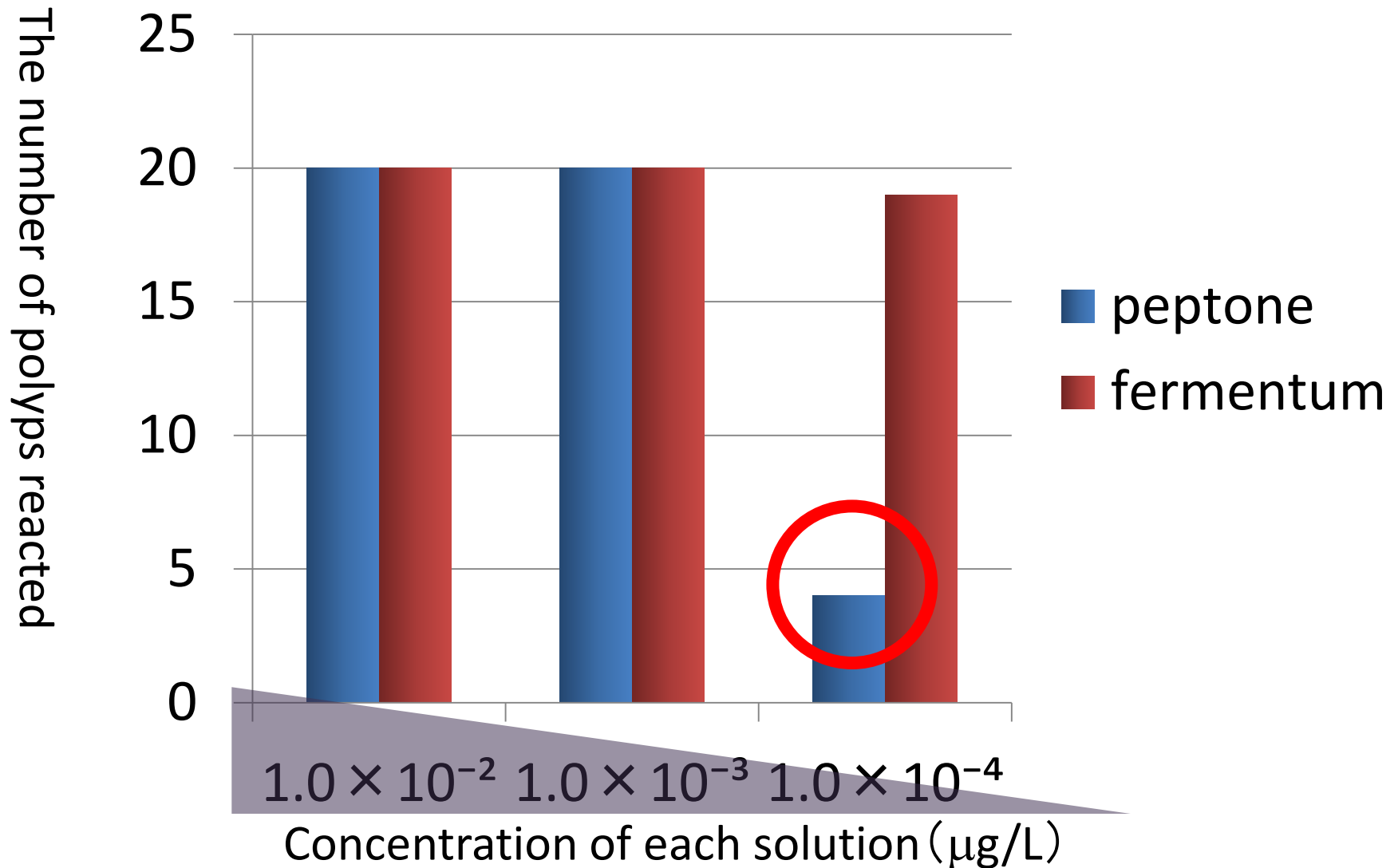


- Fermentum
- Peptone(from Experiment1)

<http://blog.livedoor.jp/keloinwell/archives/1413914.html>

→Expose to 20 polyyps

Reactions of polyyps



The trigger of feeding

- *Aurelia* → *Certain kinds of amino acid*



Conclusion

- Amino acid is the trigger of polyp's feeding
- Certain kinds of amino acids trigger the feeding of *Aurelia* polyps
- Could not answer 2nd question
 - ” Is the key amino acid only one kind?”

