Sea Slug Characteristic

Such a sea slug takes in choloroplast from other plants. This type of process is called stolen chloroplast. This phenomenon inseen in one of the kinds of sea slugs.

Sea Slug Structure

U.S.A research institute Main university Doctors Mary Ranpo research.

Discovered that cell's DNA matches apart of an algae

Column

☆ The Osaka university and Tottori university team succeeded to make a cell which has both functions of animal and plant in September, 2016.

☆ A model plant is "Shiro inuhazuna". The structure of this plant cell is similar to animal cell.

☆ According to the experiment in which nothing happened when mixing plant cell and animal cell.

☆ The team succeeded in making a new cell. This is going to be useful in various scenes in our life.

Possibility of chloroplast

Hirosaki Minami High School

First Grade 14HR Group 7

MEMBER

Purpose of experiment

- Transplant chloroplast in to other animal's cell.
- Keep the chloroplast working in animal's cells.
- In the future it can solve foods problem by taking in the human's body.

Future Tasks

In our research, we used 70% ethanol which could not sterilize enough.

- We want to use medicine with stronger sterlizing properties next time, or do experiments in a germfree room, we will make fertilized eggs of seahare and slug with chloroplasts seahare ingredients will be abridge for plants and slug.

Research

From Internet

- ☆ Chloroplast is discovered in seahare reproduction cell.
  - Parents' characteristic is conveyed to children.
- ☆ Chloroplasts need protein to do photosynthesis.
- ☆ DNA chloroplasts originally contains only 10% of protein. The other 90% of it is from protein made in nuclei of algae.
  - Seahare do photosynthesis taking algae gene.

Experiment of slug

① We got many clover plants, Then these were soaked in ethanol.

② We smashed many clover plants then these were filtrated.

③ These are centrifugalized then we took out the chloroplasts.

④ We harvested the mucus of slug.

⑤ We matched the mucus of the slug and the chloroplasts. So we make preparations.

- It was examined microscopically. But there were too many bacteria and we could not see any workings of chloroplasts.