

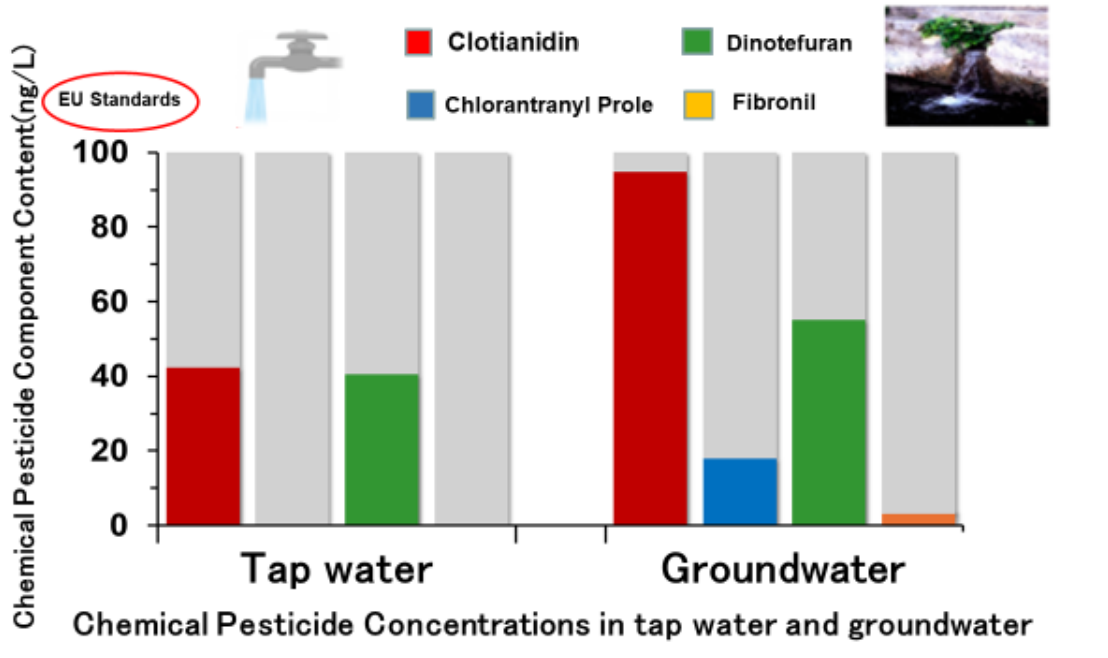
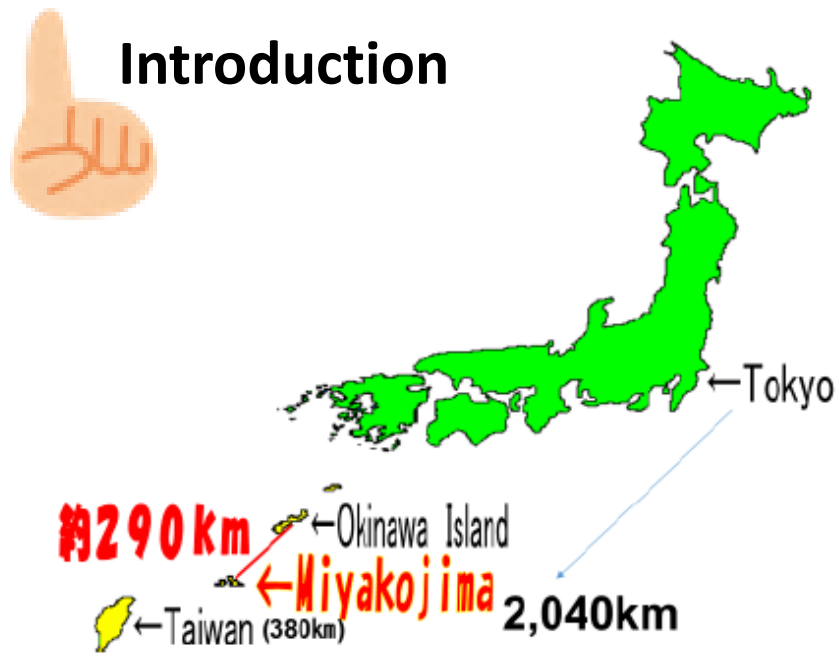
# Protecting and Improving Our Groundwater Quality

