## Abstruct of the 50th Annual Meeting Nishinomiya

19. Occurrence of polyploid spermatogonia in diploid individuals of land snails (Gastropoda) : Hiroshi KAYANO<sup>1</sup>, Aiko KAYANO<sup>1</sup> and Tadashiqe HABE<sup>2</sup> (<sup>1</sup> Kujyu Highland Institute of Biology and <sup>2</sup>Kawasaki City)

Polyploid aberrant spermatogonia  $(4x \sim 12x)$ were found in 11 species of land snails belonging to Helicinidae (Prosobranchia), Clausiliidae, Camaenidae and Bradybaenidae (Pulmonata). A series of 4x, 8x and 16x is one given by repeated polyploidization from a diploid cell. Occurrence of 6x, 10x and 12x implies fusion of a diploid and a polyploid cell, as well as fusion of polyploid cells. Aberrant polyploid cells were found in Aphanoconia verecunda (2n=22), Ventriphaedusa platyderula (2n=60), Stereophaedusa jacobiana (2n=60), Euphaedusa tau (2n=56), E. rowlandi (2n=56) , Satsuma danzyoensis (2n=58), Bradybaena similaris (2n=56), Β. (2n=56), circulus Euhadra peliomphara (2n=56), E. sadoensis (2n=56), E. subnimbosa (2n=56).

20. Chromosome analysis of large two species of *Helicoidea* in Japanese land snails: Reiko TATEWAKI<sup>1</sup>, Osamu MASUDA<sup>2</sup>, Yukiko KAGOHASHI<sup>3</sup>, Hiroki OTANI<sup>3</sup>, Kousuke FURUSE<sup>1</sup>, and Jin-ichi KITADA<sup>4</sup>(<sup>1</sup>Dept. Biol.,Shimane Medical Univ., <sup>2</sup>Himeji Marine Museum, <sup>3</sup>Dept. Anat., Shimane Medical Univ. and <sup>4</sup>Neyagawa City, Hata-cho)

The two species with large-sized shells of *Helicoidea, Euhadra idzumonis* and *Euhadra awaenis*, have strong resemblant features to each other, although the geographical distribution of *E. idzumonis* obviously differ from those of *E. awaenis*. To clear whether the two are the same species, their chromosomes were analyzed. Chromosome preparations were made from many of the early embryos (10-12 days old after ovulation at room temperature) by the method of Imai (1977) and banding treatment followed. *E. idzumonis* had the chromosomes of 2n=56 and its karyotype consisted of 20 pairs of metacentrics and 8 pairs of submetacentrics. This basic element was the same as those of *E. awaenis*. But the N-band and C-band patterns of the two species were different. The present study indicated that the two were different species, in spite of the phenotypical resemblance.

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