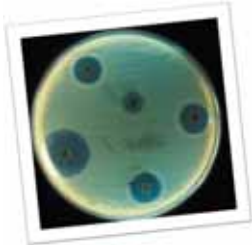


# Identification of antibiotics



KENYA KITADA  
TSUGUMI YANO

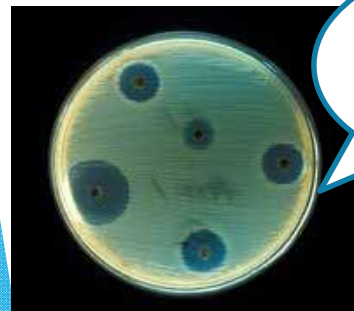
## ~ contents ~

1. The background of our study
2. What is an antibiotic?
3. History of an antibiotic
4. What is a lichen?
5. The process of our study

### 1 . The background of our study

- ▶ We got interested in lichens because of our senior's study.
- ▶ We want to research it more deeply.

### 2 . What is an antibiotic?



It's a substance whose function is to protect against propagation of bacteria

### 3 . History of an antibiotic

I discovered Penicillin which is the world's first antibiotic!



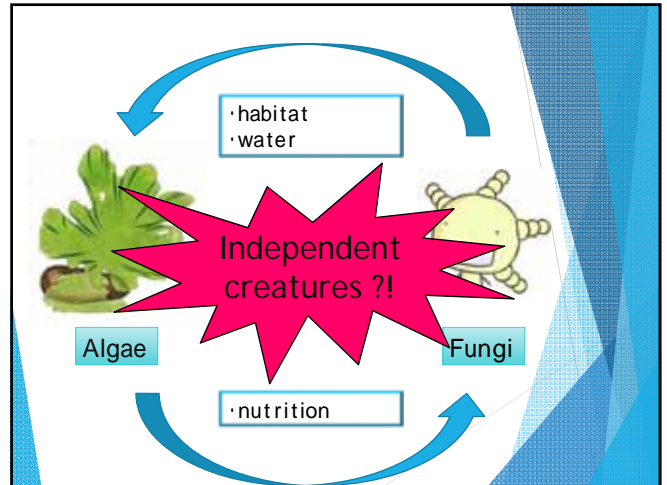
### Importance of this study

- ▶ Many kinds of antibiotics have been discovered and the tolerances to antibiotics appeared
- ↓
- ▶ We need a new antibiotic
  - ▶ We decided to take out a new antibiotic from not much well known lichen for developing a new medicine

## 4 . What is a lichen?



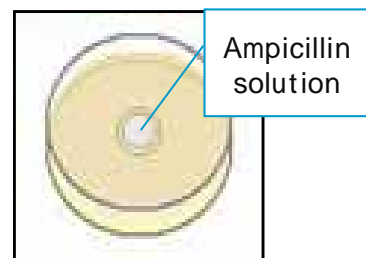
About 1200 kinds of lichens



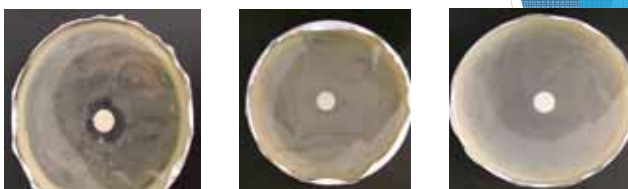
## 5 . The process of our study

The preliminary experiment  
Extraction of the substance included in the lichen  
Identification of the substance

### The preliminary experiment



### The result



Subtilis

Luteus

Mycoides

## Our assignment

Picking of lichens  
Extraction of the substance included in the lichen  
Identification of the substance

# Thank you for listening!!



## Multiple choice questions

- ▶ How many kinds of lichens have been discovered?
  - ▶
  - ▶ 1)800 2)1000 3)1200 4)1400
- ▶ Where can we find lichens?
  - ▶ 1)In the sea 2)In our houses 3)On rocks 4)In the dictionary

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