

Sunscreen and Ocean Pollution

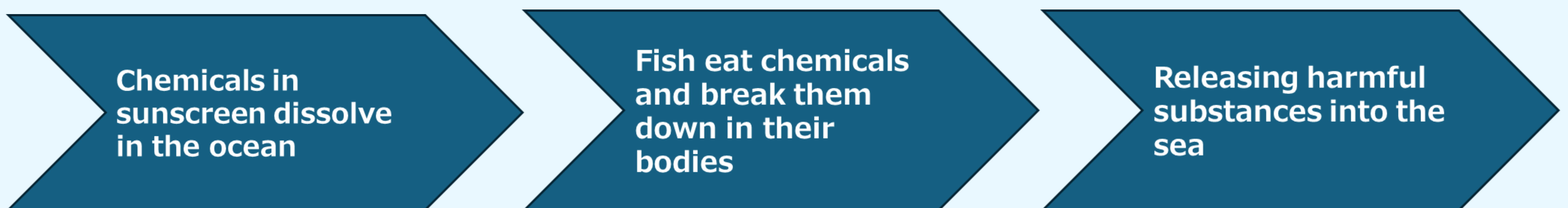


"What made we start"

At first, we tried to research coral bleaching caused by domestic wastewater. Our seniors have already conducted research on coral issues. We also have a lecture from Professor Kozue of Hawaii University about tourism every month.

The most common UV-absorbing substances are **Oxybenzone** and **Octinoxate**.

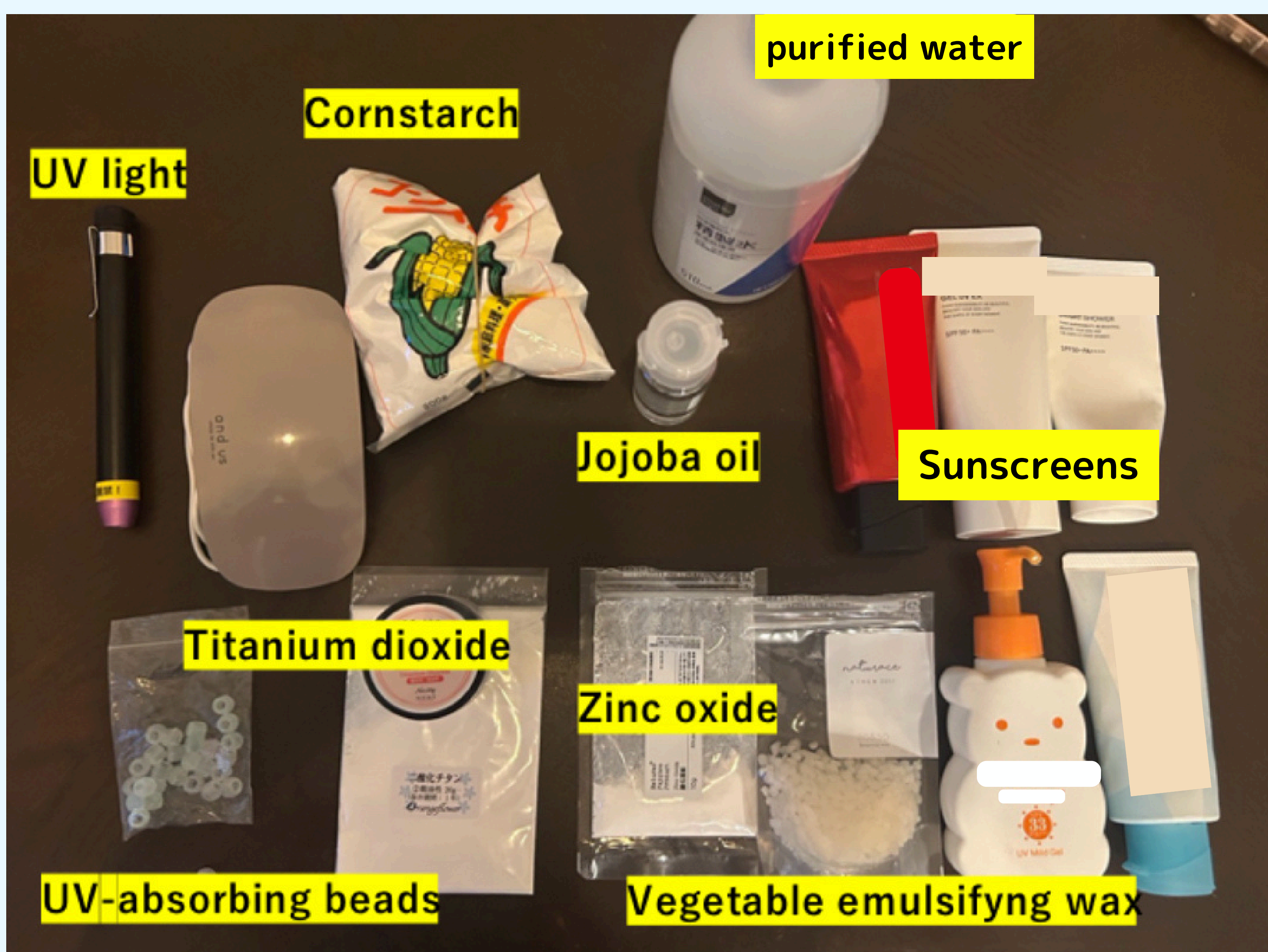
Of all the sunscreens we use, there is the only one that is not contain harmful materials.