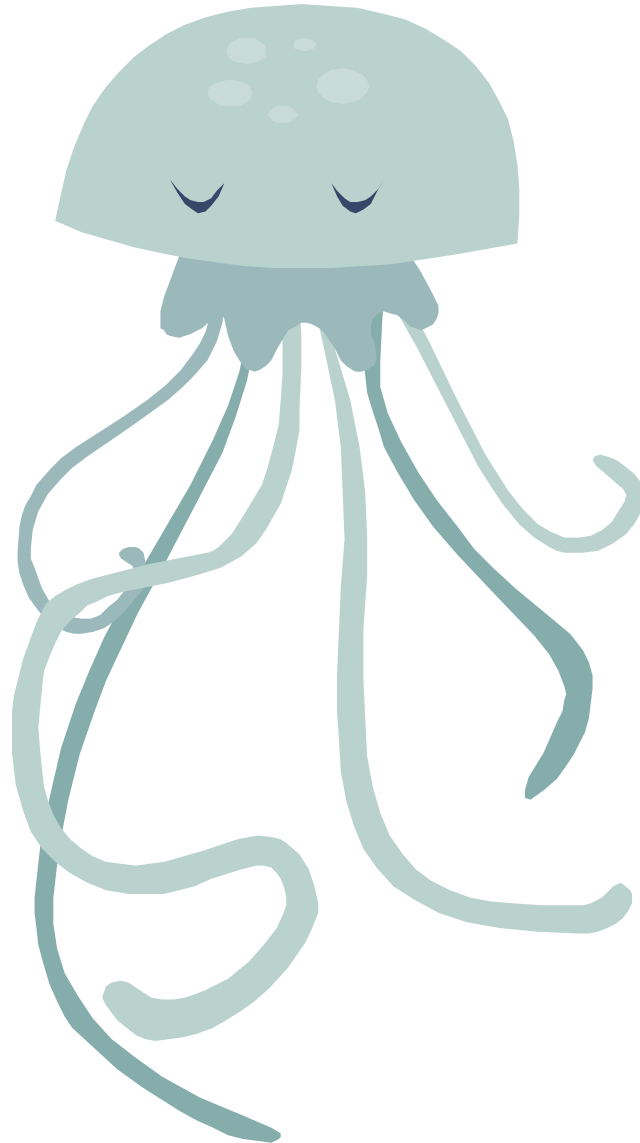
Future Work

- Expose polyps to each kind of amino acid



Determine the amino acids trigger polyp's feeding

Thank you for your attendance.

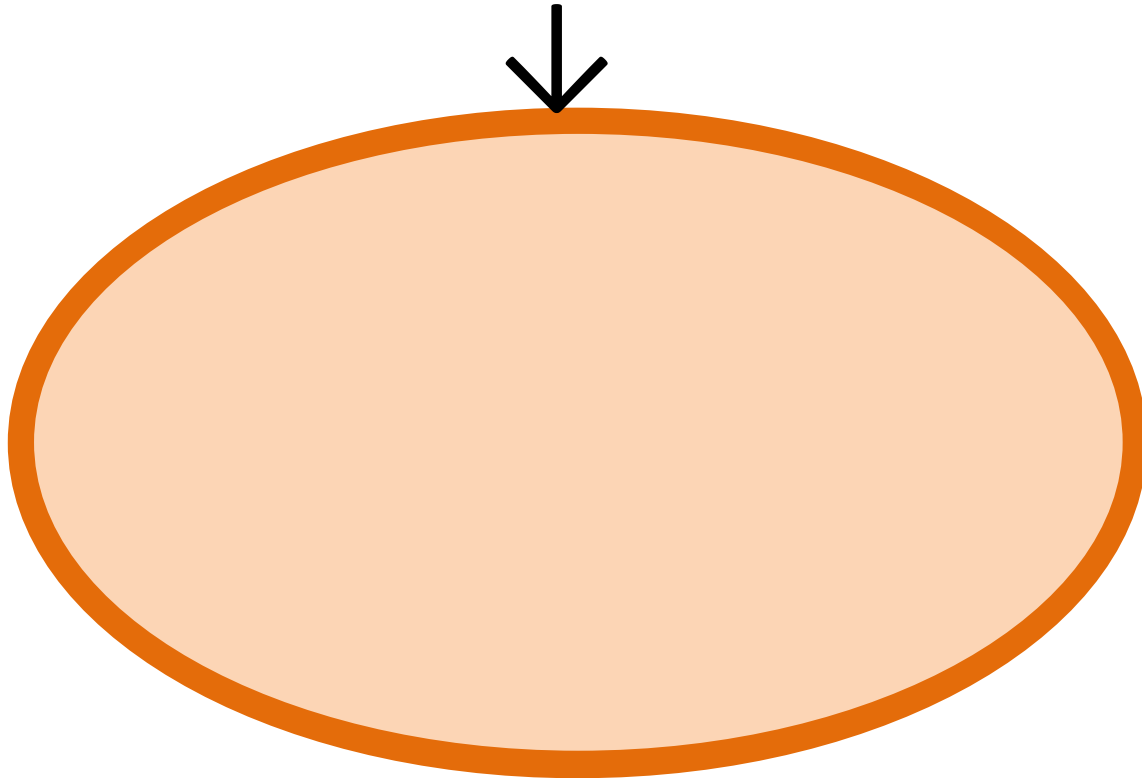


Previous researcher
C. Fluton
used
Cordylophora



<http://flickrhivemind.net/User/djpmapleferryman/Recent>

membrane
(Skin of cell)



Budded and grown





medusa



polyp