## : A Sustainable Solution from Miyako Island

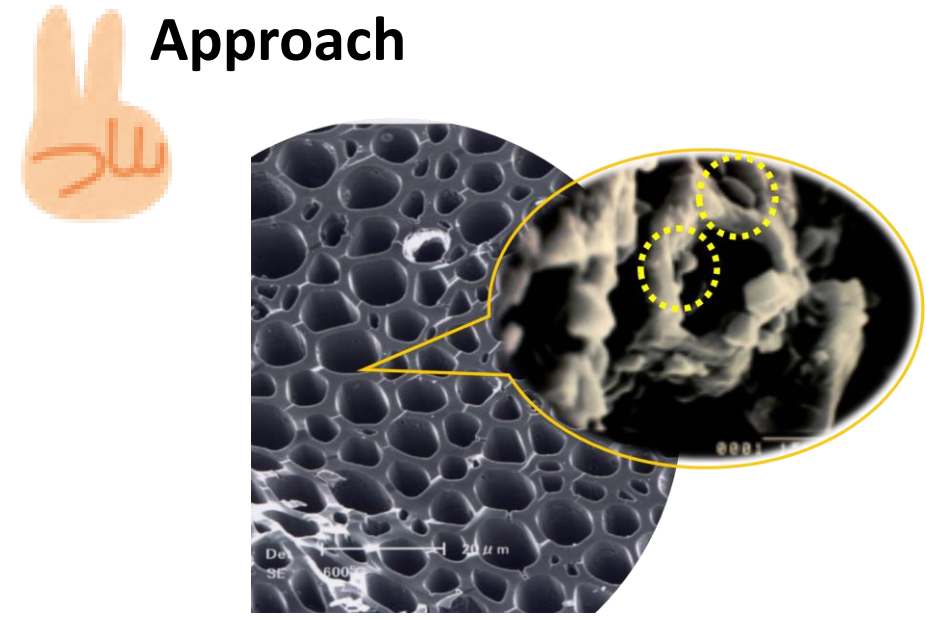
Ayana MOTOMURA and Rinka TOMARI

Okinawa Prefectural Miyako Comprehensive Technical High School

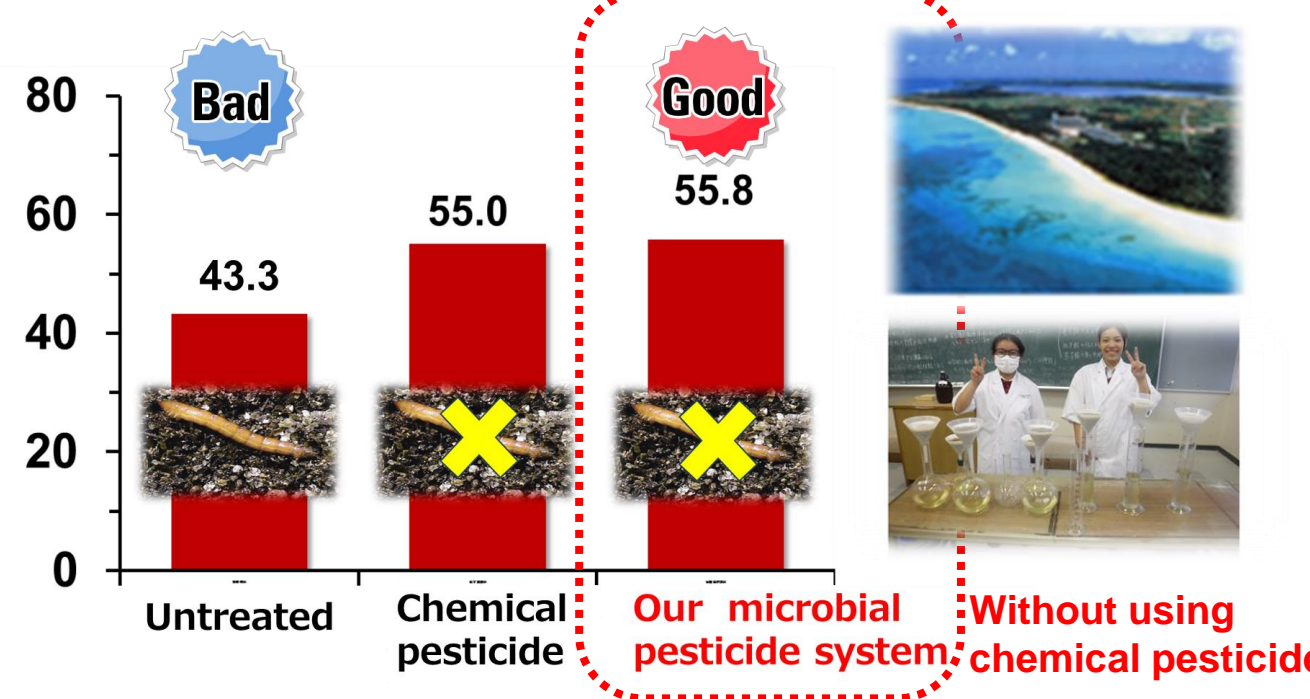
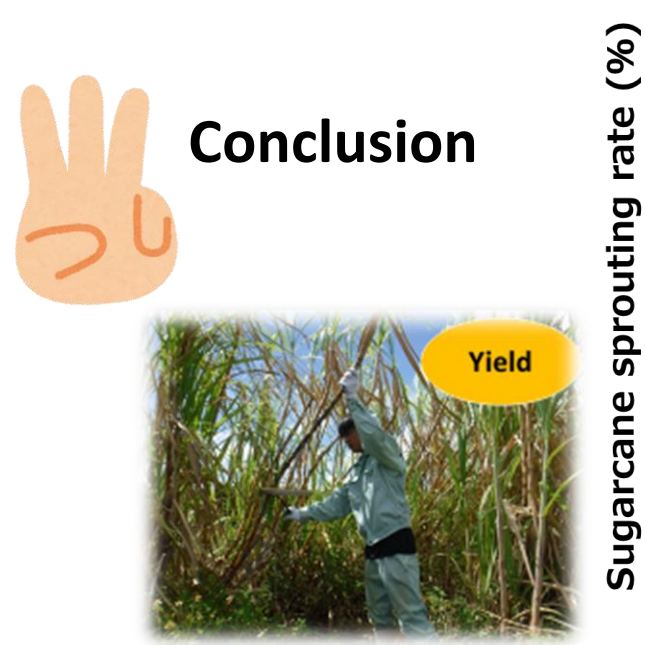




Miyakojima is a small island that relies entirely on groundwater for its drinking water. However, **we detected chemical pesticides in the tap water and groundwater.**



Our seniors used strain22 to dissolve phosphate salts. We identified the bacteria as *Bacillus thuringiensis*. We also found **this bacteria produce insecticidal crystalline proteins**. So, we thought if we use this unique property of the bacteria, **we can develop a novel system for chemical pesticide-free agriculture.**



We have to protect our Miyako island and pass it on to the next generation!