Short Paper

Chromosomes in Pacific Saury,
*Cololabis saira**¹

The Pacific saury, *Cololabis saira*, is the species which widely distributed in the area of the North Pacific. Due to an important fish for the fish industry in Japan, many studies on this species, mainly in the aspects of ecology, have been published in our country.

The present paper gives the chromosome accounts in the materials of the Pacific saury collected at the research operation to the Emperor's Sea Mounts in the North Pacific by the training ship "Hokusei Maru" of the Hokkaido University at her cruise in the last summer.

The materials used were caught by the gillnet on July 30, 1980 at the station of 46-03.6 N, 175-32 E.

The testes, ovaries and gills of the species in ca. 15-25 cm body length were fixed with acetic alcohol (1:3) and stained with aceto-iron-haematoxylin-chloral hydrate solution recommended by WITTMANN¹⁾.

The chromosomes appeared quite frequently in spermatogonia, occasionally in follicle cells and rarely in gill epithelial cells, and $2n=42$ chromosomes were easily ascertained at early metaphase in the spermatogonia.

As seen in Figs. 1 and 2, the metaphase displayed V- or rod-shaped chromosomes in different sizes. Most of the anaphase nuclei in both spermatogonia and follicle cells showed to have one long trail behind the chromosome alignment (Fig. 3). The diploid metaphase chromosomes in the follicle cells always stand in nearly the same arrangement of a single characteristic circle with one specific V-shaped chromosome in the area of its center (Figs. 4 and 5).

In the order Belonida to which the present species belongs, the chromosome number has been reported in *Potamorhaphis guianensis* ($n=24$)²⁾ of Belonidae and in *Dermogenys pusillus* ($2n=48$, $n=24$)²⁻⁴⁾ of Exocoetidae. The chromosome number in these two species differs from that in the present species.

We are much indebted to Captain S. YAMAMOTO and the crew of "Hokusei Maru" of the Hokkaido

(Received November 13, 1980)

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Figs. 1-5. Mitosis in the spermatogonia (1 and 2) and follicle cells (3-5) of Pacific saury, *Cololabis saira*.

1. Early metaphase; 2. Metaphase; 3. Anaphase; 4 and 5. Metaphase, showing the same arrangement of chromosomes. All Figs. $\times 1,680$

University for their kind support in collection of the materials.

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