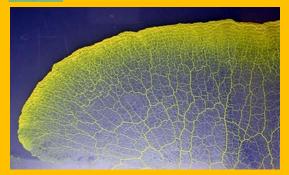
Plasmodium's maze experiment

Kobe high school Science Course

Yuki Ebisu Takumi Otagaki Yudai Okayama Yutaro Ito Yuki Asahina

Purpose



(From http://www.jst.go.jp/pr/info/info708/)

To make plasmodium solve a maze and guess the pattern of movement.

Experiment Method

The goods we used are, plastic boxes $(22cm \times 17cm \times 5cm)$, and agar medium.

First we made 2cm of medium in the box. Secondary we set Plasmodium at the start and oat meal at the end in the box.

Then left them in a dark place and kept it at 20°C for one day.

We cleaned the items at the cleaning bench because Plasmodium is so delicate.



We laid out the maze for the purpose of researching the pattern of how they act when they want to have a meal.

Result

We could observe the movement of them, but couldn't make Plasmodium go through the maze.

What we found through the experiment

We mixed red food coloring or activated carbon with the medium and made red one and black one to make Plasmodium easily observed, but they quickly died. According to this result, Plasmodium couldn't live with red food coloring or activated carbon.

· What bothered us through the experiment

- Plasmodium tried to escape from the surroundings that do harm to them by making spores.
- The water from the medium made the humidity too high in the plastic box.

Consideration

We observed that:

- it is hard to control plasmodium.
- how to make a good medium for plasmodium
- we should be careful of keeping a good environment for living things, like plasmodium.

Additional Thoughts

The size of our maze that we used was so big that we couldn't get the result that we expected.