

## The analysis results of elements concentration in green sea turtles around Yaeyama islands and their habitat

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### Abstract

The ecological behavior of wild sea turtles has many unknown parts. They are under the conservation programs due to the population decrease. Green sea turtles are suspected to accumulate environmental pollutants in their body, thus this species is a candidate for biomonitoring. Shallow sea bottom with abundant sea plants and sea weeds are favorable habitat for the green sea turtles in south part of Okinawa, Japan. In this study, we collected samples from Kuroshima, where is a part of Yaeyama islands, southern Okinawa. We have determined food and water samples from the sea turtle habitat ecosystem to multi element analyze by PIXE. The results indicated that element concentrations in sea turtles are possibly affected by their feed contents. Further monitoring may be able to understand variation of environmental changes and effects to sea turtles in more comprehensive manner.