👉 Not only for fish but the chemicals are also is harmful for coral.

The nanoparticles in Oxybenzone are absorbed by coral.

Creating environmentally friendly sunscreens: powder type and cream type



:Experimental method:

- 1, Put the substance on a board.
- 2, Put UV-absorbing beads under the board.
- 3, Focus UV light on them for 30 seconds.
→The light should be 3cm from the board.
- 4, After that, look at the color of the UV-absorbing beads

- If the UV-absorbing beads has obviously changed color, the sunscreen is not good at to protecting from UV.
- If the UV-absorbing beads don't change color, the sunscreen can protect against UV well.

Places where the sale of UV-absorbing substances in sunscreen is prohibited



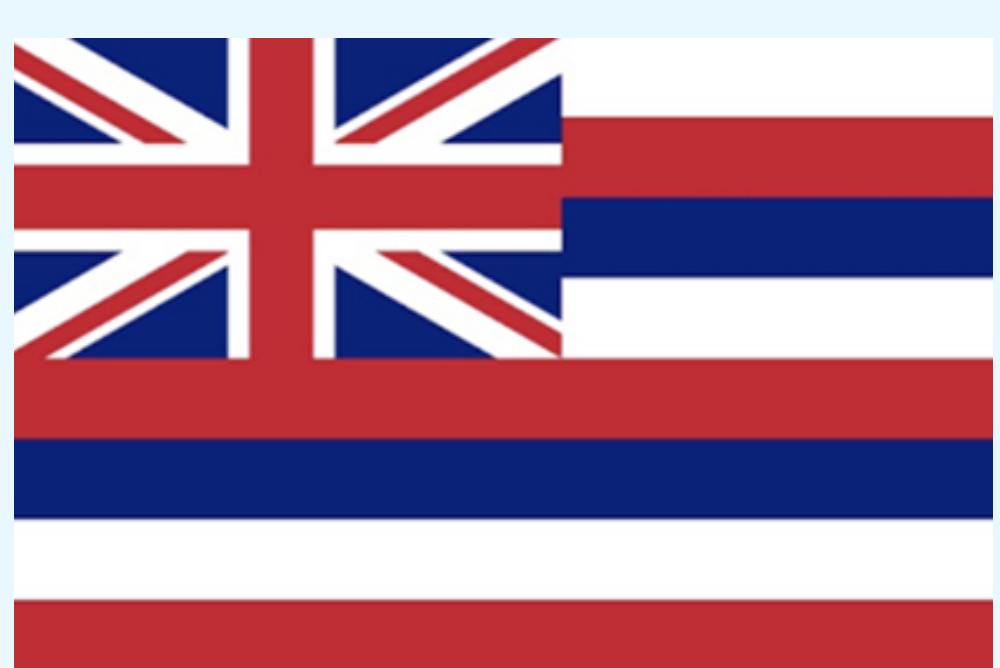
Phuket, Thailand



Palau



Florida



Hawaii



Virgin Islands



Bonaire

Question

We were particularly curious as to why there are no regulations in Guam, even though Hawaii, which is also a U.S. territory, has them. We plan to ask this question when we go there.