

Science English II: Sudachi Juice Experiment

Names :

HRNO :

Introduction

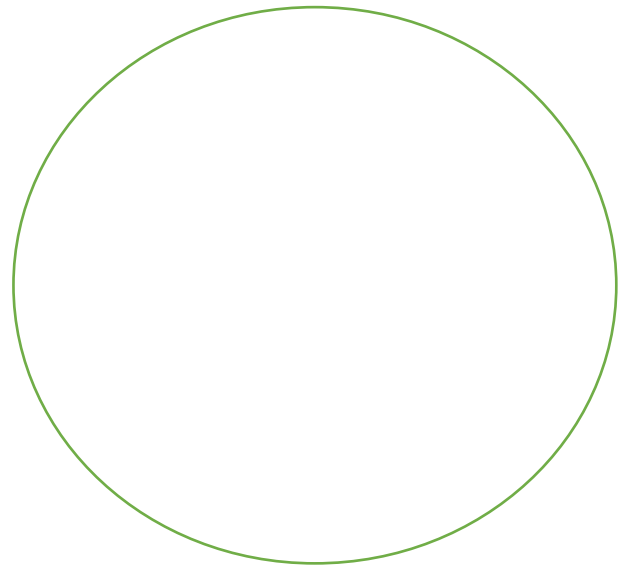
Sudachis are a kind of fruit grown in Tokushima. Many cleaning products use lemon juice or lime juice to help kill bacteria. Because sudachis are citrus fruits (柑橘類) similar to lemons and limes, we want to see if sudachi juice also has antibiotic (抗生物質) qualities. We will test sudachi juice against *V. vulnificus*, which is a type of bacteria common in raw (生) seafood. Many Japanese people place sudachi juice on their food, so we want to know if this is a good way to make raw food like sashimi safer to eat.

Hypothesis

Procedure

Materials

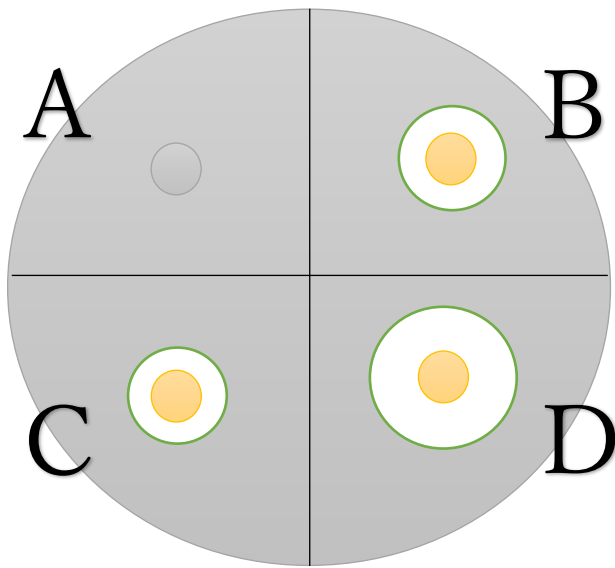
- Petri dish with agar
- Fruit juices (sudachi, lime, lemon)
- 6 mm diameter (直径) circle papers
- 0.1 mL bacteria solution (*V. vulnificus*)
- Sample stick
- Incubator (37°C)



Methods

Using the materials above, write how you will test your hypothesis. Draw your experiment plan.

Results



Juice	Diameter of circle with no bacteria
A. None	mm
B. Lemon (pH 2.2)	mm
C. Lime (pH 2.1)	mm
D. Sudachi (pH 2.2)	mm

Figure 1. Bacteria growth on petri dish with juices

Using words, describe the results of your experiment.

Discussion and Conclusion

Compare your hypothesis to what actually happened. Did you get the data you thought you would? Please explain why you think you got this data. Was there anything surprising about what you learned?

If you were to continue this research, what should you try to find out next?
